# The United States miller and the milling engineer. Sixteenth Year 1891 

Milwaukee, Wisconsin: [s.n.], 1891
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Gentlemen-Thinking that perhaps you would like to hear how we are pleased with the two Bran Dusters recently purchased of you, we take pleasure in saying they are doing more than we hoped for of them, and in the six months we have used them have given us no trouble, whereas the machines which they replaced were a continual source of annoyance

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Can say of these machines, it is a pleasure to operate them. Very respectfully, LONGMONT FARMERS' MILLING \& ELEVATOR $\mathbf{C O}$. sam'L frazier, Head miller.
y

RICHINONO MANUFACTURNME CO. LӨCKPӨRT, N. Y., H. S. A.

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Takes up but little room, runs at low rate of
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# THE EDW. P. ALLIS COMPANY 

* Mill Builders and Mill Furnishers, *


## RELIANCE WORKS, <br> MILWAUKEE, WIS.



AND THE TMILLING ENGINEOR.
Sixteenth Year:-No. 1.
MILWAUKEE, JANUARY, 1891.
Subscription Pilce, Sl.00 Per Year.

Written for the United States Miller and
FALSE IDEAS OF ECONOMY IN THE EQUIP MENT OF A FLOURING MILL.

## By J. F. Mueller, M. E.

## [Continued from December number. $]$

1is equally as important to have spouting lumber tongued and grooved or rabbitted as it is to have the elevator lumber thus finished. It will prevent leaks and dusting out, besides the time saved in putting together spouts made of material finished in the above manner will almost pay for the additional expense. Spouting as well as elevator lumber should in all cases be put together with screws. All mills are subject to more or less changes in spouting from year to year, and the old spouting can be made to answer in a great many cases. Where spouts are nailed, it is very difficult to take them apart, when found necessary, without splitting. The top board of a spout should be put on in such a manner as to be quickly removed when found necessary in case of a spout being choked. Some millwrights take great pride in putting up "diamond" shaped spouts. There are places where a spout of that pattern will fill the bill better than an ordinary square one, but in the majority of places the square spout answers every purpose, besides they are easier to put up and make a much better appearance. We more frequently find millwrights who are competent at putting up shafting and setting up machinery in general, than we find them competent spouters.

In the equipment of a mill, as a rule, nothing receives so little attention as the power connections, or that portion of the machinery which transmits power to the various special machines. A visitor cannot help being impressed with the general condition of things, immediately upon his entrance to the mill. Belting running in all conceivable directions, regardless of cut or grain, shafting out of line, etc. When any slipping or vibration occurs, it transmits itself to the special machines and will have a very serious effect. The greatest possible pains should be taken in putting up shafting securely. In this there is no little need of caution, especially where fuel cuts an important figure in the cost of production. And even when such is not the case, any one knows that when we subject a crank, arbor or shaft to too many unequal forces, the natural result is uneven wear. Machinery that involves all the principles demanded by a miller ought to be provided with driving power capable of transmitting a uniformly steady movement. We are now living at a
time when the true strength of all kinds time when the true strength of all kinds
of material subject to all kinds of forces, ought to be thoroughly understood. It is far better to go to the extreme of ing better than a large portion of the
using material a little heavier than to take any risks.

It is not uncommon to find in a system of shafting many variations of speed, and nothing adds more to the irregularity of transmission. In many of our old mills, whose owners have struggled through the various stages of he times, this is particularly noticeable. There is in some cases an endless speeding up and down, that is, driving from a fast running shaft onto one of slow speed and again from a slow revolving shaft onto one running at a high speed. Several counter shafts driven one from the other in this manner will certainly produce a great loss of power.
All shafting should be provided with means for adjustment when thrown out of line by settling of building, shrinking of timber, etc. It is generally supposed that immediately after a mill is completed, everything is in proper line. However true this may have been at the time, it will be but a little while until every part of the mill has been more or less shifted out of its original position

There are, in the majority of mills cer tain days of the year set apart for mak ing necessary repairs, particularly at the time immediately before harvest when getting ready for the new crop. The lining up of machinery should also be looked after at this time. When bearings are made adjustable, as they should be in all cases, it will take but a short time to move them into proper line, without having to disconnect shafting and take same out of its bearings. The bearings should be of ample strength, that is there should be sufficient metal to securely hold each journal in its proper place. Machinery posts are sometimes very frail and flimsy looking sticks of timber. Good strong material for supporting shafting will in many cases brace up and stiffen an otherwise frail building. All journal boxes should be self-oiling. There are a great many in use, however, that are not worthy of the name-the oil chamber being nothing more than a drip basin for catching oil and in the event of a journal becoming hot, the chances for the oil reaching the bearing are very meager. A properly constructed self-oiling box when fllled with oil, can be left without requiring a fresh supply for months, owing of course, to the size of the oil chamber. The beauty of a properly constructed, self-oiling box also is that there is no oil dripping out of the ends and running down posts and over the floor.

Many gears have been removed and thrown away, and belt drives put in their place because the gears were hought to be consuming unnecessary ower. I am not as a rule an advocate
belting in present use. The cumbersome gears, at any rate, will perform their duty, at least so far as holding shafting to proper speed is concerned, even if for the time being, it be at the expense of the coal pile. In many of our modern mills, if belts of sufficient width and quality were used, the engineer would find a considerable load added to his engine. It has been found that many belts, or rather the belt makers, have been condemned, when really they were innocent, the cause of failure being the parsimony of puchasers, who expect fifty horse power from thirty horse power belts. It is a common error to thus economize on the first cost of belting. The small amount saved is soon lost by the stopping of machinery caused by the slipping of belts, strain on the shafting, increased friction, and rapid destruction of the belts themselves. In such cases the belt is not to be blamed for the little work done, and great consumption of uel.
A great many millers seem to have horror of slack in a belt. Some of the best belts while seemingly very slack, run and do their work in a very economical and satisfactory manner. A great many belts are injured by the application of tighteners. A tightener is a valuable contrivance when it is used on belts that are calculated to perform their work without being overstrained. A tightener should only be applied when practical tests have proven that the belt is not doing all the work it can do without injury to its fabric. To make a belt accomplish its work up to its full capacity, is to exclude air beween it and the face of the pulleys.
Many points about the machinery connections could be enumerated that receive very little attention the year round. It ought to be great satisfaction to a miller, after making a series of practical tests, to know that he is making a barrel of flour out of a limited amount of wheat. It would also help largely to show up the credit side of the ledger account at the end of the year, if now and then a series of practical tests were undertaken to determine the full measure of power, and making adjustments accordingly. Of course no flexible rule can be laid down that will govern all conditions, situations and nature of machinery.
The conclusions to be drawn from the principles and theories which have so often been presented and from the examples in practice, are obvious and definite. To secure the highest possible efficiency of machinery and maximum economy in the operation of establishments in which it is employed, none but the best material should be used, and it should be of sufficient strength, rather a trifle above than below the actual strength required.
[To be continued.]

## MICHIGAN MILLERS.

令ME annual meeting of the Michigan Millers' Association was held at Lansing, Mich., Jan'y 8, 1891, with President Knickerbocker in the chair and Sec'y Reynolds at his post of duty as usual. Representatives of 38 milling firms were present, also Mr. Frank Barry, Sec'y of The Millers' National Association and D. H. Ranck, Esq., editor of The Millstone. The Secretary and Treasurer's report was read and showed the organization to be in a flourishing condition both as to finances and membership. Several encouraging letters acknowledging the value of the Association to Michigan millers were read, having been received from members who were unable to attend. Insurance matters were discussed at some length. The Association concluded not to further agitate the subject of State grain inspection. The matter of adopting the use of paper-sacks in place of cotton was considered favorably and the paper-sack agents, a number of whom were present, were invited to present samples and prices. The Association finally concluded to award a trial order to a manufactory of paper-sacks at Irwin, Pa. Weekly reports were ordered to be continued during the year.
The President called attention to a resolution adopted by the executive committee of the Millers' National Association, December 16th, 1890, and now being circulated among the members of that association for signatures. The resolution being read, and some explanations made regarding it by Secretary Barry, Mr. Voigt moved, that it be declared the sense of this meeting that the resolution be enforced by the members of this association, which was carried. The resolution is as follows:
Resolved, That from and after February 1st, 1891, all sales of flour shall be made for shipment within fifteen days from the date of purchase, unless otherwise specified in the order, as entered at time of sale, and that a cbarge of five cents per barrel for each fifteen days or fraction thereof, beyond that time, shall be made until the order for shipment shall be given by purchaser.
The officers of the Association were re-elected for another year, Secretary Reynolds compensation being increased to $\$ 1,500$, the Association to pay $\$ 1,000$ and the Michigan Millers' Mutual Fire Insurance Co. to pay $\$ 500$ and all traveling expenses and furnish office room, according to their own proposition. The Constitution and by-laws were thoroughly discussed and so changed as to formally ally the Association with the Millers' National Association. Sec'y Barry addressed the meeting in a few well chosen remarks on timely topics and Editor Ranck read an able paper which was warmly received.
"Is Just a Little Wonder, Has Improved the Color of our STRAIGHT flour TWO SHADES, and INGREASED PATENT TEN PER CENT."

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## E. HARRISON CAWKER, Editor.

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MILWAUKEE, JANUARY, 1891
We respectfully request our readers when
they write t) persons or firms advertising in
they write to persons or firms advertising in Was seen in the UNITED STATES MILLLER AND THE MILLING ENGINEER. You will thereby oblige not only this paper, but the ad tisers.

## MILWAUKEE AMUSEMENTS.

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day and Sunday matinees.
day and Su
ACADEMY
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and Saturdays. Admission 25 cents on Wednes days and Fridays.
PUBLIC M USE UM - Open daily. Exposition building Visitors to Milwaukee in either summer or winter
cannot fail to flnd amusements suited to their taste.
$T$ HE Nebraska Millers' Association met at Lincoln, Neb., Jan. 15 and 16.
W. L. MANSON, representing the Millstone of Indianapolis, Ind. made us a pleasant call on the 13 th inst.

THE Silver Creek, N. Y., "funny paper" has made its appearance. No head of "tickled to death."

T
 of Wisconsin is reported to be in good circumstances both as to financial condition and amount of patronage.

WHO would have thought it? It is said that the great works formerly the property of the Geo. T. Smith Middlings Purifier Co., are to be turned into a manufactory of oil stoves.

MLWAUKEE mill-builders and furnishers are favored with plenty of work, and there is no lack of orders at any of the establishments. A good business year is anticipated.

T
 in Des Moines, Iowa, Jan. 21, 1891. Heatanareresat tues anery Howes. largso atemananeo is expeated. J. It
 A. Comigusy, Prexident

T
 Dopmernent of E.umomoesy will
 Semiotellus nigripes, a Russian parasite of the Hessian fly, in order to endeavor

BBro. Hall of the valum nilar ought to write an article entitled "What I Know About Corn-Shellers." In a late number he illustrates one, showing the corn and cobs flying towards the sky, regardless of the law of gravitation.

0UR Milwaukee Chamber of Commerce refuses indignantly to abolish the wheat pit. Its cause was championed in a tear-starting oration by our old friend J. W. Bass. The members were silent as if spell-bound by his eloquence and even the old clock almost stopped ticking. At the conclusion of
his speech the integrity of the "pit" was maintained by a rousing viva voce vote, and the old clock struck for joy. "Why" said an old member "you might as well try to play Hamlet with Richard the
Thisrd left out." The pit will remain.

S
SOME Wisconsin Millers object to grinding Japanese buck wheat. They say it makes bitter flour. They will find that if they use the modern buckwheat machinery they can make good flour. New York and Pennsylvania millers find no fault with it.
M
CHIGAN millers have without doubt an able, enterprising and active secretary. We wish the secretaries of the Associations in the other states would follow his example. would mean a great deal for the welfare of the trade throughout the country.

THE question of building and operating their own telegraph lines is being agitated in the several boards of trade throughout the country. It is asserted that the members of the exchanges could save themselves a vast amount of expense by building their own lines.
$\mathrm{A}_{\text {special technical writer outside of }}^{\mathrm{T}}$ our office (Mr. G. F. Mueller,) contrib uting to the United States Miller. He is an able writer and his articles written for us have been quite extensively quoted. We commend his articles to the careful study of our readers.

0AT-MEAL millers are again endeavoring to organize a trust. This time it will be known as the American Cereal Co., and will be heavily capitalized if the organization is perfected. We doubt if the organization can be carried to a successful conclusion, as there are too many oat-meal mills in the country, many of which will remain outside and take the consequences.

WE desire to call the special attention of our readers to the valuable nature of our letters from Regular Correspondents. We have taken great pains and spent a good deal of money to secure the best writers on milling subjects, commercially considered, in Great Britain, Baltimore, Buffalo, St. Louis and other points, so as to give our subscribers a correct view of things viewed from local stand points. Some of these letters have created a good deal of comment, and they have been looked for anxiously as our publication day ap-
proached.

N a recent number we referred to the instability of mutual insurance companies and predicted the early demise of some of them. In this connection we note the appointment of a receiver for the Buckeye Mutual Insurance Co. of Ohio, and the Wisconsin and Milwaukee Mutuals of Milwaukee, Wis., and we do not know how many others. There is reason to believe, however, that the Millers' Mutual Insurance Co., of Wisconsin, and the Millers' National of Chicago will be able to stand any pressure that may be brought to bear upon them. Good insurance like good property or ervice of any kind, demands a fair price, and must have it. A mutual company may start out and run along or two or three years without meeting with many material losses, and the poly holders imagine they are making a ig saving in cost of insurance, but
practically there is no saving in the long
un. Millers or any one else desiring be productive of good, mentally, social to take out insurance should thoroughly ly, morally and physically to all who satisfy themselves of the stability of the partake therein. Mr. L. Maygrove the companies to whom they entrust their business, whether they are mutual or stock companies. It is the only safety valve. The trouble with the Milwaukee companies seemed to be from a sudden scare of the insuring public, and conse quent dropping off of patronage.

$T$HERE are over 15,000 millions dollars in currency in actual circulation in this country; outside of the U. S. Treasury, showing a gain about three times as large as the gain in population, and yet a class of people imag ine that a great a mount of money issued by the government would be of great benefit to the commercial interests o the country. It is the "Greenback" theory revived under new auspices This class of enthusiasts want a "cheap dollar" to pay the indebtedness of an honest dollar. Such a scheme can nev er be of any practical benefit to our cit zens as a whole and merits the con demnation of all honest men. Above all things let us take no step that wil depreciate the value of our currency in the eyes of the world or of ourselves A round plug can never fill a square hole.

THE Modern Miller, Kansas City, Mo publishes the following item in its anuary number
There are owned and controlled in this city twelve elevators with a total storage capacit. of $, 760,000$ bushels, an increase over last yea
of three elevators with $1,800,000$ bushels storage capacity, and there is a prospect of two or three being built the coming year. Below are the names of the elevators now in the cit with their capacity:

| NAME. Storage capacity, bushels |  |
| :---: | :---: |
|  |  |
| Arkansas Valley. |  |
| Alton. | ,000 |
| Kansas | ,000 |
| Novelty | 250,000 |
| Inter Ocea | 150,000 |
| Armourdale | 250,000 |
| Union Pacific. | 1,009,000 |
| Santa Fe | 750,000 |
| Kaw. | 40,000 |
| Argentine | 75,000 |
| Pacific | 175,000 |
| Total. | 3,765,000 |

## $\mathbf{S}^{(O M E}$ effort is yet being made to ca

 ry out the proposed millers excur sion to Europe. Whether any greate number of millers will go across thi year than other years we do not know but it would be pleasant if a considera ble party could go at the same time on the same boat. If the weather should prove rough the scenes of a former ex cursion of millers on Lake Michigan from Chicago, would be vividly brought to mind. We hope the artist of the Honest Miller will be on board with his little Kodak. It is reported that Bro Edgar is raising side-whiskers, practic ing the "trooly Henglish haccent." under competent instructors and rehearsing his "parle vous" for the occasion Ranck of The Millstone is said to have ordered some fine large shark-hooks to add to his fishing tackle which he in tends to use on the way over. Bro Mitchell is reported to be writing an essay entitled "How to make British Milling Pay-Subscribe for the American Miller." Bro. Hall of The Modern Miller will, they say, go armed in the regulation Colt's Navy style, and orate a warning to British syndicates to keep away from Kansas City, but his English hearers will doubtless consider it "Just han Hamerican joke, don't ye know." Laying all jokes aside, we sincerely hope that if the excursion excurts it will British correspondent of the United States Mileer at London will be able to give first-time visitors some valuable points for their edification and instrucion. A $\begin{aligned} & \text { DECISION of considerable import- } \\ & \text { ance to millers was recently made }\end{aligned}$ ance to millers was recently made by the Arbitration Committee of the New York Produce Exchange. This case has attracted more than usual attention because of the original refusal of the milling company to arbitrate, because of the question whether their agent was such or acting as principal in he transaction involving the question in dispute, and because the milling company at first denied the jurisdiction of the Exchange, as it was not a member of the Exchange. It was brought by the English shipper, F. E. Hadley, against the Sanderson Milling Co., of Milwaukee, Wis., for breach of contract and damages for delay in delivery of four sold to arrive, and the Arbitration Committee decided that such breach had been committed, allowed the claim of Mr. Hadley and gave him judgement for the $\$ 1,357.15$ in full of his claim. The decision of the Complaint Committee originally was that the milling company, though a member, must submit to arbitration. As the penalty for refusal was the exclusion of the four of the mill from sale on the Produce Exchange by its agents or any member of the Exchange, the milling company reconsidered its refusal to arbitrate, and the above decision therefore was upon a submission by both parties of the case.$\mathrm{W}^{\text {B }}$E are gratified to be able to note the organization of another Milwauke company whose business is bound to grow to immense proportions. Its name is The Shaw Electric Crane Co. Travel ing cranes used for moving and carrying heavy articles from one part of a shop to another, or for loading or unloading heavy machinery on cars have been in use many years, but the Sbaw electric crane simply discounts them all in general efficiency The implement was invented nearly three years ago in the E. P. Allis Co. works, in this city. It wasa result of a breakdown of one of the kind in general use. Mr. A. J. Shaw wasthena designer in theAllis works. Superintendent Reynolds requested him to prepare plans for a crane which would de durable and do good service, and the Shaw electric crane is the result. One was built and put in use. In speaking of it Mr. Reynolds said:
"It is the only really practical traveling crane in existance. The one first built has been in use in this shop two years, and has worked perfectly, almost day and night, during the entire time, and the expense of keeping it in order has been simply nothing, whereas others are almost constantly getting out of order. A year ago we put in the second one, and a third one is now being built. The electric crane will do double the work of one of the others in the same time and at much less expense. There is not a doubt of the absolute practicability of the new crane or of the success of the new company. The extent of its business will simply be limited to its capacity to meetdemands The electric crane is sure to take the place of all other traveling cranes speedily No shop can use the slow ones and cornpete with an establishment equipped with the new ones, hence the business of man ufacturing them must be a success."
As soon as the location of the works is decided upon, which will probably be in the new manufacturing district in the the northwestern portion of the city, work will immediately commence on the necessary buildings. The enterprise will give steady omployment to 100 mechanics
from the start

## millers national association.


of Ladiligation-Tariff bill-The Export Bin ECRETARY Barry, of the Millers' National association, has completed his semi-annual report to the members. The report says there is an increase of thirty-four memberships, with fifty-nine units of 100 barrels, daily aggregate capacity, which is certainly encouraging. above figures demonstrate a point worthy of note. The thirty-four firms which have recently joined with us have an aggregate capacity of but 59,000 barrels per day, and one of these concerns makes 1,000 barrrels daily, so that an average for the remaining thirty-three firms is but about 150 barrels each per day. As a matter of
fact, twenty of these mills make less than 100 barrels per 24 hours. This goes to show that many millers of smaller capacity are beginning to realize
the fact that this association is of just as much practical benefit to a small manufacturer as it is to the larger one, and that they are willing to join hands for the common good, and recognize their obligation to take part in supporting an organization which has worked so much good for all millers of the United States.
I view of the fact that the association had not called upon its members for one cent of money from Jan. 31. 1883, to June 16th, 1890,-a period of seven and one-half years, and that the
accounts of members who paid this last assessment were technically in good standing up to June 16th, 1890 the recent call demonstrated the fact that some of our memberships, as they appeared upon the books, were really dead, the firms having gone out of business. is gratifying, however, to note that we have, within the past two years, gained more members than we have
lost during the last seven and half years. The association today stands larger and stronger in point of daily output of its mills than it ever did before-even during the times of the patent troubles, 1877 to 1883-the aggregate capacity of members being about 150,000 barrels of flour per day.

A suit was reported on the part of one $W \mathrm{~m}$. E. Lee vs. C. A. Pillsbury \&
Co., for alleged infringement of his patents, in the use of the cockle machines manufactured by the Cockle Separator Manufacturing Company, of Milwaukee, Wis, the defense being furnished by the manufacturers of the machines. The association has kept careful watch of this case, and
guard the interest of its members,
Another suit which attracted som interest last summer was that of J. H. Russell vs. J. O. Kendall \& Co., of Hartford, Wis., Mr. Russell claiming that he had some seventeen years ago purchased the exclusive right in certain states to manufacture and vend middlings purifiers under the George T. Smith patents. The National association has interested itself fn the defense
of this suit, which is now resting in peace, and Mr. Russell will doubtless not be heard from again. A number of minor threats of patent litigation have been reported during the past few months, but no new suits have been entered, and patent matters seem to be peaceful for the present at least. This quiescent state is undoubtedly due largely to the existence of our organiza-
owners of bogus and invalid patent claims, that they cannot pursue an aggressive policy against millers unmolested. The association stands as a menace to this class of swindlers, and insures millers against their attacks.
As reported at the last convention this association was then engaged in an active lobby, during the framing and passage of the so-called "McKinley Tariff bill," in order to secure the reduction of duty upon jute and burlaps. Our efforts proved very successful and, though the most powerful influence was brought to bear by the combined American manufacturers of jute goods, to have the duty upon imported burlaps placed at a figure which would give them a monopoly of the jute bag trade, through the co-operation of our members, in responding to the call of the secretary to appeal to their members in congress for support of our interests, we succeded in getting burlaps, such as are used for bags, placed at the lowest figure in their schedule.
The constant agitation of the subject of a new and fairer export bill of lading which has been kept up by the Association and its friends, has led to some light improvement in the service rendered by the transportation companies. At the recent meeting of the Executive committee, careful consideration was given to the subject of organizing an "Export Bureau" for members of the National association, the idea being to establish a central office, to which each member may, when desired, report an export shipment, when forwarded, the same be traced to destination. Agents will be placed at all the principal points of trans-shipment throughout the United States and at the seaports. These agents will be immediately advised by the central office of the shipments which are coming their way, and it will be their duty to watch for and promptly report the arrival, transfer and forwarding of the lour. When the central office discovers by its recorders that a shipment
enroute is suffering delay, communication will at once be had with the railroad which is at the time responsible, and the shipment may thus be started up and hurried on its way. The agents the seaports will look after prompt transfer from the cars to steamers, and thus the provoking delays which have done so much to injure our export trade may be obviated. For this service the
Export bureau will charge a sufficient fee per barrel simply to pay for its operation. A basis for such fee can only be arrived at by experience, and in order to establish the bureau, the flour exporters of our association who may wish to join in this organization, will be asked to sign a small guarantee fund and state approximately the amount of flour which they will want traced thus. It is hoped that members interested will is prompt and hearty cooperation in through organization of this sub-association, benefit the export flour trade of the United States, all millers will be directly benefitted thereby, as results of over-production will then be felt less in the domestic markets. The Executive committee adopted a resolution on Dec. 16., permitting A. M. Bailey, of Minneapolis, to present on June 15. a plan in detail for the organization of a Mil-
lers' Transportation Association, to be conducted under control of the Miller's National associatin, and at that time to furnish definite information relative to first mass by $v$, and that of the centre
could be secured for its support during
the first year.

- The Executive comittee at its last session instructed the secretary to submit to all members of the Association the following resolution applying upon domestic flour sales :
Resolved, that from and after Feb. 1. 1891, all sales of flour shall be made for shipment within fifteen days from the date of purchase unless otherwise specified in the order, as entered at time of sale, and that a charge of 5 cents per barrel for each fifteen days or fraction thereof, beyond that time, shall be made, until the order and specifications for shipment shall be given by the purchaser.
If an agreement, as stated, can be lived up to, the results will be of inestimable profit and benefit to millers, and a thousand and one disputes, often resulting in litigation and misunderstandings which cost millers valuable trade, may be obviated. Many flour buyers are inclined to take advantage of sales placed without specifying time of shipment, and it is, of course, unnecessary recite to you the advantages of a re form in this method of transacting busi


## the meghanics of the injector.

By J. Burkitt Webb.

THE fact that the injector wastes no heat except a small
amount by radiation, is usually accepted as proving that the instru ment has a very high efficiency ; when, however, we make a careful comparison of it with a good steam pump we may surprised to have the latter come out the best. I desire to call your attention to a mechanical principle upon which the injector works, and to show that it is an unfavorable one and one which accounts largely for the difference in favor of the steam pump.
If a mass of clay or putty be projected against an equal mass at rest it will set it in motion and the two united masses will move on with half the velocity given to the first mass; if, however, the projected mass contains but one-tenth, instead of one-half of the
whole amount, the final velocity will whole amount, the final velocity
be but a tenth of that of projection.
The principle governing such cases is called in mechanics the "conservation of the motion of the centre of gravity," which means that the velocity of the centre of gravity of the united masses is the same as the velocity of their centre of gravity before they united.
In the first instance, the two masses being equal, their centre of gravity lies always midway between them, and therefore moves along with half the velocity of the projected mass; after impact the centre of gravity is in the centre of the united mass, and, as the impact does not alter its velocity, we know at once what velocity the united mass must have. In the second case onetenth of the mass being in the striking and nine-tenths in the struck mass, the
entre of gravity will lie nearest the latter and at a distance from it equal to wo masses. The velocity of the centre of gravity will therefore be one-tenth of the velocity of projection and, consequently, the masses after uniting will ave a velocity of one-tenth of that of projection.
In both these cases, supposing the rst mass to be $m_{1}$ and the, second to of gravity by $V$, we find that before
impact the energy is $\frac{1}{2} m_{1} v^{2}$, while after impact it is only $\frac{1}{2}\left(m_{1}+m\right) V^{2}$. In the first case $m_{1}=m_{2}$ and $V=\frac{1}{2} v$, so that half of the energy disappears at impact, being converted into heat by the blow and lost. In the second case, $m_{1}+m_{2}=$ ten times $m_{1}$ and $V$ is only one-tenth of $v$, consequently the energy after impact is but one-tenth of what is was before, or nine-tenths is lost by the blow.
Looking more closely into the condiion before impact, we see that the energy consists then of two parts, viz.: the energy of the whole system of two masses moving with the velocity $V$ and the energy with which the two masses approach each other, that is to say, we may calculate the energy on the principle that the pair of masses is moving
forward with the velocity $V$ of their forward with the velocity $V$ of their centre of gravity, and then that mass one has an additional forward velocity $=V$ in the first case, and $9 V$ in the second, while mass two has an additional backward velocity $=V$ in both cases, thus causing the latter mass to stand still and make the velocity of the first mass $=v$.
Having made this division of the energy we find, as might be expected, that only the first part of the energy is preserved while the energy of approach is lost by the blow; and this holds for all bodies which are not sufficiently elastic to separate again after the blow is struck.

Now, in the injector, the water is almost at rest when it is struck by steam moving with a high velocity and thus set in motion. If the steam is, say, one-fifteenth of the water, the velocity of the mixture will be but onesixteenth of that of the steam, and fif-teen-sixteenths of the mechanical energy of the moving steam will be lost by the blow. This mechanical energy has been developed by allowing the steam to flow from the boiler into the vacuum chamber and thus to get up a high velocity, but, however economical such a method of generating mechanical power from steam may be, it is neutralized by the wasteful way of using the power, for impact is, as has been shown, a wasteful method. In this respect the injector is like a slowly moving impact water-wheel, where almost all of the kinetic energy acquired by the water in running down to the wheel may be lost in heat when the water strikes and dashes into foam; and yet in such a wheel, were it desirable to warm the water, it might be claimed that no energy was lost.
In the injector a greater part of the energy even than calculated is lost by the blow, from the fact that it is not struck exactly in the direction in which the water is to move.

In reasoning upon the efficiency of the injector it is not enough to state that no heat is wasted, because there would be none wasted if the steam were condensed into a tank of water for the purpose of heating it, while if our object were to get mechanical power it would all be wasted, whereas in a proper engine we might get out of it the legitimate amount of power. The steam used by the injector is at boiler temperature, whereas, the heat when eturned is at feed water temperature, and we should therefore charge against the injector the amount of power which good engine working between these temperatures would develop, and not redit it with heating the feed water, except so far as we might not be able to do it with exhaust steam.

## CORRESPONDENCE.

LThe following letters are ali from our own specia
correspondents, and refleet thefr views nowd the view of the trade in the location from whieh they write

## MILWAUKEE REVIEW.

我MODERATELY large general business has been done here during the past month and the banks have enjoyed a brisk demand for money, which has enabled them to keep their discount lines as full as is considered desirable. The discount rate is 7 per cent per annum and outsiders pay $7 \frac{1}{2}$ and 8 , but the tendency is toward lower figures.
The breadstuffs markets are steadier at present than during the earlier part of the month. Flour is quiet and steady, with a fair demand for bakers' and low grades while patents are dull. The latest quotations are: Hard No. 2 spring wheat patents in barrels $\$ 4.65 @ 4.90$; soft wheat patents in bbls. $\$ 4.40 @ 4.65$; export patents in sacks $\$ 4.15 @ 4.40$; clears, hard wheat $\$ 3.65 @ 3.90$; soft wheat $\$ 3.40 @ 3.65$; straights, choice bakers, $\$ 4.15 @ 4.40$; export $\$ 3.40 @ 3.65$; low grades $\$ 2.00 @ 2.50$; winter straights $\$ 4.30 @ 4.50$; Rye flour, country, in sacks $\$ 3.00 @ 3.50$; city, in bbls. $\$ 3.75 @$ 4.00 .

Millstuffs are steady on a slight recent advance and are quoted: Bran per ton on track, car lots, $\$ 18.25 @ 18.50$; Middlings, fine $\$ 18.25 @ 18.50$; corn meal in bulk, course, $\$ 20.00 @ 20.50$; Ground feed, corn and oats, $\$ 17.50 @ 18.00$.

Wheat is steady and good grades sell readily while the poor grades are slow The following are the closing prices of grain on 'Change Saturday 17 th. inst. as compared with those of same day in 1890.

No. 1 N wheat:
No. 2 S wheat ot t
No. 2 barley is.
No. 1 rye is ..
No. 2 corn o $t$
No. 2 white oats.


Sameday
1890. 1890.
822
83

Several of th
Several of the mil and are having necessary repairs down on their machinery. Many have considerable stock on hand. The average daily production of flour for the week ending the 17 th inst. was 5,400 barrels against 3,900 for the previous week and 6,525 for corresponding time 1890. During the past year reports show that the total production was less than one half the amount of the capacity of our mills; the a mount produced being $1,379,039$ barrels while the capacity is about $3,000,000$.
An effort was made, in the Chamber of Commerce on the 17th inst., to dispose of the pit, which, in the past few years has fallen into disuse, except as a receptacle for tobacco quids, cigar stubs and as a roosting place for holding friendly chats during the intervals when business is lagging. A petition had been presented to the Board of Directors, signed by several members, asking that the pit be removed. The cause of the pit was championed by some of the older members and an eloquent and forcible speech by Jim Bass, which, for pathetic touches and appealing terms, was on a parallel with the famous poem "Woodman Spare That 'Tree", made such an impression on the listeners that, when a vote was taken it resulted almost unanimously
in favor of allowing the pit Ther allowing the pit to remain
The suit brought before the Board of Arbitration of the Chamber of Commerce by E. P. Bacon \& Co. against the E. Sanderson Milling Co. to recover the
value of a car load of wheat has been decided in favor of defendant. The wheat was sold Sept. 27. and delivered Nov. 27. The Sanderson Milling Co. claimed that 60 days was not a reasonable time, especially as the price of wheat had, in the meantime, goie down. The complainants claimed that there is no specific rule as to time of delivery and that the wheat had been delayed in transit by the railway company on account of the blockade. This decision should be a reminder to all dealers, of the necessity, in the absence of a rule governing such matters, of specifying when, or within what length of time the purchase is to be delivered.

## OUR ENGLISH LETTER.

eations for the Future-Collapeets and Indi-Elevator-Annual Meeting of London Flour Millers-Milling Affairs in Brazil, s. A.
Foot-ball Mateh in Mark Lane Corn $\mathbf{E}$. Change on Christ mas Eve-Failure of
ent Large Grain House-Etc, Etc.

会HE year 1890, which commenced with brilliant promise, will in a few hours be reckoned with the past, and in looking back on
the past twelve months, it must be ad he past twelve months, it must be admitted that the millers of Great Britain have had everything in their favor, so that they cannot be but satisfied with the result of their years' trading. To the farming community prices have been disappointing, but still the year 1890 on the whole has been moderately satisfactory. In fact by some farmers and those connected with agriculture, the year just closing is considered to be the commencement of a far more prosperous decade than that of the eighties. There
certainly has been an improvement this certainly has been an improvement this
year due to the yield of the principal corn crops, the abundance of the pulse division, and the result of the sales of bred pedigree stock, rams and young bulls; as well as the considerable outcomes of wether lambs and draft
ewes which were disposed of by ewes which were disposed of by
the large breeding flock masters at the autumn fairs. Dairying must be
added to those industries that have added to those industries that have done fairly well chiefly because
pastures have been grassy and keep abundant during the greater part of the year. Although the prices of wheat and other corn crops have been low during the year, still it is gratifying to find that there is an improvement upon the values of 1889. For the 51 weeks ending the 21st December the average prices are 31 s . 9 d . a quarter for wheat (a quarter of wheat is 480 lbs ), 28 s . 8 d . for barley and 18 s . 8 d . for oats, whereas for the same period in 1889 they were 29 s .9 d ., 25 s . 10 d ., and 17 s . 9 d ., respectively. The Director of the Statistical Department of the Board of Agriculture, (Major G. P. Craigie) in his report to the President of the Board of Trade, states that: Among the details of the corn-cropped area,attention isalways primarily directed to the area under wheat, n which by far the most of the decline is apparent. A further diminution in this cereal has to be reported in 1890, the $2,449,000$ acres in Great Britain under wheat in 1889 having dropped to 2,386,000 in the current year, a decrease of $2 \frac{1}{2}$ per cent. The decrease occurs in England only, a very slight increase being shown in Wales, and one of $4 \frac{1}{2}$ per cent. in Scotland, where, however, wheat growing occupies very narrow limits. The following table gives a summary of the estimated total production of wheat, the acreage on which it was
grown and the estimated average yield per acre:

| wheat. |  |  |  |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Estimated } \\ & \text { Totat } \\ & \text { Produce. } \end{aligned}$ | Acreage. |  |
| 1890. | 1890. | 1890. | 1890. |
|  | Bushels. | Acres. | Bushels. |
| Wales | 1.72, 541 |  |  |
| Scotland | 2,199,526 | ${ }_{61,973}$ | 35'49 |
| Great Britain.... | 73,354,484 2 | 2,386,336 | $30 \cdot 7$ |

The imports of wheat and flour into Great Britain during November were much less than usual, and the totals for the first quarter of the cereal year have fallen considerably below those of the corresponding period of 1888 and nearly to the level of last year.
With reference to maize or Indian corn, the unusually scanty supplies from the United States have not made the quantity imported as small as it was expected on account of the Argentine
Republic and Roumania having shipRepublic and Roumania having shipped largely.
During the month the first collapse in England of a brick elevator occurred. The accident was at the elevator connected with the flour mills of Messrs. Samuel Kidd \& Company, Limited, of Isleworth, near London, and it occurred on the 9th of December between 7 and o'clock in the morning. The elevator is built on to another large building, and 8 feet square. Suddenly, without any previous indication of weakness, the whole of one side of the building fell outwards, and the contents of five bins-about 1,700 quarters of wheatwhich were on that side was scattered over the fallen debris. In my next letter accident and a few details of the of this accident and a few details of the foundin London shortly on some milling matter, but from what I hear at this distance from the scene the architects are mewhat to blame.
The London Flour Millers' Associa tion held their Twelfth Annual Meeting on December 3, and after electing the officers for the ensuing year, a long discussion took place on the proper weight of a sack of flour, the Chairman urging that the Americans, as a practical people had adopted 140 lbs . as being sufficiently heavy, and that the adoption of a smaller size would give the millers arger choice of men for carmen; but on the other hand it was urged very strongy that it would enormously increase cost of distribution.
I hear from London that the fifth ordinary general meeting of the share holders of the Rio Janeiro Flour Mills and Granaries was held at Winchester House, Old Broad street, when Mr. Richard Foster, chairman of the Board, took the chair. The report stated the regret of the Board that the assets did not show a more favorable result, the profit and loss account displaying a debit balance of $211,806,4 \mathrm{~s}$. 8d., together with $£ 30,962$ caused by loss on exchange, which had been carried to an exchange contingency account. Part of the loss was due to the depreciation amounting to $£ 8,500$. The chairman in moving the adoption of the report said it would have been a pleasing duty dividend, but a petter report and declare a dividend, but owing to the circumstanno profit. They had, he thought, turned the corner, and their operations since the accounts were made up, showed a much more favorable result. Mr. Simon, their milling adviser, had sent out to Rio a gentleman with instructions to sent them back most encouraging anti-
cipations as to what his report would be. The difficulties inherent to the establishment of a business like theirs had now, to a large extent been overcome. Their flour was in increasing demand, and highly appreciated by those who bought it. With the view to increasing the practical efficiency of the board, they had, he hoped, secured the services of Mr. Marriage, a London miller of high standing. Mr. Weigall seconded the proposition, remarking on the great loss which they had suffered by the fall in exchange and on the value of the property as certified by all who had seen it. He agreed with the chairman in thinking they had now turned the corner, for they were making a profit as fast as they could. It was a great advantage that Mr. Marriage had consented, subject only to his having time to attend to the duties, to join their board The report and accounts were adopted. Mr. F. Price was re-appointed auditor, and a vote of thanks to the chairman and directors terminated the meeting.
The Weekly Miller of Monday last published the following account of a football game which took place on Christmas Eve, in the London Corn Exchange:
"A football match appears to have become a sort of "Christmas fixture" on Mark Lane Market, and on
Christmas Eve, the Old Corn Exchange again witnessed a merry game. This time the football players did not wait for the closing of the doors, but some ten minutes at least before the hands of the tall clock had given the signal for the exclusion of the public a football was tossed out and sent spinning through the air, and in less than no time a throng of eager players had joined in the game, and were urging the kall about in all directions. Play was continued till the market was reopened at 3.10 , but so far as we can learn there were no casualties either to limbs, panes, or clock. It shonld be mentioned that the anticipation of a "game" was pretty general on market, and that some minutes before play commenced such standholders as attended this holiday market were generally busy covering up their stands, and by the time the game was in fair progress nearly everybody was in the body of the Exchange. The football players were mostly young men who presumably, had acquired the knack of impelling forward the "leather" in more suitable places than Mark Lane Corn Exchange, but this year they pursued their pastime without any let or hindrance from the powers which, for the time, were not. But perhaps the latter expression is hardly accurate, because it appears that as soon as it became evident that the annual match wa imminent, guardians were posted at the doors, which were thus closed to the public before the "closing time," and this is said to have led to some unseemly scuffling between the doorkeepers and frequenters of the Exchange, who could not be brought to understand why their customary right of entry should be denied them in so unexpected a manner."
I have been spending some weeks in Liverpool and for some days at the early part of the month the affairs of Messrs Joseph Boumphrey \& Co., corn merchants, Brunswick Street, Liverpool, have been the topic of discussion in the corn trade. The liabilities of the firm were roughly stated to be about $£ 50,000$ and the principal creditors are the Mr. Bank of Liverpool.
Mr. Louis Gibson, the well known

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flour and author of Gradual Reduction Milling, has been staying a short while here on his way to London. Mr. Gibson who intends to winter in Paris, has already visited Glasgow, Edinburgh and Dublin, and intends to approach the importers of American flour in this country with a view of their combining with the American exporters to obtain a more favorable and quicker transportation. To-day is the 22 nd day that frost has been registered in England, and weather continues nearly, if not quite, as cold as ever. The thermometer registered 25 degrees here, 26
degrees at Holyhead, 20 degrees in London, Oxford and Cambridge, 12 degrees at Dungeness. The mean daily temperature has now been below the freezing point for 22 consecutive days.
Taking this test for the length of frost Taking this test for the length of frost
the Greenwich observations do not show a period of cold so prolonged as the present since 1813. A very severe frost commenced on the 26 th of December
1813 which lasted just 32 days. The next prolonged frost since 1813 com-
menced on the 9 th of January 1823 and lasted 18 days. In the Crimean Winter 1854-55 the daily mean was below freezing point from February 7. to 23.
The British Vice-Consul at Nicolaieff reports that the late harvest has been a most disappointing one throughout th whole of South Russia.-L. Maygrov
Liverpool, 31st December, 1890 .

## our buffalo letter.

 until the stock on hand showed a consider able decrease. On January 6th the millers-
that is the five largest, viz.; Schoellkopf \& Matthews, A. R. James, Urban \& Co., Harvey \&Henry and Shuttleworth of the Banner Mil-
ling Company met and decided to organize a stock company for the purpose of manufac-
turing their own barrels. It is claimed Buffalo coopers do not buy their cooperage stock from tirst hands and therefore cannot
compete with Detroit and other milling disadvantage in the strife, our millers at a trade against other points, on the other hand the coopers claim that barrels are cheaper in
Buffalo than other towns. Messrs. Harvey, committee to purchase a plant and stock. One thing is certain, and that is, if George
Urban takes the lead in this matter, the cooper shop will go up before the next de-
mand for flour creates the fresh supply of barrels. the Lackawanna line started up last week. Richard K. Noye has resigned his wosition
as Councilor of the University of S. B. Patridge of North Collins, Erie coun hy, committed suicide by shooting, at Brown's
hotel in this city, January 6th. He was well
known among flour and feed dealer known among thour and feed dealers and had
quite a large store in North Collins. The act was no doubt planned some time ago, as he
held a large number of life insurance policies of late issue.
thus far have been very large for the season thus far have been very large and of most ex-
cellent quality. Only two cars of the whole amount were "hot" and of No. 4 corn about expected to be at least 25 per cent. larger The Labor Union of this city is record. the millers who are using second-hand barrels. The newly elected common council was organized on the sth of January, and the
corporation counsel is also of a more liberal stripe than the former incumbent. The unconstitutional. The boys there coopers nopos of bringing forward sufficient "inlooence" to pass the ordinance on the plea
that such second use of barrels in hat such second use of barrels is dangerous to health. If is true that flour is one of
the best absorbents, the claim of the work-


#### Abstract

ingmen that it is dangerous to health must also be fact. Diseases have been spread in a


 of more unlikely manner as the records millers' have in no way been rendered unfit for use How does the miller know? The barrels are collected by mer know? The barrels are mill which purchases them. Everything the to the barrel man, when he can get a few cents off. Millers, you will have to fight he last occasion
## Have you ever

Have you ever noticed a business man ennotice that he does it by the side doornot ce that he does it by the side door-they
all have these little conveniences, no matter what their pretentions to honest dealing may be. Some "shops" are fitted up with green curtains to hide the foolish virgins whose caught in one of these places, he acts like boy denying a raid on the cherry tree while his mouth is stained with the fruit. He makes a good attempt to swagger out, but lord, you tep. One or two visits are not him at ever on, it is only after he commences to spend a few hours with the idle crowd, he meets there swapping foul stories, that his banker hears business new departure. Then, later on his and some reluctance is shown to trade with tells him he is a "damned fool", and if he is not too deep in the quicksand he takes the several of our business men are in the path rod by those who have lost all, on these treacherous waysides.
Messrs. Mather \& Brown of Honeoye Falls, swamped with orders.
The Buffalo Merchants' Exchange want the Chicago quotations, and wants them bad How to get them is the question. A proposition was made to subscribe a sufficient sum information, but it met with little favor The quotations are now posted about half an hour late and do not agree with those rewhether these latter prices are any nearer correct, as several discrepancies between been noticed many times
The Matthews-Wright case was put over for the next term of court which convenes about the first of February. It begins to look as now that young Wright has managed to himself into another questionable business tangle through the failure of Bateman \& Co The disclosures of assignee Garver caused a
smile on change, especially the statement that "neither Mr. Wright nor Mr. Gladwin ever contributed one dollar toward the capcapital was contributed by Mr. Coon, the special partner." Trouble has come thick and fast upon young Wright. First the failure of A. P. Wright \& Son, the MatthewsMerchant"letter, the writing by the "Grain opinion places the writing of which private ous charges made by Bateman the seriassignee. It is sad to add that there is little or no sympathy expressed for the Wrights.
Mr. Wright to-day asked his customers to close their deals.
Changes in firms commenced on the 1st
of January, and quite a number are looked of January, and quite a number are looked tion. The most important is the resignation of S. W. Yantis, agent for H. J. Coon \& Co Mr. Yantis came here a young man to sucBoston to represent Coon \& Co. They were probably the first firm to establish at Buffalo grain agency of an independent order, and their success was beyond expectations. Mr. Yantis was respected by all his associates
and to show their appreciation the grain trade presented him with a handsome desk and chair
Mr. Wm. J. Reardon for the past two years
connected with Messrs. Spann \& Chandler also struck out for himself on the 1st of Janary, taking a room among the hard wheat ren on the 2nd floor. Mr. Reardon is an enrgetic, wideawake, hustling young busineess nan who has had fully ten years of expeririends. He will succeed.
Mr. W. V. Downer, for a number of years chief clerk for S. A. Yantis has been appointed by H. J Coon \& Co. as agent here. r. Downer possesses the confidence and Exchange Exchange.
C. A. Warfield who represents Bartlett, ers too small for his constantly increasing business, has taken the connecting room ocupied by Messrs. Rateliffe \& Son and fitted up in fine taste as a private office. Mr.
Warfield has become quite a power on
'change and the canal men dread the coming
of their season's business with this notorious of their season's business with this notorious disturber of the peace in the field again. y which he will be known-so Jacus is reorted saying.
There will be no canal association next
season. That's settled. All the better for grain men and some of the forwarders, but between the two the of the forwarders, but fer. Sid Finn is happy as a lark and working like a beaver to secure the lion's share of the grain. The only salvation now for the canal men is to own an elevator and I believe berore the year is out a start will be made that direction. It must be done either by he state or private capital if the usefulness of the canals is to be maintained. An elevator answering this purpose could be built before would not opens this spring, and the cost would not exceed $\$ 50,000$.
The Lehigh Valley railroad will put a line or steam canal boats on the canal next seaso between Buffalo and New York to ca
grain. This will have no effect on rates. grain. This will have no effect on rates.
Next year promises to be an eventful one in more ways than one, that is, if the present in dications are fruitful. Rumor has it, and there no elevating of truth in it, that there will be are in course of construction next year. Floaters dissatisfied ones forced into the combination last year, they are a standing menace to the of which I cannot speakere are internal war knock the old combine at present, likely to Oh, what fun we're going to have. The new wheat from hard is booked for it from Buffalo.
The first consignment of M
wheat reached us about of Minneapolis wheat reached us about December 25. It quality. About 20 cars have been received thus far but more is expected. The freight rate was 15 c per bushel. The supply and the deficiency must be made up from Minneapolis no matter what the cost may be. New York took 120,000 bus. No. 1 Northern during the month, and for a week was figuring come up to the figures hard but would not advanced from 8 to 11 centsover Chicago May and No. 1 Northern from 3 to 7 over the same month, during the week ending January 10th. The stock of No. 1 hard is only 254,000 and of Northern 819,000 against over 2 millions
It is clai
aimed by those who should know that a larger amount of flour will be shipped ever before.
Millfeed is higher again, having advanced $\$ 21.50$ for winter the month and is scarce at Fine white feed is sailing up tor fine bran. $\$ 26$ per ton. Still higher prices are predicted next month.
I understand that quite a number of Buffale grain men are speculating in hay, Heinold has never been so cheap as it is at. Hay throughout this county. Fine timotresent as low as $\$ 6$ per ton loose and $\$ 8$ baled. Work money in this certainly.
bakery is well advanced addion to the $R$. Ovens is completed it will be the largest individual plant in the country. The new structure is $85 \times 150$ feet, 4 stories high new structure proof. Five hundred men will be employed Indictments were recently found in Niagara county against several "Bohemian-Oat" club together for the have been swindled est case. The game is sue or making that it is difficult to see how even an old mossbacked granger who never reads a paper could be persuaded to bite.
A scheme to bridge theNiagara river atBufralo is on foot and what a blessing it would be if sufficient capital could be secured to carry it by Canadians little boat, managed of course few days ago this tub went ashore in and Think of it, actually went ashore. This fog makes half hour trips to Cana. This boa would imagine the skipper could pilot one across blindfolded after 10 years of service at the wheel. The bridge company has petitioned for a franchise in the Canadian Parliament for a foot, carriage and railway bridge and to empower the said company to be incorporated in the state of New York for like purpose.
The people of Buffalo have for years grade cred evils of the present system of and a crossings by railways entering the city, rock is one, has for two yars past bgen trying to come to some agreement with the roads to abolish them but without success. The Rome Watertown and Ogdensburg road is the latest to ask for admission to enter the city at grade, and after a bitter fight permission was
granted by the common council to

Thom.
rock.
tracks within 15 feet of the Lehigh Valley old law partner, Bx-President Cleveland's and General Doyle, president W. \& O. Merchants Exchange and general of the the Lehigh Valley Company aided agent for in bringing about the favorable result. Bissell's speech before the result. Mr. worthy of repetition. He said:
"When you are talking up Buffalo, what do
you say? You speak with pride of, what do road facilities. You have more your railroad facilities. You have more miles of
trackage than any other city in the world. Is anybody in Buffalo particularly guilty of the prosperity of Buffalo since 1880 ? No, sir. We have prospered through the injection We $\$ 20,000,000$ of foreign capital in the last of years. Here comes the opportunity len necting with the farming country of consouth shore of Lake Ontario, a connection with farming territory which we need. Now here comes another railroad that wants to come in. This track is for the benefit of freight traftic. You can't stick it in the oir It must be on the ground. They say it's dangerous. We admit it. It's dangerous to run machines. Will you therefore shut up machine shops? It's dangerous to sail the lakes. Will you stop shipping? A sail the choked to death the other day with a fish one. Will you stop the eating of fish?", The argument of Mr. Bissell or something else, was convincing-something else probably, as it takes much to convince a Buffalo alderman, as a rule.
The old Tifft elevator owned by the New York Central roads was cleaned of its grain in store a week ago and will be torn down as soon as possible.
Natural Gas is now being piped from Canada to Buffalo the company having after many unsuccessful attempts with a large pipe managed to lay a four inch one across the river. U
ad valorem.
Chaffee's mill at Springville was entered by burglars a week ago and about $\$ 30$ in cash secured by the gang. A freight car stood in front of the office window which gave the boys full swing.
The Godfrey Pond mill at Batavia, owned was started, proprietor of the Attica mills idle for nearly two years ags after being is finding mory two years. The young Bork as he has unlimited backing from his sire who knows a good thing when he sees it the chances are, he will gobble up all the "dead" mills in this section of the state ere long. More power to the energetic young man. Flour has been dull-that is a mild term for the condition of the market during the down for necessary nuer of mills were shut but the majority ahead to mority were supplied with orders mills have heavy ring compulso fut this ap pears to be the rule with them and has been the case many a time on a more uncertain wheat market than the present. The demand will come as it usually does all in a heap, tak ing the stock on hand and that unproduced for onths thereafter. This ever occuring whine of some millers is enough to put wheat out of condition. As to prices, well if the quoted ist is $\$ 5.75$ for best patent springs there are millers who would like to see some one ready o bid from 40 to 50 cents less for round lots. Winters are not worth quotihg except in a ocal way $\$ 4.85 @ \$ 5.00$.
Mr. Alexander Mann, formerly of Buffalo but now of Boston, Mass. was on 'change two weeks ago looking as chipper as ever. I am credibly informed that his first inquiry was for Mr. Newman and strange to say the latter gentleman had been looking for Mr. Mann all the morning, knowing that the Hub man was in town. They embraced and so loving were the pair that Mr. Mann missed an appointment to dine with several bankers and a grain merchant or two at the Iroquois. The Merchants Exchange has been in a turmoil of excitement since the 9 th inst. when Choice for Prets were nominated
Choice for Vice-President-S. Guthrie. Choice for Treasurer--Frederick L. Dan-
Thomas Hodgson, Philip Houck, Melvin DunWing, Arthur D. Bissell, S. M. Clement, Jr., H. Wolcott, Harvey J. Hurd, J. H. RodeH. Wol
baugh.
Choice

Choice for President-John N. Scatcherd.
Choice for Vice-President-George Sand-
Choice for Treasurer-John L. Williams. Rensselaer W. Daniels, Cbarles B. Arm-
strong, Harlow C. Palmer, Howard H. Baker strong, Harlow C. Palmer, Howard H. Baker, Pierre A. Rosseel, H. F. Shuttleworth, Wil-
liam G. Heathfield, H. D. Folinsbee, Ed Anthony, Robert R. D. Folinsbee, Edward Anthony, Robert R. Hefford.
The first ticket was dubbed the "prayer cket" and the second the "wine ticket." Mr. Guthrie was elected, the members of if Mr. Seould be invited out to prayer and

adjourn to the $\Lambda$ nderson for wine galore
Still the latter inducement, no matter how Still the latter inducement, no matter how
tempting it appeared to a majority of the embers, failed to bring out the enthusiasm expected by so popular a name at its head The reasons were that the ticket was made up principally of gentlemen who favored high dues, too much freight bureau and generally expensive ideas concerning the running of the different departments, especially the secretary's room. Besides this it had "Clint" Newman backing it with tongue and dollars. This in itself was sufficient to cause its defeat. Every man on the Guthrie ticket was a strong card except the head, and really nothing could be said against that gentleman's character, business ability, or anything else. Mr. Guthrie was never anxious for office in the gift of the Exchange, but is proud of being the leading spirit in the Boot Blacks' and News Boys' Home. This. is as matters stood on the day before election.

## OUR BALTIMORE LETTER.

Oriole's De
ment.-T
Lecture
Flour Ma
tions for
Notes.
ars.UR remarks in these columns last month caused quite a breeze in
the trade here, where they were generally read, discussed an commented on. As was our aim and inten-
tion they hit the bulls-eye exactly, and from all accounts brought many pretenders to grass.
It was really amusing to hear of the quietly thanking God that they were not as other men and to witness the innocent washing seems to have been some squirming where least expected and by men who have always borne exceptional characters.
If, however, our random shot has had the effect of bringing down unsuspected game
we are glad of it and glory in the achievewe are
ment.

## We

We wish it understood, though, and as we stated at the time, that our accusations
emanated from a broad, cosmopolitan standemanated from a broad, cosmopolitan stand-
point and had no especial significance or re point and had no especial significance or re
ference to any market in particular but to all alike in general.
And just here permit us to say that it is quite unnecessary and unbecoming for reput able dealers to take exceptions to what was said and to go round proclaiming their innocence, when ther
laid at their doors.
The
The innocent need no vindication and should not be so quick to wear the shoes intended for others, unless perchance they happen to fit them. Our shafts are aimed at the Devils masquerading as saints and if that is your size, reader, we are then after you, too,
regardless of who you are, your protests or regardless of whe

## your profession.

out," and on that principle " murder will innocence is oftentimes a confession of guilt

A word to the wise is sufficient", if you are innocent, keep quiet and let the guilty What we are
Wong merchants and leg for is more purity Half the world and less perfidy.
Half the world, apparently, is forever trythe attempt all rules of other half and in and integrity are too often either forgotten or ignored and the consequence is that many men do things under the impulse of the moment and when struggling for the ascendand which they are sorry for afterwards, reflection. The whole trouble is that we ar moving at too rapid a gait. Competition is also too great. All is hustle, excitement and confusion. Men don't take time enough t hink - their brains are fired with the one g cion to get rich and instead of proceed reak-neck pae until tinally fring on at roustion pace until nally from sheer ex membered no more forever graves and ar they too who are even too busy to die decently and in order, but must needs be cut off with out warning and preparation.
out warning and preparation.
life for them, but with aching thatle of life for them, but with aching, throbbing, seething and bewildered brains they rush on,
pell-mell, helter-skelter, hither and thither pell-mell, helter-skelter, hither and thither after the Almighty Dollar until the end comes when they "shuffle off this mortal coil " and leave their hard-earned savings to the prodHality of some worthless heir.
How often have we seen this exemplified in our own immediate circles and bow strange amples, rein in their speed a profit by such examples, rein in their speed a little and occaperpetual gallop.
We don't believ
of breath, particularly, when there life out necessity for it.

This brings us to the point we wish to make, namely, that the present go-as-you-
please-lightning-express way of doing things is alone responsible for the charlatans, ad venturers, rascals and thieves that infest the trade. Competition is so great and profits so small that a premium is offered for dissmall that a premium is offered for dis-
honesty and the consequence is that the temptation is greater than many can with stand-hence the large and ever increasing percentage of rogues in the land.
will hile overproduction continues, so also while such conditions exist, abound, and dlers, tricksters, scoundrels, hypocrites, and the like, will increase and multiply, hold high carnival and never be content until they have sucked the very life-blood out of trade. Our fathers, however, did business on differ ent principles, and consequently lived better longer and happier lives, and, in the end, died richer too than the average man of the present.
They left their cares and worries behind days, and they came homeat night́, in thos the club or with wife and children and everything done to amuse the little ones and otherwise brighten up the fireside.
Our sires did not leave their religion at around with them during the but carried lived up to it.
They were not ashamed to face the devil and call him by his proper name. In a word, o be chosen than great riches" wathe shaped their destinies accordingly.
What a change has taken place since then Now, great riches are rather to be chosen orld good name, and indeed the whole Is there time rolling rough-shod to hell face and pursue the way our fathers trod If so, for God's sake let us do it before it is "It is $n$
"It is never too late to mend," but if some of the rascals we know of don't hurry up and change their tactics we will advance a step ange.
Life is too short to make enemies at every cross-roads, but it is necessary it seems in this case and where we have so many culprits to deal with.
Such enemies, however, we are proud of, and shall continue to denounce their methods and scorn their patronage, regardless of consequences.
If men would enjoy the bright side of life they would pay more attention to character, money cannot buy, rather health which one and neglect the other the balance of their ays in the effort to amass a fortuue. Anticipat
The presen
upright, and the same identically for the brought happiness in the past to our fathers, so why not like them lead exemplary lives door? "A bird in the hand is worth two in

The past month *in the Baltimore flour market has been devoid of interest, owing values.
There have been occasional spurts of activity which resulted in some large sales to in any quarter.
Prices are about the same as those of a month ago, but we fail to note any pressure ase at that time. The stock of flour her an. 1st, exclusive of that held by city mills, was 74,006 barrels against 73,477 barrels same date last month, and 78,767 barrels Jan. 1st,
1890 .
Jobbers nor city mills have made any change during the month and altogether There is little to report.
The flour sold to arrive was principally pring wheat patents ranging from $\$ 5.00 @$ 5.20 ; baker's from $\$ 4.10 @ 4.25$; winter patents
from $\$ 4.90 @ 5.15$; straights from $\$ 4.90 @ 5.15$; straights from $\$ 4.60 @ 4.80$,
and clears from $\$ 4.3 E @ 4.55$, and clears from \$4.3E@4.55.
Dealers as a rule are pretty well stocked again, and there is no prospect of further activity unless wheat should happen to materially improve, in which event the trade would probably buy moderately in anticipation of wants.
City mills, however, have been quite busy throughout the month and during that period ave sold fabulous lines of extra for South American account.
Nothing of moment has been done in low grades for the West Indies, but there is an
inquiry in the market for inquiry in the market for a cargo of super at after. Output of city mills for December was 43,000 barrels.
Clearances of flour from this port the past seabo
fail.
month have been enormous and are likely to so continue for sometime to come.
We hear also of large quantities in transit for Newport News which will be forwarded by the Furness Line on arrival.
Our exports are going in the shape of flour his year which speaks well for the mills. Let them keep it up as that is the only way to feed foreigners with profit to ourselves. While many here look for no material
change in flour, there change in flour, there are others who predict sharp advance in it shortly.
We quote the range of the flour market as follows:
Spring wheat, patent. .
Spring wheat, straight.
Spring wheat, bakers'.
Winter wheat, patent.
Winter wheat, straight
Winter wheat, clear.
Winter wheat, extra.
Winter wheat, super
Rio brands, extra.
City mills, super
Rye flour.
Rye flour.
The wheat market here the pas
ruled pretty much the same as flour-fluctua tions have been narrow and business retricted, particularly, as far as speculation han the figures of a month ago, while the futures remain practically unchanged.
Stocks, in the absence of receipts, and with Milling wheat is still further shrinkage. at full prices.
Cables are higher and a good export inquiry prevails, but in the absence of available tonnage, transactions in the main have been confined to berth-room parcels although we know of two full cargoes that have been taken since our last review based on current rates of freight. Business in this direction is hampered only by scarcity of tonnage. New York has taken quite a jag of our 2 red for milling and mixing purposes of
late.
Speculation here still clings to the bull side of wheat.
In view of the present statistical position of the cereal it sees no other alternative but values to advance and that right sharply Manipulators may hold it down temporarily, Northwest, but prices will go higher ultimnately all the same.
That last Government repor was double barreled action, bullish on the old crop and bearish on the new, but when the values on that they will be looking around in vain for something to fill their contracts
with
Next year's crop won't fill May contracts y a large majority.
Gaze on January, February and March paying the carrying charges, the bulls or the ears?
Just so will it be with May, June and July se! a short-crop option at a discount
The visible supply is likely to show weekly decrease from this time out. Th mount anoat will also probably grow less whole situation warrants higher prices. Silver is being used as a cats-paw nfluence prices, but all such side issues wil ward to give way sooner or later to the upard march of values.
Those who are bearing wheat now with
great gusto will be bulling it at $\$ 1.25$ on the eaboard before another crop, unless all sign
We have lost nothing the past month and are likely to show a considerable gain month hence.

## Stock of wheat in Baltimore is 614,047 Bus.

CLOSING AND COMPARATIVE PRICES.
Closing
to day
Wheat No. 2 red

Stoek of colly comes.
Stock of corn in Baltimore is 164,594 bus.
Plant.

## Closing and comparative prices: $\underset{\substack{\text { Cora } \\ \text { Mixed }}}{ }$ Spot mixed. Stmr mixed. South white January. <br>  

items of interest to the trade. Exchange makes the of the Corn and Flour the business of the year 1890 at Baltimore in his Daily Produce Report of recent date: Receipts of flour amounted to date: $3,369,83$ brls., against $\$ 3,189,572$ brls. in 1889. Export 2,753,628 brls., against 2,332,85 5 brls. in 1869 . Receipts of wheat in 1890 were $6,378,638$ bus against $6,889,432$ bus. 1889 , and exports were $4,785,142$ bus. in 1890 , against $4,507,165$ in 1889 Receipts of corn in 1890 were $21,093.894$ bus. 8,961,871 bus. in 1890, against 16,617 Export in 1889 . Receipts of oats for the year 1890 were ports in 1580, 547,039 bus. against 131,999 in
1889 .
Rece
890, against rye amounted to 469,880 bus. in in 1890, 28,859 bus.; 1889 nil. Exports of rye Receipts of barley and
1890 were 772,177 bus., against 608 , 1889.

Charles A. Pillsbury, of Minneapolis, was health, and predict his way south for his patents on the seaboards $\$ 6.00$ for spring wheat Jas. H. Knowles, reards in February
of St. Louis, and the La Grange Kehlor Bros. Wing, Minn., was also here Mill, of Red search of trade.
P. P Simm
P. P. Simmons, Freeman's agent, bobbed ington and here today and will go to Washbefore and from there to Harrisburg, Pa W. J. Smith, of headquarters

Co., of St. Louis, the Geo. P. Plant Milling ocal agent a short visit late in Dere to pay his The C. A. Gambrill Mfg. Co. has gotten handsome engraved pamphlet ill of the art of milling.
Blanchard Randall, the present incumbent, more Corn and Flour Excht of the Baltinsuing year.
The Washburn-Crosby Co ss. agent, of MinH. A. Deardorf, of the Isaac Harter Co Ohio, was seen on the floor of 'change last
week. The feed dealers of this city gave us a representation of an Indian war dance on change the last day of the old year. is pretty generally read by the trade of Baltimore. Oriole.

## our st. louis letter.

Comparisons-Merchants Exchange fle mills-
Camp Spring mill fire Camp Spring mill fire-Critichange election-
spectors - Transportation matters - Wheat
marke

䛼NNUAL reports, annual elections
and annual good resolutions and and annual good resolutions are the topics for this month's con-
tribution. The winding-up of the the St Luss was the chief occupation of the St. Louis flour men, and their results were hardly as gratifying as last year's totals, a falling off of $194,437 \mathrm{bbls}$. from last year's work, of 144,614 bbls. from 1888, and of 113 712 bbls. from 1887. Of course it must be taken into consideration that all the mills were not running regularly. The St. George was shat down for six months, hence its poor showing of $15,300 \mathrm{bbls}$., while the Anchor mill's output of 58,000 bbls. is owing to its loss by fire on March 15,1890 . The out-
put by mills was: put by mills was:

Eagle Steam.
Camp Sprin
Victoria.
Saxony.
Jefferson
Jefferson
Hezel....
United States
Meramec.
Anchor.
Carondelet
St. George.

| 1889 |
| :---: |
| 344,521 |
| 288,800 |
| 207,604 |
| 210,258 |
| $16,1,30$ |
| 125,782 |
| 103,777 |
| 92,565 |
| 104,000 |
| 85,735 |
| 60,236 |
| 225,89 |
| 30,905 |
| 25,000 |

Total.

As the daily capacity of our mills amounts of 312 days, the output for 1890 is for the year as good as it might have been is not nearly good as it might have been.
Merchant's Exchange for officers for the place Jan. 7th. With only the year 1891 took ap, matters went off smoothly
Marcus Bernheimer received
1070 votes cast for the all but fou

The struggle between Geo. II. Plant and Sid. matters a little. Mr. Plant, how enlivened aged to beat his opponent by a small margin receiving 765 votes to his opponents 610 .
The treasurer's statement for the shows that the total receipts from all sources amounted to $\$ 68,993.47$ and that the total ex$\$ 8,351.63$, of which sum $\$ 5000.00$ goes to the reserve fund, leaving a balance of $\$ 3351.63$. Speaking of the reserve fund, which now man, of the Board of Directors, strongly advises the Exchange to expend it in the erection of a new Merchant's Exchange
Building. As the ing expires in 1895, the Board belieyes that now is the time for action on the matter there is any intention ot putting up a building of their own.
At the opening of the year there were 3190 members, but this number has heen reduced twelve members deceased and by the for
feiture of 62 leaving as a total of membership the close of the year of 3116 .
The new year started out with a mill firevictim. The fire was fortunately small and resulted in a loss of about $\$ 5000$ on flour and grain in stock. The buildings were only slightly damaged
and railr. 31, 1890, the Missouri warehous in this city and made an examination of the St. Louis elevators. Their chief object, how ever, was the election of a successor to Mr
Jasper Burks, chief grain inspector for Mis souri. There were several applicants for
this position, prominent among them being Capt. Wm. M. Price, of St. Louis, who had a very strong endorsement. But endorseAssistant Clied very little in the selection as moted to the old position chief inspector's place and his Washington. This by the election of Frank the past $\$ 1800.00$ as chief supervisor a salary of As a recognition of the Fice was abolished. Mr. J. Marck Anthony of Madison county, who is vice-president of theFarmers'Alliance, was elected to fill the newly created office of
treasurer. Editor Gallagher, of the city Times, was appointed chief inspector Farmers' Allity. Mr. W. H. Hall, another clerkship, Alliance man, was proffered a $\$ 1500$ clerkship, but he has since respectfully de-
clined. Of O'Sh's of the grain inspectors for Missouri, farmers all over the state are making vigorous protests and are doing their utmost to have him removed. As a change will soon occur in the commission it will not be surprising to see
an entire reorganization of the department of grain inspectors.
then is needed doubt that such a reorganizalittle satisfaction to the merchants. give a peculia ruling of it might be well t As is well known, Kansas hard wheat monopolizes the St. Louis market in its line and for the most part comes through Kansas City wheat were shipped from Kansas city to Eas St. Louis by way of the C. \&. A. R. R. On
inspection the Merchants Exchange inspecors graded it as No. 2 hard. A few days and the Burks-O'Shea inspectors attempted o pass fair judgment on it. As usual they ound that the East side inspection was debeen rated as No. 2 red, and accordingly changed the inspection to No. 2 red. As here was a slight difference of 10 c . between not altogether pleased and were not slow in airing their opinions on the chief inspector nd his assistants. In view of the fact that have long carried on all the inspection for he Exchange, the millers are more inclined to rely on their judgment rather than on The Board of Directors have pectors for the Exchange chosen the innumber was reduced from five to three this year and J. L. Currie, W. E. Robinson and spectors for 1891 are Richard Perry, Victor Goetz, Fred Bohle, J. Hamsworth and Aug. Rumpt.
And Kansas is again heard from under date of Jan. 10, 1891. The flour men are preparing a long address to the Interstate Comflour to the sion, asking for lower rates on flour to the sea coast. The petition hails from Central Kansas and is to be endorsed by all the flour dealers. The demand is the flour, which afford the Eastern wheat and lour, which afford the Eastern producer a big advantage over his Western competitor

A special rate to the Gulf is particularly pool can easily be secured. It is claimed pool can easily be secured. It is claimed
that over one hundred cars of flour for export are at present waiting for the asked reduc ficient profit for the cost of production.

## wheat.

Receipts for the week amounted to 71,940 bus, as against 66,393 bus. last week. Total Shipments fore past year were $11,135,496$ bus. week 58,358 ; for week were 50,390 bus.; last Stocks in elevators for year, $3,720,701$ bus withdrawals in past week for city, consump The 59,545 bus.; for rail shipment, 78,295 bus. The market was very light and there was country points-the city No. 2 red from country points-the city mills being
supplied. Quotations for the week are:

> Monday
Tuesday
> Wednesday
> Friday...
Saturday.


The flour market is very quiet and there is very little trading-trade being local and Prices very firm; outpusiness whatfor city and country. Receipts, light both as against 16,700 bbls. last week; shipment, 46,489 bbls. this week; last week; 54,206 bbls The output of the mills was 47,450 bbls.,
divided up as follows:



| Planet .......... | $\cdots$ |  |
| :---: | :---: | :---: |
| Eagle Steam.... | 5,000 | 21, 18.500 |
| Camp Spring... | 3,000 | 10,700 |
| Carondelet ..... | 750 | 2,000 |
| Hezel . . . . . . . . . | 2,700 | 8,800 |
| Meramec ....... | 1,500 | 5,100 |
| President....... | 2,400 | 10.400 |
| Saxony | 2,600 | 7,800 |
| Yaeger | 3,200 | 11,550 |
| Total | 47,450 | 47,030 |

Tresent quotations on flour are XXX, $\$ 290$ ; fancy, $\$ 4.00 @ 4.10$; extra fancy, $\$ 4.80 @$ ; patents, \$4.60@4.75.
t. Louis, Jan. 17, 1891.

H

NEWS.-The Manitoba wheat crop which was expected to exceed 20 ,-
000,000 bushels, is estimated by the Winnipeg Department of $\mathbf{A g}$ 000 bushels last year; the great anst $7,201,-$ 000 bushels last year; the great bulk of the
crop, however, has been more or less injure in quality by the frost.
The Relyea Grist Mill at Rondout, N. Y.

Keister \& Loucke succeed the Scottdale Milling Co. at Scottdale, Pa.
W. H. Hand \& Co., of Adrian, Mich., are Tueded by the Hand Milling Co. THE Minneapolis (Kan.) Steam-Milling Co are builaing a 50 -barrel roller mill.
Near Paris Ill., Jan. 5, the Vermillion Com Aт Riverton, Neb thed. Loss $\$ 4,000$. A Riverton, Neb., the Eagle Co.'s mill was
2,510 . $2,5 \mathrm{t} 0$.
The Fort Oran
The Fort Orange Milling Co. has been in corporate
$\$ 100,000$.
John Cretors \& Son, owners of the Model
Mill at Leavenworth, Kan., have made assignment.
The Kansas State Millers' Association wil McPherson
A stock company has been organized at linton, Mo. with a capital of $\$ 40,000$ to build
flour mill.
The North Dakota Millers' Association will hold a meeting January 16 and 17 at the Columbia Hotel, Fargo.
AT Dundas, Minn., Jan. 2, the flouring mill about $\$ 15,000$; no insurance.
The Brooklyn Elevator and Milling Co has been incorporated at Brooklyn, N. Y.. capital stock or $\$ 50,000$,
AT Freeport, Ill., Dec. 30, Serf \& Mitchell's tiour and feed mills were destroyed by fire.
Loss, $\$ 15,000$; insurance, $\$ 7,500$. Loss, $\$ 15,000$; insurance, $\$ 7,500$
At Marlette, Mich., Dec. 30, the roller process mill, owned by H. W. Wilson, was burned. coss $\$ 22,000$; insurance $\$ 10,000$.
The Farmers' mill at Preston, Minn., has improvements and increase the who will ma

Near Unionville Md., Dec. 17, the Whitehill Mills were bnrned, together with con-
tents. Loss not stated; insurance $\$ 11,600$
THE annual meting of the Iowa Miller Association occurs Jan. 21 at $100^{\prime}$ clock, in Room 1, Masonic Temple, Des Moines. At Juniata, Pa., Dec. 30, the steam flouring mill of $J$. E. Toomey was burned, wit
The fourth annual meeting of the Nebras ka Millers' Association will be held at the Windsor Hotel, Lincoln, on Jan. 15 and 16. Kansas State crop reportsiows that whea in that State has improved 20 per cent since en Aт Templeton, Ia., Dec. 27, the elevator ffice and warehouse of Montgomery Brothers were burned. Loss, $\$ 20,000$; partly insured At Philadelphia, Pa., Dec. 17, the cooper shop of J. L. Helling, Harland st., below 19th, \$2,000.
At Howard Lake, Minn., Dec. 27, the Howetor, was burned. Loss, $\$ 18,000$; insurance $\$ 10,000$.
J. M. Crancb, B. L. Fusen and M. L. Davy have incorporated the Bluffs Roller Mill Co. of $\$ 10,000$.
At Black Rock
Glor \& Gridley's N.Y., Jan. 7, fire destroyed Three cottages were also burned. Loss $\$ 10$ 000; fully insured.
At Elkton, S. D., Jan. 1, Buck's grain elevator and contents were destroyed by fire.
Loss about $\$ 10,000$; no insurance. The fire Loss about $\$ 10,000$; no insurance. The fire started in the engine room.
The announcement is made that all arpal flour mills in Canada by a syndicate English capitalists is about completed.
At Fergus, Ont., Jan. 6, John Black's ele vator and adjoining barn were burned with grain and 60 tons of hay. Loss, $\$ 25,000$; partly insured.
The Smith Purifier plant at Jackson, Mich., the only bided by eastern parties for $\$ 65,000$ verted into a factory for the manufacture of oil stoves.
Leo Heilpern, the defaulting bookkeepe of the Columbia Mill Co., Minneapolis,Minn. was arrested at El Paso, Texas. He will be
tried Jan. 26 on the charge of embezzling $\$ 1,900$ from his late employers.
Aт Parkville, Mo., Dec. 20, the flouring mill wned by S. H. Graden, and operated under Loss on mill $\$ 15, C 00$; no insurance. Loss on stock, $\$ 1,500$; insured for $\$ 1,200$.
AT East Boston, Mass., December 23, the building of the New England Cooperage Co. by fire. Loss on stock, $\$ 12,000$, and on build ng, $\$ 2,000$ to $\$ 5,000$; fully insured.
AT Bushnell, Ill., Jan. 15, the boiler in W J. McGehe's feed mill exploded, demolishing
the building. Alpha McGehe was badly scalded and injured about the head by falling timbers. Two other men were injured.
In a suit brought by the American Biscuit New Orlo., in the United States Court, at as it was a monopoly, with the design of controlling the price of bread it had no standing in court.
AT a meeting, held in Chicago, Jan. 9, of pany, which a month or two ago was organized with the enormous capital of $\$ 35,000,000$, it was decided to discontinue the project on account of grave legal obstacles.
At Sandusky, O., Jan. 10, Geo. Booth, aged 14 years, confessed that he had set fire to the
elevator of the Cincinnati, Sandusky land railroad which was destroyed by \& Cleveland railroad which was destroyed by fire Dec.
11, and that he had fired the general offices of 11, and that he had fired the general offices of
the company two days later. The elevator fire entailed a loss of $\$ 100,(00$. No cause was assigned for the deed.
A syndicate of Chicago, St.Louis, Galves-
ton and local capitalists of Wi ton and local capitalists of Wichita, Kan., on tion of elevator arrangements for the erecto take care of the coming crop which hasevery prospect of being the largest ever harvested in the State. The promoters of the deal are now asking Congress for a charter.
AT St. Louis, Mo., Jan. 2, fire occurred in Walnut ond the roof of brick building corner still. Small loss to structure. Machinery contained therein was damaged. There may be a serious loss on wheat by water in stories below. The machinery in mill building was slightly damaged by water. Cause, friction of machinery. Insured.
The proposed draining of the lakes about Madison, Wis., is going to impair the water
power of the Soughton Milling Co., at Stough-
ton, Wis. The latter asks $\$ 190,000$ damage if the work is carried out as the drainage commissioners first planned to do it. The work, and by building a $\$ 10,000$ complete the injuring the water power of the Stoughton millers.
S. G. Brock, Chief of Bureau of Statistics, reports the total export of wheat-flour from the United Sta export of wheat-flour from ber, 1890, was $1,053,892$ barrels, valued at $\$ 4,853,747$. The exports of breadstuffs for the same period represent a value of $\$ 10,126,739$, and the total exports of breadstuffs for the year ending Dec 31,1890 , 845,899 , an increase of $\$ 10,986,840$ or of 1889 .
ON November 21, 1890, the cooperage plant destroyed by fire. Suit is now Wis., was
ditton at Green through his attorneys, against now brought, and Fort Howard Water Works Co Green Bay damages resulting from the fire on thecover of negligence on the part ef W egrounds Co., which, it is claimed did $W$ ater Works water pressure flames. The action is unprecedented and the ground of a novel nature
At New Orleans, La., Jan. 9, fire broke out in the engine room of the Merchants' Rice Mending to Constance st. Thagazine st., ex gin in No. 112, the mill proper. The mill poper was occupied by Emile Dabo mill prop the ground floor were four pounder, On rough rice-shaker, some bran and polish ond the engine and boiler. The second and tained the stones and brushes, while the thin thebran screens, ricescreensand shater. Th building and machinery were owned by B. Saloy and were insured The by Mrs. buildings, 108 and 110 , also the adjoining structures, and owned by Mrs . Saloy, used as a warehouse and contained a stock rough rice in the rear and stock of clean in the front portion. The roof of 110 wa partially destroyed, while the sto was badis damaged by fire. The stock in the the building was slightly damaged by water. Dabouval valued his stock at $\$ 000$, Mr ried insurance of $\$ 2,000$ in Home Company. Total loss $\$ 8,000$ to $\$ 10,000$.
The grain dealers of St. Louis are indignant at the methods of grain inspection of the ewly appointed State Grain inspection of the Numerous cases of alleged inspector O'Shea wheat have been reported on 'cherading of dagrant being made on the 14 th ine, days previous to the charge being ${ }^{\text {a }}$
 City to East St. Louis. The Mercon' change inspector at the latter place examind the wheat and graded it as No. 2 hard the 12th inst. the wheat was sent hard. On and fell into the hands of the State Louis Inspector, who took a different view of the situation and pronounced the wheat to be No. 2 red, the effect of which would to be a large sum of money into the pockets of the shippers at Kansas City, as the wheat of the o have immensely improved by its trip seemed the big bridge from Illinois to Missouri millers who were to receive the wheat strongly objected to taking it at the State Inspector's rating. St. Louis at the State will force an investigation and quite deaters tion is promised.
Again the Oatmeal trust is trying to en gage in active business. Mr. Ferdinand Schuto ther presented plans for an organization at the Chicago, OatMeal Milling Company's office, Crowell, of the Quaker Milling Co Ravenm 0.; C. R. Newell, of Newell Bros, Cleveland, O.; Otis Hower, of Hower Bros., Akron, O.; S. Coldson, of the late Oatmeal Co., of Iowa City, Ia.; G. B. Douglass, Roberts and Stuart, of the Meal Milling Co., of Cedar Rapids Ia. and Chicago. Prəsident Ferdinand Schumacher and Directors Barber, Allen and Crouse, of the F. Schumacher Mfg. Co., of Akron, O. The A. M. Johnston Oatmeal Co., of Rockford, III., is in the deal, but was not personally represented. The mills represented are said to contain 85 per cent of the entire product, and have an aggregate value of $\$ 2,500,000$. It is proposed to organize the American Cereal Co. with a capital stock of $\$ 5,060,000$. The stock is to be issued to the eight mills represented, in such proportion agreed upon, and the new company is to become the absolute owner of all plants, brands and products of these mills. It is also proposed to locate the new compau's head quarters in Chicago, and operate such of the mills as the market warrants.

Wadhams Oil and Grease Co. of Milwaukee, Wis., and Seattle Wash., notify us that they have the exclusive agency for the entire North-west, for Swift Lubricators and the well-known Magnolia Anti-friction Babbitt Metal. See adverAnsement on first page.

## SLOW-BURNING CONSTRUCTION.

## By Edward Atkinson.

FROM an article on this subject in the Century, we quote the following extracts: What, then, is the slow-burning construction? It consists simply in consolidating the wooden material in frame, floor, and roof in sach a way that a fire can be held long enough in any room in which it may originate for a fairly competent fire department, public or private, to get it under control, or where it may be extinguished or held in check by sprinklers. The timbers used may be solid or may be cut in two parts to be bolted together. The latter is perhaps the better way, in order that the air may reach the center of the timber and season it, great care also being taken in mill practice not to paint, oil, or varnish the outside of any heavy timber for at least three years after it has been placed in the building, lest what is called dry rot should occur from the fermentation of the sap in the green timber. Where an outside finish is required some architects use the timbers in two parts bolted together, with an air space between; each timber being also bored through the center lengthwise for ventilation. This latter plan is the customary method with posts when wood is used for supports, a crossway hole being also bored near the top and bottom, connecting with the center. Upon these heavy timberswhich are commonly placed eight or ten feet on centers resting directly on properly adjusted posts without the interposition of any girders lengthwise of the building, in lengths or spans from eighteen to twenty-two feet-the floors are laid of plank not less than three inches thick when the beams are eight feet on the centers. If the beams are ten feet or even twelve feet apart on centers, ordinary weights will be carried by floors consisting of four-inch or five inch plank; the timbers themselves may be from fifteen to not exceeding twenty-two feet in length from wall to post and post to post, for ordinary factory loads. If provision is required for extraordinary loads, a special computation should be made to meet the case. If a fine finish is desired, sheathing may be placed underneath between the timbers, nailed close to the under side of the plank ; if the most absolute security against fire is called for, the finish may consist of plastering laid on wire lathing close against the plank. This plastering may be carried around the outside of the timber on the line of the timbers, provided no skim coat of lime putty is put upon the plastering, thereby cutting off the air from the timber. The top floor may be laid directly upon the plank, or a layer of mortar may be laid between the plank and the top floor; in some cases asbestos paper has been interposed. The layer of mortar offers great security in preventing the passage of fire downward. The roof which has been described corresponds substantially to the floor, to wit: three-inch plank laid upon the timber, one-inch sheathing on the under side if desired, and sometimes one-inch boarding on the plank; then the ordinary outer covering of whatever kind may be adopted. If the roof is exposed to great humidity within, as in the machine-room of a paper-mill, one inch of mortar may be interposed between the roof boards and the plank. This latter roof proves to be impervious to cold or heat, and with proper means of ventilation gives se-
curity against any possible condensa
tion of moisture from the atmospher tion of moisture from the atmospher within.
If the buiiding is over one story i eight, the stairways ought to be place either in separate towers outside th building proper or else in the corner of the building surrounded by brick walls, the doorways being protected by adequate fire-doors consisting of wood encased in tin, iron being one of the nost teacherous materials customarily made use of for the protection of doorways in party walls. In such a factory no cornice is required or permitted and no sheathing within set off by fur rings from the wall can be tolerated. No concealed space is allowed anywhere n which a fire can pass from room to room or from cellar to attic. Every part of the building must be open so that water from bucket or hose can be hrown anywhere.
If these plans and specifications are compared with the ordinary method of combustible architecture, the reason will be apparent why textile factories paper-mills, and other works are better fire risks and are insured at less cost than the average stone church, brick hospital or asylum, or iron warehouse, although the nature of the work done carries with it almost every cause of fire hazard from ignition, friction, or spontaneous combustion, while in many cases the material used is almost ex plosive.

## hickory pulleys for rope trans-

 MISSION. ITH the extensive pulley business of the Menasha Wood-Split Pulley Co., of Menasha, Wis., the manufacture offor the exchange, he having sufficient funds on hand with the bank to meet the check is a transaction in which the depositor is a purchaser of negotiable paper for value, and no equities existing between the drawer and the payer can be set up against the bill so sold. The
acceptance of a check by a bank is an absolute discharge of the debt of the bank to the depositor, to the extent of the check, and as such amounts to a
parting with value on the part of the maker of the check.-Mayer v. Heidelback, Court of Appeals of New York 25 N. E. Rep., 416.
Action for Wages-Extra Time.Where one had formerly been in the employ of another under a written contract, by which he agreed to and did work at a given price per day, waiving all claim for extra time-and afterwards made a verbal agreement for a position a second time and no mention was made of over-time, and when he has accepted his payments and given his receipt without making a claim at that time, but acknowledged full satisfaction therefor, he cannot recover under a statute making a certain number of hours a day's work for time worked in excess of the tatutory day.-Bartlett v. Street Ry. Co. of Grand Rapids, Supreme Court of Michigan, 46 N. W. Rep. 1034.
Injury to Servant by Negligence of Master.-Where an employer negligently provides his workmen with improper and unsafe apparatus with which to perform the work, and the workman, without any fault on his part, is injured owing to the employer's neglect to provide suitable, safe and proper appliances, the employer is liable for the injury.Union Pac. Ry. Co. v. Broderick, Su-


Rope Transmission Pulleys has become preme Court of Nebraska, 46 N. W. Rep an immense industry.
It seems that the rims of these pulleys being made so that the grain of the wood follows around the pulley leaves the surface and groove very smooth and prevents abrasion or wear of the rope, which is a very desirable thing in transmitting power by rope. These people also have men out putting up this kind of Drive, and take the contract to put up the work complete ready to run. We show illustrations of these pulleys his issue.

## OUR LEGAL DEPARTMENT.

## and Milling Engineer, from the latest

Purchase of Exchange by Check-
The purchaser of foreign exchange by a depositor in a bank, from the bank on
1121.

Additional Insurance.-Where policy of insurance provides that shall be void if' other concurrent insur ance shall be taken out without notice to the company and endorsement of permission on the policy, the taking of other insurance through the agent for the company which issued such policy cannot avoid it, as the knowledge of the gent is constructive notice to the com-pany.-Hagan v. Merchaṇts \& Bankers Ins. Co., Supreme Court of Iowa, 46 N . W. Rep. 1114.

Presumption of Consideration for Note.--Under the Statute of New York a note which does not contain words of negotiability or words expressing the fact that it is founded upon a consider ation, or expressed to be "for value received," is nevertheless payable as ex
pressed therein, and the owner and pressed therein, and the owner and
holder of it at its maturity may hold the endorsers liable in case of dishon-or.-Carnwright v.Gray, Supreme Court of New York, 11 N. Y. Rep. 276.
Rescission of Contract for Sale of Goods for Fraud.-In order to entitle ne to rescind a contract for the sale of goods because the purchaser bought them without intending to pay for them, it must be shown that the intent was formed and acted upon at the time the goods were bought. And where a merchant in failing circumstances, who knew he must fail but could not know just when he would be obliged to stop payment, the presumption is great that he knew he could not pay for them at the maturity of the bill, and therefore he may be said to have bought them without intending to pay for them.Whitten v. Fritzwater, Supreme Court of New York, 11 N. Y. Supp. 297.
Breach of Contract for the Sale of Goods.-Where a firm engages with a mill for the maufacture of a specified quantity of goods, to be delivered in partial lots from time to time, and agrees to give its note for each lot at delivery thereof, the failure to pay one of the notes at maturity is such a breach of the contract on the part of the purchaser that the manufacturer is justified in canceling the remainder of the order, and he may recover for the goods actually delivered, without completing the contract on his part.-Kokomo Straw Board Co. v. Inman, Supreme Court of New York, 11 N. Y. Supp. 328.
Constructive Waiver of Additional Insurance Clause.-Where a policy of insurance provides that additional insurance procured without permission therefor, also provides no agent has power to waive any conditions of the contract, the procuring of additional insurance after the policy is issued, without permission therefor, the fact that it is procured through the agent of the company does not amount to a waiver, as the agent had no power to waive the provision which was broken.-Hess v. Washington F. \& M. Ins. Co., Supreme Court of New York, 11 Supp. 299.
Rescission of Sale of Goods for Breach of Warranty.-Where goods are ordered to be manufactured, and the contract provides the specifications which shall be conformed to, the buyer waives any defect in them which would be apparent upon investigation at the time of acceptance, if he accepts them, without objection, and having accepted them he will not be heard to object that they were not in conformance with the contract, as a matter of defense to an action for the price of the goods.-Smith v. Servis, Supreme Court of New York, 11 N. Y. Supp. 301.
Injury of Employe on Freight Ele-vator.-An employe who goes upon a freight elevator for the purpose of saving himself from walking up stairs, voluntarily assumes the risks attendant thereon, and if injured he cannot recover from his employers except for gross carelessness. It cannot be said to be gross carelessness for a business firm to use a freight elevator without a safetyclutch, where the absence of it was not known to them, and in the ordinary use of the elevator they would not be likely to notice such defect.-Hansen v. Schneider, Supreme Court of New York, 11 N. Y. Supp. 347.
Release ofs Liability in Telegraph Blank.-The agreement in a telegraph blank that unless the message is repeated the company shall not be held liable
is void as against public policy．The favour；but they must remember that company cannot，by any agreement the greater part of the millions of with the sender of a message，escape Chinese and Japanese have always liability for the negligence of its em－used rice in place of bread，and have ployes，as that is a responsibility im－found it the staff of life，and it has been posed upon it by law and not by con－claimed by many that it would be as tract．－Western Union Telegraph Co．v．impossible to induce these people to Short，Supreme Court of Arkansas， 14 abandon rice in favor of wheaten bread S．W．Rep． 649.

## IS THE M＇KIMLEY BILL VOID？

MRSHALL FIELD \＆CO Chicago＇s millionaire mer chantsand importers，hav commenced an action whose object is to have the new tariff schedule，known as the McKinley bill，declared null and void．Ever since the passage of the measure there has been a good deal of talk of this kind，and some little action has been taken in the East，all of which came to nothing
The men who constitute the firm and guide the business of the great house in question are very far from being vision ary，as their brilliant past sufficientl attests，and this movement on thei part from that circumstance attract world－wide attention．We quote some of he reasons given by the firm＇s attorney for holding the act invalid；they may or may not be well founded，but in view of the great attention given to the sub－ ject on every hand，and the enormous pecuniary interest involved，are well worth considering：
1．Because the so－called act ap proved Oct．1，1890，entitled＇An act to reduce the revenue and equalize duties on imports and for other purposes，has not become a law，it never having been legally enacted，as required by the pro－
visions of article 1 ，section 7 of the con－ visions of article 1，section 7，
stitution of the United States．

Because said bill as passed by the House of Representatives and the Senate contained a certain section pro－ viding for a rebate of internal taxes on manufactured tobacco and snuff，which was not contained in the engrossed ident and approved by him
＂5．Because the first five paragraphs of schedule E，section 1 ，of said socalled act，providing for bounties to producers of American sugar（paragraphs 231 to 235 ），are unconstitutional and void，no power to enact legislation of this char－ by the constitution
＂6．Because section 3 of said so－ called act is unconstitutional and void in that it delegates to the President the power of laying taxes and dues，which power，by sections 1 and 8 of section 1 of the constitution，is vested in Con－ gress．＇
o declare this act null and void would work no end of injury to the country，unsettling the values and de－ stroying confidence，but nothing is to be gained by closing our eyes to this mat－ ter．A large number of lawyers，some of them of high standing，are of the opinion that the points are well taken， while perhaps as many take the op－ posite view．A mong the latter is Judge man，and a constitutional lawyer of great ability．Developments will be eagerly watched by millions of people． －Chicago Journal of Commerce．

## bread in Japan．

T1many who have been eating bread all their lives and have always heard it spoken of as the staff of life，and to whom life would hardly be worth living without it，it may seem strange to talk of flour or
bread being introduced and growing in
as it would be
rice for bread
Failure of the rice crops，and con－ sequent famine in China and Japan have been the means of introducing flour into those countries more rapidly than anything else could have done．
Most remarkable is the universa avor that bread and similar floury concoctions are beginning to enjoy．
This article of food has also been completely Japanized and sells in form unknown to Westerners．Tsuke－pan sold by peripatetic vendors，who push their wares along in a tiny roofed hand－ art，is much liked by the poorer lasses．It consists of slices－thick generous slices－of bread dipped in soy and brown sugar and then fried or poasted．Each slice has a skewer passed hrough it，which the buyer returns after demolishing the bread．One cannot speak highly of this bread．The ough is heavy and the color an un－ healthy yellowish gray．But the best Japanese flour is equal，we are told，to California No．3，which is high praise， indeed．Flour is now used in many other ways besides the manufacture of simple bread．There is Kashi－pan，cake－ bread，which is sold everywhere．As
the name implies，it is a sort of sweet breadstuff made into cakes of various sizes and artistic figures，according to the skill and fancy of the baker．To a European palate this Kashi－pan is rather dry and tasteless－＂too much Sairey Gamp．But it is very cheap and for five sen one can get a huge paper bag full．Kasuteira，or sponge cake，is not so much sought after as it used to be．Yet some bakeries，such as
the Fugetsu－do the Fugetsu－do and Tsuboya，excel in licious of sponge cake．- British and Foreign Confectioner．

## a new dictionary．

The general object in referring to a dictionary is to find one or more of three things about a word：（1）its correct spelling，（2）its correct pronunciation， （3）its most common present meaning． To enable one to get this information with ease and certainty it is desirable to have a work in which is combined simplicity，accuracy and comprehen－ siveness．From our examination of sample pages we believe a work of this kind will soon be published by Funk \＆ Wagnalls， 18 and 20 Astor Place，New York，under the title of＂Standard Dic－ tionary of the English Language，＂in the preparation of which they have made several departurres from the usual methods of lexicographers，and have added several features not used hereto－ fore．The illustrations are numerous and excellent．

## foreign items．

Concerning the harvest in South Kustralia，an Adelaide letter，under date of Nov．26．，says：Reaping is now in full operation in the northern areas， and while red rust is prevalent it is to be hoped the season is too far advanced
for any extensive loss to occur．In or any extensive loss to occur．In range numbers；but while they are too late
for the crops in the north，it is possibe ducer．
they may endanger those not so far
advanced．However，with these fay advanced．However，with these draw－ that of last year，say，an average eight bushels，or an e，
of about 350,000 tons．
From Glasgow，Scotland，Messrs Dun op Brothers send their annual revie from which we quote as follows：
In passing to a review of the course of the market during the past year，it falls to be recorded that，as in 1889 there has happily been an exemption from foreign political excitement，and the import of all articles of the trade from the principal producing countries has been uninterrupted．But if we have had peace abroad，there have been labor financial troubles at home，causing nuch unrest，and tending to repress ex pansion of business．In the earlie menths of the year，as if following rigid rule（characteristic of the past thre or four years），trading was on a restricted scale．Supplies during this period particularly of flour，were in excess o equirements，and prices drooped．Not till April did the trade show improve－ ment．In the middle of that month reports of damage to the growing Ame rican winter wheat crop awakene anxiety，leading to renewed activity and better prices．Some reaction followed in the succeeding summer months Towards the end of Jury，and in August the unfavorable weather here and in America（now compromising the spring wheat crop also）stimulated the market wheat acquiring 116 to 2 per boll，（4，
bushels）＇and flour $2 \mid$ to 3 per sack ad－ vance．American shippers，indeed at this juncture expected the sea son would shew no exportable sur－ plus．Russia，the Danubian prin cipalities，and Hungary，on the other hand，were more highly favored promising an abundant supply．Mani toba，too，had a very large and hand some crop upon the ground．These circumstances，together with abnormally low Atlantic freights，combined to counteract the adverse outlook in the States．In the beginning of September the condition of our home crops fortunately underwent a complete change for the better．While the wet summer had injured the potato badly ihe effect upon the cereal crops of Eng． land and Scotland was quite neutralized by the subsequent brilliant autumn． The home requirements being on the ordinary scale，and the quantities afloat quite up to usual volume，there has been since harvest no special anxiety about future supplies，except in the case of Indian corn，the deficiency on which seems to have been apparent to those most interested．The city millers have been specially busy during the most of the year，having had great variety of wheat at their command，and with admirably equipped mills．It was matter of regret，however，that the promise of fine hard wheat from Mani－ oba was doomed to disappointment inclement wheather on the eve of harvest modifying，if not altogether upsetting the expectations from that country．The financial crisis of November has so far been little felt in the Glasgow corn trade，and it has been spared such fail ures as have occurred in Liverpool and the north of Ireland．Our bakeries have been fully occupied，and bread although one of the cheapest of the necessaries of life，has maintained a

Although it may be vain to attempt
forecast the future of the mar－ ket it is noteworthy that much un－

Ameriean Steam Cauge Co． Burifon Steam Gaugers
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Patents for Inventors． CHAS．E．BR®CK， Pacific Building，WASHINGToN，d．c．


## FOR SALE－In Wisconsin．

125－bbl．roller flour mill， 4 stories，frame power for 4 water wheents．Flume plenty water mill in good condition．Frame warehouse and office close by，and long sheds for
farmers＇teama．The whole pro peration 16 hours daily，doing pry in full business．Has big grist business．City of 2，000 population；two railroads．Good trade with citizens，farmers and lumbe men，for
flour，feed and rye．Good local plenty of it．Good place to live，has good schools and churches，and close to other
large citie． large citie．Owner non－resident，which is

Menaul Wood Adess
Menasha Wood Split Pulley Co． Menasha，Wis．
A GREAT SNAP．
We offer for sale a first－class steam flouring
mill at a price that will astonish you．Ca－
pacity 100 barrels，situated in the Solmoon
Valley，the best wheat country in Kansas．
In good repair，and running steady．Ele－
vators and warehouses complete．On the
U．P．R．R．Address
BANK of GLAsco，
12－3t
Glasco，Kans．
certainly still remains as to Amer－ rica＇s surplus．Her wheats are prac－ tically indispensable here，and it is significant，that while supplies of No． 1 northern and lower grades have been fairly liberal，there have been，up to his point，no receipts of strictly No． 1 hard Duluth，the spot stock of which is rapidly disappearing．The higher quali ties of Russian and Danubian wheat ikewise are into narrower compass．It may not be too much to expect that ome enhancement of value to present holders should result from the causes we have indicated，as well as from the resumption of buying which will naturally follow the absence of demand that has marked the closing weeks of 1890

[^1]
## a lesson for laggards.

You think of taking a journey some day:
You have talked it You have taiked it over for years and y
Yet somehow or other you make delay,
Until further and further away ape Until further and further away appear
The beautiful goal; and I tell you now To bind yourself by a solemn vow To cross the Rubloon. Pluek up heart!
For you'll never get there unless you There looms before sou from unless you start There looms before sou from day to day
A task that you dread to undertake: A task that you dread to undertake;
So it hangs like a cloud upon So it hangs like a cloud upon your way
Through which the sunshine can never And I tell you now that the better plan Is to do the work as quick as you can: Over sour fears a victory win.
For you'l never get
For you'lt never get through if you don't begin! With the bravest and busiest keep abreast,
Nor through love or indolence Nor through love or indolence loose y
For in each endeavor to do your best You raise the hopes of the human rac Be not content to grovel below, But rise to your duties with faith aglow :
Let your aims be high, and trive to Let your aims be high, and strive to excel;
For he who does better must first The heart that gives way to its doubts and fe That idly dreams when there's wo Wegka ined and bankremany years, There are journeys to take and tasks to be dong. From early morning till set of sun,
And triumphs to win, as none can deny And triumphs to win, as none can denv,
And you'll never suceeod And you'll never sucoesd unless you try

## MIL WAUKEE ITEMS.

The Pabst Brewing Co. will expend over a million dollars in improvements during the year 1891. Among them are a new hotel, several office buildings in prominent locations, additions to various departments of their brewing plant and a large repair and mill wrighting shop.
The Schlitz Brewing Co. will erect another immense malt house. The
Pring \& Rau Mfg. Co. have the contract for the machinery.
Hon. Henry Smith recently received the sad intelligence that his brother F A. Smith of Salinas, Cal. had dropped dead there. The deceased was for many years a resident of Milwaukee and was engaged in millwrighting with his brother Henry and George.

## A SChEME FOR CHEAP pOWER.

A French engineer in a recent paper proposes a scheme for cheap power by having gas and steam in the same cylinder. By this scheme he claims to be able to produce motive power by using a combustible gas, employing the heat generated by its explosion to generate steam, and the vapor of ammonia. When the gas has operated on the piston it escapes at a temperature of about 400 degrees into a generator, where steam is produced, which is used to act upon the opposite side of the piston from the gases. There are two advantages claimed for this-the high temperature due to combustion of the gas prevents cylinder condensation, and the steam assists in lubrication. The completed machine for which this claim is made will consist of two cylin-
ders, one making its forward stroke ders, one making its forward stroke and its return stroke by the action of the steam ; the other is operated entirely by vapor of ammonia. Under these conditions, says M. Tellier, there can be no doubt, theoretically that 44 pounds of coal per horse power per hour is an economy which can be secured.

## BREAO MADE FROM ROOTS.

George H. Harris, of Rochester, New York, has for some years been investigating this matter, and writes: "Among the wild roots used by the western Indians was one variously termed prairie potato, or bread root. The Sioux called it wild prairie turnip.
The French named it apple of the The French named it apple of the prairie, or turnip of the prairie. Others called it Indian turnip, or bread root.
These roots grow on high and dry prairie ground, one or two together, from four to six inches below the sur-
face. The Indian women usually dig them with pointed sticks. They are about the form of a hen's egg, and vary
in size from that to a goose egg. They have a thick brown envelope, similar to the outer peel of an onion, of a tough, leathery nature, that is easily separated from the interior, or food portion, which is smooth. It can be
boiled and mashed like a turnip. It is boiled and mashed like a turnip. It is
usually split open or cut into two thin strips and dried for future use. In this state it resembles pieces of chalk. It becomes friable when dry, and is readily ground into a light starchy flour that makes a very palatable and nutritious bread. The taste is like that of the Swede turnip.

## how an electric car is moved.

The dynamo which generates the current does so by the revolution of a coil of wire near the poles of a magnet, the force which revolves the coil being derived from the engine. The current then passes over the wires, down the trolley which surmounts each car, to a small motor. This motor has an armature consisting of coils of wire traversed by an electrical current, which is attracted in succession to the poles of the stationary coils called the field magnets, through which the current also flows,
fies around, and transmits its motion, by means of cogwheels, to the axle of the car. The driver of the car, by use of a lever, turns the current into the motor beneath the car, or diverts it to the rails at will. In the conduit system the current passes along the wire, with which connection is made into the motor on the car, and then out through the wheels to the rails, and then back o the central dynamo.-Engineering.

## Character in shoes.

"Do you know that an old shoe is a good index to the character of the person who wore it?" said a salesman in a sixth avenue shoe store to me the other day. "I have been in the business close on to twenty years, and have observed the matter closely. A person who wears a rear is of a passionate temperament, one who is generally enthusiastic, and one who does whatever he undertakes in a rapid manner. Such persons I have found, are not successful in accumulat-
ing money. An evenly worn shoe ining money. An evenly worn shoe in-
dicates an easy-going person. But if the toe end is badly worn, look out for the wearer. "Shady" people and mostly all criminals wear out the toes of their shoes first. Why? Because, as a rule, 'crooks' glide along on their tres. on the inside. He lives contentedly, and is little concerned as to the morrow. If married, he has a large family. If the whole heel is badly worn, the person is full of resolution and determination is buoyant to the point of brusqueness, and is possessed of ability to both make and save money.-New York Star.

## practical recipes.

The German Remedy for Burns.The celebrated German remedy for burns consists of 15 ounces of the best white glue, broken into small pieces in two pints of water, and allowed to become soft; then dissolve it by means of a water bath, and add 2 ounces of glycerine and 6 drams of carbolic acid; continue the heat until thoroughly dissolved. On cooling, this hardens to an elastic mass, covered with a shining parchment like skin, and may be kept for any length of time. When required for use it is placed for a few minutes in

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a water-bath until sufficiently liquid and applied by means of a broad brush. It forms in about two minutes a shining, smooth, flexible and nearly transparent skin.
A New cement for securing iron into stone is described in some of the foreign papers. The cement is made by melting resin and stirring in brick dust, which must be finely ground and sifted until a sort of putty is formed, which, however, runs easily while hot.
Anyone can make the hand-grenade fire extinguishers, and at small fraction of the prices charged in the market. Any light quart bottle will serve to hold the solution, which is composed of 1 pound of common salt, one-half pound of sal-ammoniac, dissolved in about 2 quarts of water.

At the Wisconsin Agricultural Experiment Station, two feeding experiments, for the purpose of ascertaining the value of ground oats and of bran for milch cows were conducted during the last year Two cows were used on the first experi ment, and four on the second one. The cows were fed the same quantities by weight, of oats and bran, 8 tbs . daily per head on the first experiment, and 10 tbs , on the second, and in addition the same fundamental ration of corn meal, hay, and corn silage or fodder corn. The effect of similar weights of oats or bran in a ration for milch cows was thas studied. It was found that the cows invariably did better on oats, going up in milk yield when feeding on oats and going down when bran was fed, while the fat content of the milk remained the same on an average.

## fegent milling patents.

The following is a list of patents relating to Milling and Grain-handling appliances granted during the O. S. Miller, by Chas. E. Brock, Patent Attorney Paoifle Bullding, Washington, D. C.:
No. 441,658, Automatic grain-scales, T. F Gray, Monroeville, O.
441,702, Safety device for mills, G, Rieseck, Allegheny, Pa.
441,912, Grain tally and register, S. R. Wheeler, Detroit, Mich.
442,006 Crushing-roll, H. C_Behr, San Francisco, Cal.
No. 442,051 Cockle-separator, F. W. Howell. Buffalo, N. Y.
442,086 Machine for breaking shelled corn, A. Ball, Claremont, N. H.

442,184, Grain-meter, F. Orr, East Springfield, Ohio. 442,202, Flou
Haven, Minn.

No. 442,212, Middlings-purifier, G. Walter, Grand Forks, N. D. This covers the combination of an upright shaft, means for rotating said shaft, a sieve supported upon said shaft, a cam upon said shaft, means of rotating said cam independently said shaft, and means of connecting said cam with said sieve, whereby said lovement when both a rotary and lateral re said shaft and said cam are rotated.
Bowling Green-packer, N. C. Gauntt, Bowling Green, Ky.
442,537, Bag-holder, A. P. O'Brien, Rich-
mond, Va., assignor of mond, Va., assignor of one-half to $A$. D. Ledoux, same place.
Richards, Hartford, Coin scales, F. H. Richards, Hartford, Conn., assignor to the ratt \& Whitney Co., same place. 42,720 , Grain- $442,714,442,717,442,719$, Regulator for weigher, 442,715, 442,716, 718, Grain-mor grain-weighers, and 442,Richards, Hartford, ponn, anted by F. H. Richards, Hartford, Conn, and assigned to the Pratt \& Whitney Company, same place. 442,722 , and 442.723, Grain-weighers,
patented by C. H. Cooley, Hartford, patented by C. H. Cooley, Hartford,
Conn., assigned to the Pratt \& Whitney Co., same place.

## F. H. Richards weigher, C, H. Cooley and

 F. H. Richards, Haitford, Conn, assignors place. . 442.76 442.766, Feed regulator for roller mills,D. Brennan, jr., Bayonne, N. J. Gilbert and W. Richarg machine, G. A Gilbert and W. Richardson, Milwaukee, Wis., said Richardson assignor to said
Gilbert. . 442,848 ,
Brooklyn, N. Y. o. 442,859, 442,860, 442,861, Grain-weighers
C. H. Cooley and F. H. Richards. Hart ford, Conn., assignors to the Pratt \& 442,924, Ventilator same place. ing vehicles, A. W. J. Swindells, W. S.
Peel and $\mathbf{G}$. F. Freeman, Manchester ing vehicles, A. W. J. Swindells, W. S
Peel and G. F. Freeman, Manchester
Eng. Eng.

## Croswell 43, Feed-regulator, W. Gribben Croswell, Mich., assignor of one-fourth to J. M. Gaige, same place

 443,143 , Combined place. S. Loree, Cincinnati, O., assignor cutter half to J. Loree, Lincoln, Nebr. 44,180, Grain-weigher, F. H. Richards Hartford, Conn., assignor to the Pratt \& hitney Company, same place.443,295, Grinding-mill, L. Poulin, Gunder-
son, Mont. son, Mont.
aw, Toronto, Caning machine, A. Laid 443,372 Grain scoure Moore, Toronto, Canada. 443,485 Grinding-mil Chicago, Ill., assignor to $\mathbf{F}$ A. Cameron, 443,669, Grain-weigher . Sustin. Hartford, Conn., assignor to the Pratey,
Whitney Company, 43,583, Grain-weigher place. Hartford, Conn., assignor to the Pratt \& Whitney Company, same place. 443,718, Grain-weigher, F. II. Richards, Whitney, Conn, assignor to the Pratt \& 443,933, Grain-weigher, C. H. F. H. Richards, Hartford, Conn. assignors to the Pratt\&Whitney Company, same place.

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cinnati, Ohio.


Mindian corn in france. IZE is hardly known as an article of food in France
As a crop, it does not thriv well there, and those who do eat corn, ea Spanish or native corn, which is not pal atable. Consul Griffin writes from Lim eges that "if corn meal could be introduced as an army supply its adoption would prove advantageous to the soldier. The bakers would find a greater profit in mixing meal with rye flour, thus producing a lighter and more digestible bread.
Were American corn so introduced, a lasting favor would be conferred upon the poor French peasant and workman, as well as an outlet for the over-production of the American farms. A very simple
way to reach these country people with this valuable product, would be to follow the fairs, which are held monthly or bimonthly in nearly every canton of France. There let American corn in different way be prepared and cooked before their eyes; let the people taste it, handle it, and find out how easily it can be cooked and how cheaply it can be bought. I would say that from personal experiments, medical
and other professors who never before eaten of American corn (but though corn was only a food for cattle and fowl after tasting it prepared in the different ways we have it in the United States, declared it not only wholesome and nutritious but delightful to the palate.
The corn crop in France in 1888 wa $7,000,000$ metric quintals of 220.47 pounds The average price is nearly 20 francs a quintal. The import of foreign corn is $4,800,000$ metric-quintals, of which 2,000 , 000 are from the United States and 1,600 , 000 from Roumania. The consumption is put at $4,037,000$ quintals, $2,000,000$ in distilleries, $2,100,000$ are fed to animals and the remainder is used in starch factories. The transportation companies in Paris use great quantities for food, and declare that a tax on corn would force them to raise their prices. The French Senate after a long debate finally voted in favor of a duty of 3 francs on corn, and supplemented this by imposing a duty of 6 francs on corn meal. During the debate it was
distinctly avowed that the duty on corn was to be considered only a continuation of the policy toward American pork. Comte Careil declared that the importation of American pork was only another mode of importing American corn, and French farmers could not maintain themselves against it. The prohibition of pork was right and ought to be maintained, and the duty on corn should also be made prohibitive. The farmers who raise beets favor a duty on corn, while the distillers are opposed to it.
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 MENT OF A FLOURING MILL.
## By J. F. Mueller, M. E.

 (Concluded)THERE is probably no part of a mill receiving so little attention as the power plant. The style and condition of the enclosure usually is suggestive of the condition of the combination of engine, boiler, pumps, etc., also perhaps of the man in charge. No engine, even if it is nothing more than a plain slide valve engine, should be put along side of a boiler without having a partition to keep out the dirt and dust arising from coal and ashes which usually surround the boiler furnace. It is not uncommon, with small power plants particularly, to find the same inclosed in a shabby gloomy little shed, anything but a comfortable place for an engineer. No engineer can be expected to keep up the appearance of this important part of the mill entrusted to him, where the surroundings are anything but pleasant. It is frequently the case that the building is extremely low, affording but little ventilation and during the warm summer days the engineer is more apt to fill up his furnace with all it can carry and then sojourning on the shady side of the house in the open air, perhaps until he perceives a slackup of speed in engine caused by the steam running down. The competent engineer is likely to do this as well as the incompetent and he really cannot be blamed. In some of the mills in large cities the engine and boiler outfit is sometimes found in a dark pit where daylight is scarcely admitted and ventilation entirely out of the question.
There is nothing that so thoroughly exemplifies the old proverb of a stitch in time saving nine as the careful supervision of a boiler, and in following up this care by a thorough repairing of the little defects that make themselves apparent. Like a rent in the clothing, a small defect will grow very fast, and as it grows its power of increasing the deterioration will grow in faster ratio. But taken in time there is no reason why a boiler should not last for many years with but a small margin of its original strength taken away. Simply because a boiler is well made is no reason for utterly neglecting it. No engineer, worthy to be called such, will attempt to operate any boiler with any water without inspecting and cleansing. Boilers are likely to a deterioration of strength from a variety of causes, and the engineer in charge who has never had an explosion will insist on looking into and carefully inspecting this most dangerous adjunct of steam power.
In making the selection of an engine it is a wise plan to purchase one that who be best adapted to the engineer
engine is beyond doubt the best and lesser degree in the condenser. most economical type of engine that can be employed, it requires the attention of a man who is a thorough machinist and by no means a cheap or medium-priced man. There is no
doubt that such a man is by far the doubt that such a man is by far the
cheapest in the end, and when in charge of a modern Corliss engine, is capable of saving his employer a good round sum from one year to the next. It is therefore more a matter of first cost. There are quite a number of automatic engines that can be employed with considerable economy, at least they are far ahead of the plain slide valve and can be bought for very little additional money.
In selecting an engine it is not only important to get a good make, but also to select one of proper size. Many per sons entertain a mistaken idea that it is best to have a larger engine than is needed, "so that it will do its work easily." An engine which is too large for its work is very wasteful of fuel. Any engine will give the best result when it has a fair load, and in selecting from the list it is advisable that the lowest ratings be taken, as they are low enough for economical work.
In selecting a pump it should be of considerable more capacity than that needed to supply the boiler, as there are many things which effect the working of a pump; such as defective suction pipes, leaky valves, etc. It is the practice of most manufacturers to give the capacity of their pumps in gallons of water delivered per minute from which it is easy to select a suitable size, but the speed given in the tables at which the pump is to run is generally faster than that at which it is desirable to run them.
Some manufacturers of boilers are apt to overrate the capacity. By look ing over various catalogues we are likely to find a marked difference in the estimated horse-power for equal size boilers. Some base the horse-power upon fifteen square feet of heating surface per H. P., while others make use of twelve square feet of heating surface per horse-power. The fifteen square feet, at all events, is the most reliable basis to figure on. The economy of the boiler should have an equal consideration with that of the engine, and should be ample in all its capacities, so as to enable it to absorb so much of the heat generated in the furnace that the excess passing up the chimney shall be the least possible with the necessities of draught; for unless all possible channels of waste are cared for or closed, we may go on and save at the "spigot" of fine spun expansion curves, and waste hole" of the chimney.

Heat is lost up the chimney, lost in its transit from the boiler with the steam through pipes and cylinder. An immense loss of heat takes place in the
are various devices to take the maximum quantity of heat from the exhaust steam as soon as it leaves the cylinder. They are generally known as feed water heaters-seizing the escaping heat and marching it back to the boiter again They are a positive economy inasmuch that they rest on the principle that if a quantity of heat far exceeding that neccessary to actuate the piston must pass from the boiler through the engine then they watch the exhaust and secure
the superfluous heat, or as much of it as possible and remand it again to the boiler.
The mill-owner who uses the best means to protect and preserve his mill from fire is studying true economy, selfpreservation. He is suspicious of fire from every source at which it might possibly originate. He uses preventatives many times when it is not neces sary, not knowing where fire might originate; his only safety being in diligently guarding every avenue. Some would advise insuring your property well and if it gets afire let it burn. Insurance is good, no prudent business man will do without it, but he should be judicious in it. But more can be done than to insure the property. You should guard every avenue and use the prevention necessary to insure your protection. In the first place if you should insure for full valuation, no in surance company would pay full value. They would not be doing a safe business for themselves; certainly not a profit able one, as the temptation would be too strong many times for those who wish to close up and go out of business. It would certainly be the shortest way out. But few are willing to pay for even what make actual losses good. The miller who is successful must take a broad view of all his surroundings, he must not be short sighted, but remember that the neglect of any precautionary details is likely to prove disastrous and ruinous. Even if well insured, there is a loss, not only in the building and machinery, but the utter inability to supply customers' wants and keep their trade. Look well after it that your risks are reduced to the lowest possible minimum-it is self-preservation.

## Mondenoe Uxited 8TAT

a-word from donaloson "on the ROAD.'

合HE writer by a mere accident fell in with your Baltimore correspondent "Oriole" and passed a very pleasant half hour with him. He is a red bird sure enough and some of the Baltimore mill agents think he is red hot. Recognizing my name on the card I gave him as one he had seen under several articles on " Milwaukee Review" we became fast friends and he gave me some valuable points on the flour trade here.
I have no doubt he will mention my visit in his February article, and will
no doubt fully discuss the Baltimore market. I have no idea what he will say, and I have no intention of writing up especially the Baltimore market. It is neither better nor worse than the Boston, New York, Philadelphia or Washington flour markets. I will give only a few facts that I have found in a thorough canvass of these markets, they are applicable to all. Like the writer, all dealers, with hardly an exception, have believed in better prices in January and were therefore easily induced to stock up early. Mills everywhere seem to have run for the sake of selling their bran at good figures and piled up the Patents. When the financial pinch came, these mills threw that great load upon the eastern markets, forced it on, and so glutted all these markets that every available store house was filled to the utmost, and still there was consigned cars on the tracks paying $\$ 2.00$ per day demurrage. So great was the pressure to sell, that thousands of barrels were sold at ruinously low prices and many a dealer is still kicking himself for having bought early at $\$ 5.70$, what he, on Jan'y 15 th, could and did get for $\$ 5.00$. This was a general skirmish for orders. The small towns and small dealers were loaded up.
In short the eastern markets are well supplied with flour for some months. These conditions have changed somewhat since the 25th of January. The advance in wheat brought a little relief from the pressure, at the same time the Custom House reported a very substantial export movement in flour from the eaboard.
The mills that had been compelled to reduce their prices, quickly advanced to their old figures. This in turn checked all demand. Dealers have been so badly beaten in their calculations that they have no confidence now in this rise, especially as the pile of flour is so great on their hands. These gentlemen argue that this country is so large, and its resources so great and varied that no approximate idea can be got of the amount of wheat in the country, and besides, the bread supply is changing from wheat to corn, oats and barley. But we reply, corn, oats and barley are proportionately higher than wheat. Besides, how shall we overcome these facts that are admitted by all:
1st, Tbat the reserves were never so nearly drawn up as in July and August 1890-there being hardly a bushel of decent milling wheat to be found at that time ;

2 d , The crop of 1890 is admitted by all authorities to be $100,000,000$ bushels less than in 1889; and
3d, Our exports in the form of low grades and wheat together, will amount to very nearly as much as last year.
If they were scarce, poor and high last year, what may we reasonably expect if the above exhibit is correct?
I believe flour is good property.
Donaldson.

Baltimore, Feb. 9 th, ' 91 .

## "I CMIITOO SAI TOO MCCA FOO TZE SCLILPRA."

RREFERRING, OF COURSE, TO
The New Era Scalper
 CANTON, O., January 24th, 1891. SUPERLATIVE PURIFIER MFG, CO Milwaukee Wis

Gentlemen-Enclosed please find draft for......, balance due on scalper. annot say too much for the scalper, and cannot see how it could be better for he work. My verdict is that it is about perfect-cannot be improved upon.

Thanking you for favors, I am, yours truly,
G. C. HARVEY

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COCKLE SEPARATOR MFG. CO.,
MILWAUKEE. WIS.

United States Milekr and the milling engineer.

## E. HARRISON CAWKER, Editor.

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MILWAUKEE, FEBRUARY, 1891.
We respectfully request our readers when
they write to persons or firms advertising in they write to persons or firms advertising in Wa: sean in the UNITED STATES MILLER thereby ob
vertisers.

## MILWAUKEE AMUSEMENTS.

DA VIDSON OPERA HOUSE-Every evening, Satur
day and Sunday Matinees.
BIJOU THEATER-Every evering, Wednesday, Satur-
day and Sunday matinees. ACADEMY OF MUSIC-Every evening and usual
matinees. STANDARD THEATER-Every evening and usual matinees.
PEOPLES THEATER-Every evening and usua
matinees.
GERMAN STADT THEATER-Regular perfor
Wednesday, Friday and sunday evenings.
LA YTON ART GALLER Y-Free Tuesdays, Thursdays
and Saturdays. Admission 25 cents on Wednes-
days and Fridays. Uays and
Visitors to Milwaukee in either summer or winter
cannot fail to flad amusements suited to their taste.

T
HE free coinage bill now before the House committee will doubtless be defeated.

TनHE United States ranks first in manufacture, our products having exceeded those of Great Britain last year by more than $\$ 700,000,000$.

AREPORT sent out from St. Johns N. F., to the effect that a reciprocity treaty had been agreed upon by the United States and Newfoundland, is denied by the State Department.

THE end of the session of the present Congress is rapidly approaching, and many important measures will doubtless fail to secure a final hearing.

THE farmer element in the Illinois legislature is laboring to secure the passage of a bill which will abolish the the State Board of Warehouse and Grain Inspectors.

RECIPROCITY has been a subject which has attracted much attention of late and and the recent treaties made and others in progress are very encouraging to our export interests.

T is not very long ago that we chronicled a new "fad" of our British cousins for whole-meal bread. A company was organized called "The National Whole-meal Bread Company." After worrying along for awhile and finding that the taste of the public reverted back to bread made of ordinary wheat flour, the company has concluded to liquidate and the necessary legal steps for that purpose are now being taken.

WE clip the following item from The Financial Times (London) which will be interesting to American readers in view of recent legislation:
The American girl can always be trusted to make the best of her opportunities, and in
that respect the American Belle Mines seem that respect the American Belle Mines seem
to be well named. The circular just issued to the share-holders must bring immense satisfaction to them, but there is a sentence in the latest cablegram which has a moral for a
far wider circle. It is that "as market improves for our ores we are in shape to increase our output double or treble amount. That is a promising lookout for the free coinage men, and if many American mines are in the same
happy position it will want more than universal bimetalism to save the United States from the impending deluge of silver.

$\mathrm{W}^{\mathrm{E}}$E have received a copy of The Manufacturer and Inventor, published by Messrs. Green, McAllan \& Fielden St. Andrew st., Holborn Circus, London E. C. It is an epitome of manufacturing and invention from a British point of view, is ably edited and well patronized and deserves a place in the files of American manufacturing institutions for reference. The subscription price is 10 s .6 d . to subscribers in this country

THE millers of the United States are be congratulated upon the reci procity treaty just concluded with that great South American republic, Brazil It will open an extensive market for our breadstuffs and cereals. Section 1, which is of special interest to the flour and grain trade, reads as follows :

1. Schedule of articles to be admitted free into Brazil: Wheat, wheat flour, corn or maize, and the manufacture thereof, including cornmeal and starch; rye, rye flour, bucktoes, beans and peas. hay and oats; pork, toes, beans and peas, hay and oats; pork,
salt, and including pickled pork and bacon, except hams; fish, salted, dried or pickled; cottonseed oil; coal, anthracite and bitumin ous; rosin, tar, pitch and turpentine; agri cultural tools, implements and machiner mining and mechanical tools, implements and machinery, including stationary and portable ing and industrial purposes, except sewing machines; instruments and beos for the art and sciences; railway construction material and equipment.
Similar treaties are being made with other South American countries.
In this connection Mr. Leonard Busby, of Holt \& Co., large flour exporters of New York city, gave the probable effect of the lows: "The Brazilian duty on flour is between 55 cents and 70 cents per barrel, according to Brazil exchange, which varies very much The average duty is about 60 cents. Wheat is free, and is drawn from the Republic and ground in local mills and he Republic and ground in local mills, and has been gradualy eroaching upon the United have driven us out of the Brazilian market altogether. There were two new proces first-class merchant mills built in Rio by English capital about mills built in Rio by English capital about three years ago. They 900,000 bbls. annually, which is enough to supply the consumption of Brazil. These mills, however, have been brazil. These mills, however, have been unable to keep ferior quality of the Brazilian wheat and also the Argentine wheat, which has and also necessary the importation of $700,000 \mathrm{bbls}$, from the United States. The flour required is of the higher grades, and forms a decided contrast to our export trade with Europe which takes low grades. Eventually the Rio mills would have secured better wheat Rio would have excluded us entirely. Free flour will save Brazil to this market."

## THE MILLERS' TRANSPORTATION BUREAU.

ALTHOUGH millers are proverbially conservative and careful in regard o their business enterprises, possibly owing to their early business training in their calling, and the necessity of deal ing in that uncertain cereal from which their product is derived, still it would seem that the millers invited by the Executive Committee of the National Association to join in a movement for the organization of a Transportation Bureau, are conservative beyond reasonable limit, and are merely standing in their own light, by the reluctance which they show, to back up this movement with the small amount of money that is asked of them. There is no queston but that there is a crying necessity for a reform in the methods of trasact
ing the flour carrying business. The
railroads of the country are thoroughly organized. They make their agree ments, and realizing the necessity for unity of action in all things, as a rule, they live up to the agreements entered into. Their uniform rules and methods of contracting for the carrying of flour are based entirely upon their own inerests, and create a great deal of inconvenience and loss to the manu acturer and shipper. Individual appeals to the railroads for remedy have had absolutely no effect. They entertain the complaints and pleas entered, in a courteous manner, quietly "pigeon-hole" the matter, and nothing more is heard of it. Millers have re peatedly endeavored throughout the country to impress upon the minds of railroad managers the necessity of certain reforms in their methods and endeavored to secure some compromises as to rules which have been adopted but all this has been without avail simply because millers are unorganized, as they should be, and therefore canno meet organized opposition. For three years now a continued effort has been made, to persuade the Transportation lines, which contract for export flour shipments, to grant a reasonable busi-ness-like form of Bill of Lading. Fair promises are made at times, only to be broken, but in the majority of cases the matter does not receive even courteous consideration. The Executive Commit ee of the Millers' National Association ealizing that in union alone is there strength, recently formulated a plan for the organization of a transportation ssociation, which should deal with al these vexed problems, and throngh its powerful influence, remove the obstacles o obtaining justice and fair dealing on he part of the carriers. At first the plan was, to operate the bureau only in connection with export business, as that class of shipments have seemed to suffer he most, but the Executive Committee elt, as stated by the Secretary in his circular, that this organization should be made upon a broader basis, and that domestic and export shipments should both receive equal benefits. The mem bers of the National Association were therefore invited to take stock in the proposed corporation. We have learned from inquiry that not more than half o the members of the Association gave any response whatever to the appeal of the Executive Committee, although they were furnished with a blank which re quired merely a scratch of the pen and their signature, to be enclosed in a Secretary of the National Association What possible reason can the silent half have for not giving a courteous, business response to a matter so decidedly in their own interest. It is possible that some thought, if they answered "no" to the inquiry, as to whether they would take stock, afterwards, when the Bureau became a success, they might be ashamed that they were put on record thus, and, on the other hand, if they said "yes", they might be called upon to pay $\$ 25.00$, and therefore they feared to commit themselves in any manner. To this class of "weak kneed" members, we would simply suggest that, instead of putting themselves on record in one of two classes, they have put themselves on record as members of the third class, whose action is far less commendable than that of the ones who efuse to back the enterprise. Of the proportion of members who responded
tee in a manly way, a large majority about 150 , refuse to contribute, most of them giving one of two reasons-either that they do no export business, pretending to be blind to the distinct statement that the proposed Association was as much for the benefit of domestic as foreign shippers, and the rest express themselves as not desiring to enter into the plan until its success is assured. If all millers adopted the latter idea there certainly would be no organization. The Executive Committee of the National Association have performed a great service in presenting this matter to the members. This Committee is composed of an active, energetic set of men, who have been constantly striving during the past year to make the Association of practical solid benefit. They have received absolutely no encouragement for their labors, and worse than that, it would seem as if the men who elected them to manage the organization, were not disposed to accept their suggestions, or co-operate with them to any extent. Should this proposed Transaction Bureau fail in organization, the fault will certainly not lie with the Executive Committee. They are deserving of much credit, and certainly deserve no censure because the members of the Association decline to support them. We do not, on the other hand, believe that the National Association is to be blamed in this matter. Probably a larger per-centage of the members of his Association would join in an enterprise of this kind, than would the same number of non-members. We believe that so long as millers in general are afraid to take any chances, or make any sacrifices, for the sake of perfecting a strong organization, so long as they decline to stand shoulder to shoulder for mutual benefit and protection, just so long will they suffer every injustice and imposition on the part of railroads and of other interests with which they come in contact. If they have not "sand" enough to support movements of this kind, for their own benefit and protecion, they certainly deserve to suffer the penalty, and should not cry out at impositions, which they are called upon to endure. We are informed that a sufficient number of enterprising millers have now designated their willingness to subscribe to stock of the proposed organization to insure its formation. The benefits of this bureau are many The proposed plan of following up and tracing all shipments for members, which pass points of transfer, and are there turned over from one road to another, owing to which the great majority of vexatious delays occur, flour being side-tracked, or left in a warehouse indefinitely, the function which such an organization would have in regulating rates, obtaining adequate rates and facilities, in regulating switching charges, adjusting claims, etc., is of inestimable value to shippers, and we predict that those millers who are shippers, and who do not join in the movement, will sincerely regret their timidity and ack of enterprise, at some future date. There is no question but that the bureau can be made self supporting after the irst year, and that stock which is purchased in it can readily, within the next year or two, be sold at par, if not at a substantial advance. We hope that this scheme will not be abandoned and that there will be a sufficient number of nervy, enterprising millers found, to put it squarely upon its feet, and make it he success that it undoubtedly may be made.

## CORRESPONDENCE.

IThe following letters are ali from our own specia
correspondents, and reflect their viewsind
of the trade in the location from which they write.]

## OUR LONDON LETTER.

The Weather-Food Bill-Cont of Wheat Growing in England-The Flour Syndieate-A New

THE prolonged frost disappeared on Tuesday, the 20th of January, after having lasted almost without a break since the 25 th of November last. There has not been such a long, cold spell in the vicinity of London since the severe winter of 1813-14. Although as soon as the frost was out of the ground, the heavy soils were too wet for plowing, the continuance of open weather has enabled farmers to go on the land to try and re-cover by horse and manual labor the tillage and seeding of the land. During the frost the moving of wheat, flour, etc., in bulk has not been easy nor has the work been necessary, as the London and country millers have, as a rule, been able to keep their hoppers full of wheat, purchased during the fine autumn at cheap rates, more especially of English samples. The prices paid for foreign wheats have been higher than is generally supposed, most lots of useful quality fetching 33s. to 38s. per qr. of 496 lbs . The average prices of wheat, barley and oats come out for the whole year, 1890, at 31s. 11d., 28s. 8d. and
18 s .7 d . per 18s. 7d. per quarter.

The British Food Bill for 1890 is the largest the country has been called on to pay, although on account of the low prices the increase in the amount of the bill is less in proportion than the increased quantities. Out of the fortyfive products, such as are introduced by agriculturists in this country except
maize and oil-seed cakes, twenty-seven came in greater quantity in 1890 than in 1889, and twenty-five show an increase on the quantities of 1888 . The wheat and flour imports have been remarkably steady for the three years. The greatest quantity of wheat ever im-
ported was $14,824,000$ qrs. in 1882 , and the maximum of flour was equal to $5,558,000$ qrs. received in 1887 . Barley and oats both reached their lighest quantities in 1888. Maize is the only kind of grain which came more abundantly in 1890 than in any previous year. There is only one product in respect of which the British farmers have beaten their foreign competitors, after the latter had once obtained a good foothold in the market. In 1880 Great Britain imported $9,754,514 \mathrm{cwt}$ of potatoes, and nearly as much in the two preceding years; but since 1883 onethird of that quantity has not been received in any year, and now the quantity is only one-fifth. The competition in the potato market has been so sharp that some English and Scotch growers, far from good markets, have been driven out of it like the foreigners; but this is chiefly on account of the
railway rates. On the evening of Monday, January 21st, Professor Wrightson read a paper on "The Basis of the Cost of Wheat Growing" at the Surveyors' Institution. The professor showed the difficulty of estimating the cost of wheat by itself, and in his paper criticised the common valuations of work and manure. In his returns he allowed for the straw at consuming value, but not the value of the farinyard manure, only charging the cost of the carting and spreading to
the crop. Allowing £1.7s. 6d. per acr for rent, rates and taxes, 7s. 6d. to 10s. for plowing, 12s. to 13 s . for harvesting, and fair amounts for seed, threshing and other expenses, the professor gave a summary of the expenses and returns of a four-course rotation as follows:


Here a profit of $£ 6.6 \mathrm{~s}$. 10 d . on the rotation is shown, or $£ 1.11 \mathrm{~s}$. 8 d . per acre per annum. The returns are made up of 15 tons of swedes at 7 s . consum ing price ; $4 \frac{1}{2}$ qrs. of barley at 28 s ., and straw valued at 14 s . an acre for consumption on the farm; $1 \frac{1}{2}$ tons of hay at 60 s . ; and $£ 1$ for grazing ; 4 qrs. of wheat at 34 s ., and straw 14 s . The Standard in commenting on these figures states that as live stock commonly fail to pay as much as the roots they eat, it is obviously proper to credit the value of the manure they make, and to charge it to crops which get the benefit of it. By not charging anything for manure applied to wheat, the expenses of growing that cereal are made much smaller on paper than they are in reality.
Although the flour ring that was proposed some two years ago, embracng the mills in the northeast of England from the river Humber to the Tweed was never formed, it is not re-
ported that the formation in the flour milling trade in the southern portion of the old district and some mills in Leeds and Wakefield is being effected. Negotiations with the firms concerned, about twenty in number, are not yet entirely completed, but rapid progress is said to have been made, and details will probably soon be made public. The headquarters are, it is understood, to be located in Wake field where premises have been inpected as to their suitability. The process of valuation of proceeding, and the effect the syndicate will have on the Wakefield corn market is being much discussed in circles interested. It is further stated that the syndicate will have command over a capital of two million sterling. Why English millers should sell their mills to a syndicate just at the time they are making money is a mystery, and the only feasible reason that can be thought of is that a long price is being bid for the businesses. The state of the milling trade can be gauged somewhat from the fact that during the twelve months ending December 31st, 1890, there were twentygazetted in England and Wankruptey gazetted in England and Wales against millers, whereas during the year 1889 he number was thirty. The total number gazetted in the principal trades and occupations was 4,008 in 1890, and 4,570 in 1889.

At the present time much attention is being evoked by the appearance of a new centrifugal dressing machine which is being manufactured and placed on the market.

Parliament has a hard task before it in deciding upon the many complicated points involved in the railway rates scheme to be presented by the Board of Trade. As a compromise it could carcely be expected to give complete atisfaction to either of the opposing parties; but there is a very general pinion to the effect that it leans heaviy to the railway companies. Legisreduction of exorbitant rates and un-
equal charges found paralyzing so many cranks, pessimists and old-fogies in our branches of industry. The railway own midst who are continually throwcompanies pursued the policy of asking ing impediments in the road to ada great deal more than they expected to vancement and otherwise be-littling and get, in the hope of still getting all they discouraging every movement in the need after being beaten down, and right direction, but notwithstanding all although preposterous demands have that, the fact remains incontrovertibly been reduced by the commissioners of the same that the Monumental City is the Board of Trade, who now point to fast emerging from the woods and forctheir scheme as a compromise, if it ing its way to the front in importance. should be made law as it is, agricul- And, come to think of it, why should turalists and traders will have reason to regret that a railway act was passed.
According to Mr. William Goodwin, of Buenos Ayres, in Santa Fé and Entre Rios a crop of wheat probably equal to that of last year has been secured. In some other provinces damage has been
done by frost; but the extent of the done by frost; but the extent of the injury is not yet known. The yield of maize is uncertain on account of the
damage done to it by locusts. Although the reports of damage to crops in the Argentine Republic by drought, rust and locusts, published a short time back, were exaggerated. The first official reports on the Indian wheat per are coming in, but they merely give estimates of area and some
information as to the start in growth information as to the start in growth
shortly after sowing. In the Punjab the area is reckoned at $6,363,300$ acres or 22 per cent more than that of last year. In Bombay and the Central Provinces the acreage is expected to be about the same as that of the last crop while in Berao there is a decrease.
According to a report of the AustroHungarian Consul at Moscow, the authorities are still engaged in elaborating the scheme for the projected Siberian railway. Of the routes pro posed the northern one seems to have been decided upon. This line would run through Ufa, Statonst, Toursk Krasnojarsk, Nishendinsk and Irkutsk It is considered not improbable that at first the portion of the route as far as Toursk only would be a financial success, inasmuch as the surrounding country is very fertile and comparatively well-peopled and that the portion between the last named town and Baikal might pay, owing to the existence of gold mines in the Baikal, but that in the course of time, the region just named may become populous and
eventually develop agricultural and mining industries of importance, the soil being favorable for both. The proposal to continue the line through the Transbaikal and the Amoor district is discouraged, owing to the sparse population of both countries as well as
the severity of the climate, it being considered that the effect of working this line would be the burdening of the railway budget for many years to come. L. Maygrove.

## London, Feb. 3, '91.

## OUR bALTIMORE LETTER.

The bright-hued bird in praise of the Monu-
mental olty-Its many and varied attractions and advantages.-One important business
shows a retrograde moy in flour milling interests - A large decline in four milling interests-A large milling
plant necessary for the future greatness of
the eity-Wants the eity-Wants a big slice of the Southess Amer cilities,

ALTIMORE has been a slow old town, it is true, a veritable laggard and tailer-on in the ace for supremacy for years, but she is waking up and booming now from wayback and unless all signs fail is destined in the near future to become a leader among the progressive cities of the world.
This may sound funny to those outiders who have always regarded us as too staid and conservative to keep up
his not be the case, endowed as we are with everything which is calculated to make a great metropolis.
Our city is noted for being the healthiest in the union, and, as far as climate goes, well, we manage to eseape blizzards, cyclones and the like in winter and also many of the discomforts incient to the summer season, which is more by far than most of our rivals can boast of.
We have our universities, colleges and seminaries, public and private libraries, galleries of art and conservatories of music; cardinal and bishops, churches and orphan asylums, hospitals and homes for the aged, secular and religious press, courts, jails and alms houses, railroad and steamship lines, grain elevators and commercial exchanges, importers and exporters, banks and trust companies, iron and steel furnaces and foundries, dry-dock and marine railway, ship and engine builders, potteries and glass works, cable and electric roads, locomotive and car shops, guano and canning factories, cottonduck and flouring mills, breweries and distilleries, schools of mechanical training and design, machinists and millwrights, chemical and white-lead works, florists and nurseries, brickyards and quarries, twine, rope and bag factories, saw and planing mills, tobacco and shoe factories, hominy, corn-meal and rye-flour mills, type, bell and tool foundries, gas and electric light works, charcoal and lime kilns, box factories and cooper shops, shot tower and sugar refinery, gunpowder, river and water vorks, artisans, mechanics and laborers, city hall, custom house and new postoffice, parks and public squares, monuments and imposing residences, theatres, club houses and cyclorama, hotels and cafes, masonic temple and natatorium, police force and fire department, harbor and ice boat to keep it open, resorts and suburban residences, and in a word almost every attraction, incentive and prerequisite to make us a power in the land.
With a population of nearly half a million, and with her industries rapidly increasing and developing in every direction, we are warranted in saying that Baltimore will soon be conspicuous also as a manufacturing center.
In addition to the advantages already enumerated, we should not forget those which come to us naturally through our geographical environment. The Chesapeake Bay and its tributaries empty their treasures at our doors and are the inexhaustible sources from whence come our supplies of game, fish, oysters and crabs, and for which we are famous the world over.
The metropolis of the south is the home of the epicurean indeed, for no where else can such luxuries be found the year round at so small a cost.
Baltimore is also renowned for her beautiful women and cultured society -a reputation by the way which she proposes to maintain for all time to come. And then again-not only is Baltimore the most delightful city in the union in which to live, but it is also
the least expensive; rents, food, clothing
and fuel are all relatively cheaper here than any where in the United States Why this is so we are unable to say, but a short sojourn in our midst will demonstrate it conclusively.

And that is not all, for we take great pride in stating that the B. \& O. R. R. Co. is tunneling our city at present and otherwise busily extending its connections; that the Western Maryland R. R. Co. is planning to secure better terminal facilities at this point; that the new sugar refinery is in operation at Curtis' Bay; that the mammoth steel works at Steelton are in full blast; that rapid transit is no longer a myth, as far as we are concerned, but an actual reality; that the sound of the hammer and the hum of the factory are heard everywhere; that hundreds, and we might say thousands of buildings including dwellings are in course of construction here; that the spirit of enterprise is fast taking possession of our people; that a wonderful improvement is apparent in the architectural beauty of our city; and that Baltimore is experiencing a tidal-wave of prosperity which promises to increase and multiply as the years go by.

But while this is all true, our object in writing this letter is to point out one interest which has not flourished here of late, but which on the contrary and for some unaccountable reason has lapsed into a state of innocuous desuetude, and that is our once noted milling industry.
In the light of our preliminary remarks, and in view of the facts in the case, this is one of the most remarkable and at the same time inexcusable catastrophes that could have possibly happened to us.
Baltimore, it will be remembered, at one time enjoyed great prestige as a milling center, but she has been superseded long since in that respect by Minneapolis, Milwaukee, St. Louis, Buffalo, New York and other cities.
The mill B. of the C. A. Gambrill Mfg . Co., and the Mt. Vernon mill of Wm. E. Woodyear \& Co., are all that remain of the 15 or 18 mills, which were formerly located in and around Baltimore, and which relied entirely on this market as an outlet for their product. Of course we do not include in our calculations the Orange Grove and Ellicott City mills which are still owned and operated by the C. A. Gambrill Mfg. Co.
We find that every mill on Gwinn's Falls, ten in all, is either idle or else being utilized for purposes other than milling. The mill at Illchester, and the Paragon mill at Baltimore, are also out of business.

The Silver Spring mill of this city was recently destroyed by fire and much to our regret, there seems to be no probability of its being rebuilt.
Here then we have some 13 mills altogether that have withdrawn from the field, one by one within a few years, and among their proprietors, from time to time we recall the following: Davis \& Warfield, the Hoopers, the McClures, Seevers \&Anderson, Levering \& McAtee, Jas.\& Hugh Warden, Hazlehurst \& Sons, Tyson \& Bro., Robt. 'Tyson \& Co., Frank Tyson, Walker \& Dorsey, N. A. Gassaway, J. Olney Norris and others. Some of these are dead and some are living, but it is sufficient to know that none of them are engaged in milling at present. We know not how to account for the decadence in milling here unless it was due to the fact that our mills, which were built on the old buhr system, could not compete with those of
more modern design, and so, rather than
attempt it, or go to the expense of remodeling, concluded to retire.
We have heard no theory advanced on the subject, but consider our inference near the truth, particularly when it is remembered that these mills did a large and flourishing business in their day and generation, and ceased only so to do when the new system of milling came into vogue.
The C. A. Gambrill Mfg. Co., is the only milling concern in these parts that has kept up with the procession.

Not only has it remodeled all its mills and made them complete in every respect, but it has also enormously increased its capacity and erected large elevators at Baltimore and Ellicott City.
This concern was the leader here when all our mills were in operation, and it is the same also to-day, and ever shall be, against all comers, world without end, amen.
Its position in this section is simply impregnable and deservedly so and we are glad of it.
The secret of its success and stronghold is that it is a live, active and enterprising corporation, thoroughly abreast with the times; that it deals in nothing but the best; spares no expense for improvements, and courts rather han shuns competition.
That is the size of our world-fame company, and if you can beat it we would like to hear from you.
But the Gambrill Mfg. Co. cannot do all the business of Baltimore neither does it aspire to.
Since those old buhr mills have dropped out of existence, others from a distance have stepped in and partially filled up the gap, but there is room here yet, and to spare, for more.
What we need above everything in Baltimore just now, is a strictly firstclass modern roller mill with a capacity of about 5000 barrels.
Such an enterprise indeed is posiively essential if we are to monopolize he South American flour trade of the future.
That trade of late has assumed enormous proportions and now that reciprocity is an assured fact, we may expect even a greater demand from that

We would be the last in the world t propose the erection of such a mill at this point if we thought for one moment that it would interfere or in the least conflict with the business of the Patapsco and Mt. Vernon mills of Baltimore or the Codoras, Paxton and Steelton mills of Pennsylvania, all of which are now engaged in this distinctive trade, but knowing as we do that they are already sold ahead most of the time and consequently in no position to as. sume the greater responsibilities which are bound to come when the treaty goes into effect, we feel justified not only in making the suggestion, but also in urging its adoption.
South America is a great country, its possibilities are illimitable, and now that we can enter its borders free of duty, we, as Baltimoreans, should leave no stone unturned in our efforts to hold and increase its patronage on flour.
It is an acknowledged fact that flour made of wheat grown in this section, is peculiarly adapted to hot climates and hence commands the preference from tropical buyers.
The raw material, too, rules relatively lower here the year round than in any other market, which is another significant argument in favor of our project. At present there are two regular lines
of steamers running from Baltimore to Mass. He is also devoted to his poultry . Brazil direct and also quite a number yards. Mr. Whitney pays Buffalo a visit from New York which invariably stop occasionally during the absence of his In addition to these there is voyages. partner, Mr. Gibson from this city, with In addition to these there is a large whom he has been connected in the fleet of Clippers in the business, owned hard wheat trade for many years. by Baltimore parties. And now that Elba, on the west shore road, will have the new sugar refinery is finished and a new flour and feed mill. Turner \& lar sailings also to the West Indies and aulsbury are the proprietors.
Demarara, something we have not had abochester millers are kicking again for a long time, and which will enable $\begin{aligned} & \text { about the shortages in wheat shipments } \\ & \text { from Buffalo. As usual the blame is }\end{aligned}$ us to get back a valuable trade we once enjoyed on low grades of flour.
With all these facts staring us in the face, can any one question that there is an opening here for a model mill?
Don't discourage the proposition on the ground that it will increase competition, for when we were at our zenith as a milling centre, both mills and jobbers made larger profits by far than they are making at present.
There is unquestionably ample room here for such an enterprise without interfering with anybody and while we would prefer home capital taking hold of the matter, we are inclined to believe hat as usual it will remain for some harp outsider to undertake.
We have lost 13 or more mills, and now ask for one only in place of them. We cannot regain our former milling prestige without mills, that is one thing very certain, and as flour is going hrough here in large quantities righ along for Europe it is fair to presume that something could be done in that direction too by a mill having the advantage of being located at a point so much nearer the consumer as Baltiore. At any rate it is worth a trial Such are the facts as viewed from an unselfish and disinterested standpoint
and which we leave with you now to consider.
Before closing, however, we appeal for a mill in keeping with the growth of our city, in keeping with the metropolis of the South and in keeping with reciprocity-in a word, we appeal for a monumental mill and a Lord Baltimore brand!
Since writing the above, we find that Richmond is already beginning to crow over the prospect of regaining her er trade with Brazil, and that she is likewise making extensive preparations to do great things in that respect when the treaty goes into effect, which will be April 1st, but Richmond will hever have a ghost of a show if Baltimoreans will rise up and do their duty promptly. It is stated by an authority hat Baltimore and Richmond, particuarly the former, furnish 70 per cent of all the flour consumed in Brazil, and that last year the American exports of the product to that country aggregated $1,000,000$ barrels, which was a large gain over previous years, and that they bid fair to reach double that amount in a few years under the reciprocity act.
Such is the position of affairs, and if it Such is the position of affairs, and if it Baltimore at once, then we are willfully blind to the situation and deserve to suffer the consequences.

## Baltimore, Feb. 14, 1891. Oriole.

## our buffalo letter.

A
R. JAMES M. WHITNEY of Rochester, is a great lover of amimals. Next to the human race he loves the horse, and if it is of the Wilkes' blood, so much the better. His latest purchases were five beautiful fillies of this stock, and the
all put on the shoulders of the graindealers here, who I know are wholly innocent, but you cannot make the Roch ester miller believe it. The order is given to the elevator for the number of bushels of wheat sold, and that is the last the dealer has to do with it. This order can easily be traced. If any one is to blame it is the railroad company. The roads weigh every car-load carefully and should be held responsible for its safe delivery, whether due to leaky cars or other cause.
Mr. N. C. Simons isenthusiastic in his praises of the new Mosely \& Motley mill at Rochester, N.Y. Allis \&CO. of Milwaukee furnished the machinery. It is conceded by every one on 'change that Mr. Simons knows a good thing when he sees it.
There was no little astonishment expressed after the vote at the last election of the Merchants' Exchange was count d. Not a grain man was in it. A ticket was sprung on the voters at the opening of the ballot-box, and so careully was it worked that quite a heavy vote was cast before it was discovered. The discovery however made but little difference as the "outside element" were determined to try their hand at running the institution just once, without the aid of the grain men. The boys felt a little sore but blew themselves out in a day or two, just as they did over "Grain merchants' " letter.
Stephen F. Sherman arrived in Buffalo ten days ago, and immediately made his way to the court-house where his case had again been called. The judge sentenced him to five years at Auburn, but this did not ruffle Steve's always placid countenance, for it was understood that his counsel would at once appeal the case to the general term. His counsel, by the way, is a son of that old war-horse, N. C. Simons, possessing all of his sire's staying qualities, buta much larger proportion of fight. He says that it will be a long time before they get his client behind the bars. With half a show he would have cleared Steve's skirts of the charges against him at the first trial. Sherman is reported occupying a bookkeeper's chair in a large cement works in New York. He was employed in the same capacity when a poor boy by Clint. Newman, and if he shows half the business ability he did then, that cement works will change its firm name in less than six months. Brother Will, who is considered the real culprit, is a small iron-monger on one of the side streets of Toronto, and, it is reported has a large Bible class in one of the most popular churches there.
M. J. Ayers is about to build a feed mill at Canisteo.
The amount of flour in store here brought down by lake last fall is quite heavy, and a few agents claim the bulk of it will remain here until near the opening of navigation.
A suit will probably be brought against certain railroads here for delay in trans-shipment of flour. An eastern dealer bought $3,000 \mathrm{bbls}$, of flour last November of the Galaxy mill in Minne-
shipped by lake, but all trace of the flour Whitney's Point, near Binghamton has been lost since then as far as the shipper knows. The buyer refuses to order the rest of his purchase shipped
on until there is some settlement concerning the first lot.
Allen \& Co.'s bucket shop failed last month. Allen made about half a mil-
lion on the bear side of stocks, and when lion on the bear side of stocks, and when
the market advanced he was caught for fully that amount. The firm had 90 correspondents and employed 20 operators, besides 8 clerks in the office here. The suckers were principally in Canada, although Rochester and other small towns
lost heavily. Allen is running again, lost heavily. Allen is running again,
but not on so large a scale as before the break.
Mr. John Esser of the Banner Milling Company, has again been elected president of the
The supply of Duluth wheat in store here is 785,000 bushels against $2,100,000$ last year. Of this amount not over 150 ,000 will come on the market, and the bulk is held for millenium prices-about
120 or 125 . The 120 or 125 . The only millers having sufficient wheat on hand to last until the opening of navigation are George Urban jr. and Thornton \& Chester. The last lot of 30,000 bushels No. 2 Chicago taken by a local miller to help out his scant supply of Duluth. This wheat was offered at 95 cents a month ago, and gradually sold up to $104 \frac{1}{2}$. Just how
the Buffalo millers are going to get out the Buffalo millers are going to get out
of this serious dilemma seems to bother the hard wheat dealers more than it does the millers themselves however. They may possibly have an eye on wheat in store in Chicago or other points, as was the case in 1889 when the famous 600,000 -bushel sale was made to Schoell-
kopff \& Matthews. In either case I think they will be compelled to lick salt from the hands of owners of wheat long before they can get fresh supplies from the North-west.
The receipts of wheat from Minneapo lis by rail are light and millers do not take kindly to it on account of quality. A large proportion grades 2 Northern, and poor stuff it is too, while that grading No. 1 Northern is only fair as a rule.
Besides it costs nearly as much as our choice Duluth Northern to lay it down here at present.

Messrs. Urban and James were in Chicago lately to attend the meeting of National Association and while there made an attempt to get the Chicago quotations for the Exchange. If Mr. Mr. Urban's stalwart form and bright cheery-cherubic face, could make no those Chicago governors the case is surely beyond all human skill. The trustees thought so at their last meeting and voted the unsuccessful gentlemen the thanks of the board, individually and collectively.
The ship canal committee held its final meeting in Pittsburg, February 3. The route recommended as the most feasible coming south takes in Jamestown, Sharpsville, Sharon, West Middlesex, Pulaski and strikes the Ohio river
at Rochester, 30 miles west of Pittsburg at Rochester, 30 miles west of Pittsburg. The cost is estimated at $\$ 25,000,000$. There are no great engineering difficulties to surmount and it is thought the work could be done in five years.
The Reist mill at Hamburg, Erie Co. took fire a few days ago and was damaged to the extent of $\$ 6,000$. It is thought a hot journal was the cause. Fully insured. H. D. Smith's mill at ptrike in their travels. Now, the truth
were burned. Loss, $\$ 5,000$; partly inred.
Mr. F. J. Nichols, of Mt. Morris, has purchased the mill of F. Murphy at Portage for $\$ 8,000$ and other considera-
tion. The mill will be put in modern tion.
style.
Mr. F. J. Henry made an extended eastern trip, returning Feb. 1. Judging from the manner he is hustling around have bad weather the journey must good results both in a business way and in the direction of health, as he never looked more blooming than at

Mr. H. J. Harvey has the sym pathy of his friends in the loss of his mother
. J. Wight has been in New York for the past month looking after his interests there. No business is being done through the firm's name, but manager Newell is taking a trade or two on his own account, and the boys are satisfied with the tips given of late through Farnum. A dissolution of the firm is advertised.
The work of building the docks for the Duluth Imperial Mill Co. will b commenced in a week or two.
No secretary of the Merchants' Ex change has been appointed yet, although it is necessary to attend to this matter before the board of trustees can really
call itself organized. This has led to adjourned meetings for a month past. The trouble is in getting rid of one man out of the two proposed for assistant Meadows and Gibson-are in favor of Miller, who has taken care of the ooks of the inspection department for years, while another crowd is urging bureau. The old stand-by, Thurstone, who has rather a soft snap, will hold on to his office, I hear, and also his clerk. It seems foolish to pay about $\$ 7,000$ for services which could be procured for half that amount.
The only action of the trustees worthy of mention was the re-appointment of Mr. Conway W. Ball, chief inspector.
This meets the approval of This meets the approval of every rewould look for years and not find his equal for honesty and ability. I filling this position Mr. Ball must contend with all kinds of people, and how he keeps his temper with the complaints from all sides is beyond comprehension. With all this not a kicker among the Fault-finding is second nature in grain men; they cannot help it, and Mr. Ball has lived among them so long that he understands their nature better than hey do themselves.
Litchard's mill at East Rushford is Rate-cutting Reasoner of Lockport. Rate-cutting by railroads is being
gitated again. The matter would be agitated again. The matter would be
one for the transportation committee to ake up-but they wont, "dont'cher now.
The car service association has re fused to extend the time for unloading cars beyond 48 hours. Now, cannot the Merchants' Exchange force the rail解s to load stuff from elevators with the same promptness they demand in unloading. But perhaps the exchange would not like to stir this matter any more than they do cutting rates.
According to some millers the flour market here is dull and it is just these few millers that reporters and corres-
of the matter is flour is not dull, neither is the trade lively, but there is enough doing to keep the miller's hands out of his pockets. A good city and a fair outside demand about hits the condition here. Prices are irregular, but there is no great anxiety to sell flou ahead, in fact orders are daily refused millers generally having sold all the future they think safe. Patent spring was offered at $\$ 5.35 @ 5.50$ and straigh inter \$4.65@4.85 in car load lots. Millfeed continues strong at $\$ 21.50 @$ 22.00 for coarse winter bran and $\$ 21.00$ @ 21.50 for spring.
With the exception of a few days spent on repairs all the mills have been running for some weeks past.
The cooper shop idea has evidently dropped through. The gentlemen in whose hands the arrangments were, did not wish to spare the time to hunt up an available site for cooper shop although they were the very ones, with the exception of Mr. George Urban, t agitate the scheme.
As I said in my last, if Mr. Urba took the erection of that cooper shop under his charge the men
work making barrels now.
No. 1 hard Duluth sold at 116, No. 1 nothern 114, No. 2 northern 100@111 To buy or not, to buy will be an important question before the trustees of the Merchants Exchange in the near future. Only $\$ 10,000$ worth of stock is needed to get control of the board of rade building and some of our leading business men are urging the exchange to take hold now when the stock can be bought at only a fair premium.
Urban's calender is out but I fail to ee that it is really an improvement in an artistic sense from that of last year. There is no doubt regarding its cost being considerably above the last.
Mr. George H. Walcott has returned from a three weeks visit to Chicago and other western cities. Although defeated at the last election, as were all grain men on the regular tickets, his good nature would not allow him to shed tears as was the case with one or two
others. In fact he was inclined to regard it as a great blessing inasmuch as it eleased him from unpleasant duties and as a rule unfavorable criticism.
Mr. Thomas Thornton of the firm of Thornton\&Chester is in bed again from another stroke of paralysis, but is ex pected out in a few days.
A. J. Wright is sick in New York.

The Niagara Falls tunnel will be ex ended to Buffalo in time. A bill in creasing the powers of the company has been introduced in the assembly. Th capital stock of the company is fixed a $10,000,000$.
Mr. G. W. Derrick, manager of the Ovens Bakery in this city has been elected one of the directors of the Cracker Trust, at the meeting held this week in Richmond, Ind. Buffalo, February 14
Buffalo, Feb. 14, 1891.
Buffalo.

## OUR ST. LOUIS LETTER.

## Kansas for millers-Death of E. GoddardLegal matters-Wheat -Wheat

1ITH the convening of the Missouri legislature many to of more or less interest to the miller have been brought up, but they have been so thoroughly be made of them that but a mention need be made of them here. A bill providing for so that the farmer may have the state, wherein to store his grain have some place ciple bills and is meeting with the principle bills and is meeting with no little Hon, F, M, B, A. Granger element. icensing and regulating of public mills.

This bill goes on to tell how a mill should be operated and is replete with good ideas and valuable suggestions, which, of course, will be received with thanks by the whole milling community of Missouri.
Another bill is one changing the present weights of 48 lbs . and 24 lbs . for half and quarter barrels to 49 lbs . and $24 \frac{\mathrm{l}}{\mathrm{l}} \mathrm{lbs}$. This change, if adopted, will have a decidedly injurious effect on Missouri-Texas trade and Kansas-Missouri trade. In the latter case the Kansas miller must pack his flour for Missouri at 49 lbs . and $24 \frac{1}{} \mathrm{lbs}$., where he packs it at 48 lbs . and 24 lbs . for Texas and Arkansas business, while Missouri millers will be obliged to place a 49 lbs . and $24 \frac{\mathrm{l}}{\mathrm{l}} \mathrm{lbs}$. packing in competition with Texas 48 lbs . and
24 lbs . St. Louis millers 24 lbs. St. Louis millers held a meeting the matter, decide on what action to take in the F. M. B. A. eleme to the conclusion to let the F. M. B. A. element alone, since the bill, if passed, would ultimately effect them and On wheat market
On Monday, Feb. 2, Elbridge Goddard, one of the oldest of St. Louis millers, breathed
his last. Mr. Goddard was 72 years had been thirty-six years in 72 years old and ness in St. Louis. At a in the milling busi Louis millers the following was un or the approved:
"The millers of St. Louis deeply regret the death of their friend and brother miller, Eliriage Goddard, the oldest, both in year city, if not in the United Stathers in this man of not in the United States. He was a and not sterling integrity, of decided views plainly and emphatically miller" in every sense of the phres most and unselsfih in forwarding the, inter ests of our industry; a good citigen; ant itable man, without publicity. His char not only our loss, but a loss of the Merse Exchange and to St. Louis of which he been a citizen since 1855. Our sympathies go out to his family and his friends.'
And still the fight goes on about Kansas and her wheat grading or, to speak more correctly about O'Shea and his grading. It has been noticeable for some time that St. Louis' receipts of Kansas hard wheat has been growing (beautifully) less every day, while on the other hand Kansas No. 2 red wheat was coming in quantities far greater than usual and that this quantity was daily increasing. As Kansas reports show that large shipments of No. 2 hard are being made and but little of No. 2 red, the only way in which the matter can be explained is that Mr. O'Shea, chief inspector, and his inspect ing corps have seen fit to look with favor on Kansas No. 2 hard and to grade it No. 2 red Of course the difference in price and the dis satisfaction of the St. Louis buyers is not to be taken into account when the ability of Mr $O$ 'Shea and his grain inspectors is ques tioned. That they have some excuse for their action must be admitted, as lately a mixture of No. 2 red and No. 2 hard wheat has been coming into St. Louis. This, O'Shea grades as No. 2 red. This manner of inspection has been going on for some time in spite of vigor ous protests from the St. Louis millers, Last week matters came to a crisis and a big lot of wheat graded No: 2 red was refused by prominent miller, although the elevator com panies claimed it to have been graded No. 2 red. It is to be hoped that this course once aken will be continued, when a proper grading may be had. This question is also being agitated among the farmer element to show how, if the present grading is continued Missouri wheat must depreciate in value It is hoped by these means to get the wheat growers to influence their representatives in the legislature to take proper action in the matter.
In connection with this I might mantion that a bill is at present before the legislature making the position of Chief Grain Inspector for Missouri an elective one. It is argued that in this way all favoritism will be done away with. If passed it will lengthen Mr. O'Shea's present term, and as the present Board of Commissioners are not for Mr. O'Shea, thatgentleman hopes itwill be passed. The case in the U.S. Circuit Court of the Crown Mills Co. vs. Camp Spring Mills Co.,
has been decided in favor of the former. has been decided in favor of the former. The
case was one in which the Crown Mills Co case was one in which the Crown Mills Co.
petitioned for an injunction restraining the petitioned for an injunction restraining the
Camp Mills Spring Co. from using a "Crown" Camp Mills Spring Co. from using a "Crown", label similar to that used by the Crown Mills
The Enterprise Mills, of St. Jacob, Ill., have started up, the recent improvements having been finished.
The Exchange hall will be closed Saturday
owing to the funeral of General Sherman. Wheat.
for last w
Wheat receipts for last week amounted to 166,690 bu., as against 162,690 bu. the week from the home or southern mills and but little trading was indulged in. On Saturday last, (Feb. 14,) No. 2 red was selling at 96 @

## few cars were bought by city mills at above prices.

flour.
Flour receipts for the past week amounted to 23,579 bbls., as against 21,587 the week 60,450 bbls. and 52,620 . The out-put were: city mills amounted to 55,100 bbls. The market has much improved over that of the past few weeks, and a fair demand from the south and south-east, supplemented by a light inquiry from the east gave the St. Louis mills a nice business. But little export trading was done, and only about 20,000 sacks were shipped to British markets. Quotations on St. family $\$ 3.10 @ 3.25$; choice $\$ 3.40 \quad 3.60$; fancy \$3.95@4.10; extra fancy 4.35(a4.45; patents \$465@4.80. Walter Howard Bain. St. Louis, Feb. 18, 1891.

## MILWAUKEE REVIEW.

THE Breadstuffs markets here remain quiet and steady. On Saturday, the 14th inst., wheat opened at 93 cents for May, sold at 923 , and then up to $92 \frac{3}{4}$. Cable were rather better, but the receipts at primaries were larger, and the exports
light. The weather continues favorable for farmers' deliveries, and there are no reports of damage to winter wheat. The markets tend to lower prices unless some change in the weather occurs.
Receivers report only a moderate de mand from millers. The stock of wheat on hand, Feb. 14, was estimated at 563 , 079 bushels against 915,616 bushels the corresponding day last year
The following table shows the closing prices of wheat and coarse grains, on 'change Feb. 14, as compared with 1890

|  | $\begin{gathered} \text { Feb. } 14 . \\ 1891 . \end{gathered}$ |
| :---: | :---: |
| No. 1 N wheat ot. |  |
| No. 2 S wheat ot. | . . $93 \frac{1}{2}$ |
| No. 2 S wheat i s ... | . .928 |
| No. 2 barley is ... | .661 |
| No. 1 rye is .. .. | .80랄 |
| No. 2 corn ot. .. | . 50 |
| No. 2 white oats ot | . . 45 年 |

principally on the construction of
the Revised Statutes, providing that corporation shall continue to exist fo three years after dissolution for the pur pose of maintaining suits.

A suir for infringement of trade-mark has been commenced by the Duluth Imperial Mill Co. of Duluth, Minn. against Faist, Kraus \& Co., of the Du luth Roller Mill, in this city.
The Census bureau's bulletin on lake raffic, issued Feb. 16, puts Milwaukee's tonnage receipts for the season of 1889 at $1,584,254$ and shipments at 351,554 This is sixth in the list of 107 ports on all the lakes. The source from which these statistics have been obtained are reports from the customs officers of receipts and shipments; from leading shippers at ports having no customs office and from the important trans portation lines operating on the great lakes. Covering that portion of the traffic not included in port manifests the reports of boards of trade in the important cities have been made use of to obtained. Milwaukee shows up well in the shipment of mill products, her tonnage in this class being 289,184 , or 32 per cent of the whole traffic in mill stuffs on the lakes. Chicago follow with 25 per cent and Duluth is third with 11 per cent.

NEWS.-The millers and flour dealers of central Kansas have petitioned the interstate commission
for lower freight rates to eastern and gulf seaboards. They claim that they are being discriminated against by the railroads, which favor eastern millers and those in the eastern part of their own State, by making a lower rate on wheat than on flour. They claim to have a hundred cars of flour ready to export if they can get a fair freight.
Near Metamora, O., Jan 25, Stevens' Rollor Mills burned. Loss $\$ 13,010$.
The J. B. Alffree Mfg. Co. succeeds The . B. Allfree Co., of Indianapolis, Ind
W. D. Straw, miller at Sellersburgh Clark ., Ind., drowned himself January 28 .
Schlaefer, Huebner \& Co.. of Menomo-
nee Falls, Wis, will build a new flournall nee Falls, Wis,, will build a new flouring mill. mill was burned. Loss $\$ 4,000$; insurance pa tial.
AT Valley Mills,'Tex.,Jan. 24, Egloff Bros.
mill was burned $\$ 15,000$.
\$15,
THE Nicholas Krauss Grain Co.. of Chilton, Wis., was incorporated Jan. 28. Capital stock
$\$ 100,000$. $\$ 100,000$.
arbuckle, Ryan \& Co., of Defiance. o., Mave incorporated under the style of the Erie Millin
At Adrian, Mich., January 20 , the flouring mill of Marsh Bros. was burned. Loss, 812 ,000; insurance, 87,000
At Buffalo, N. Y., Jan. 21, the flouring mills of Daniel C. Bastian were damaged $\$ 3,000$ by fire; insured.
Young, McElroy \& White succeed Graff, Young \& McElroy in the flour milling business at Utica, N. Y.
At Adrian, Mich, Jan. 14, the flour mill of Marsh Bros. was burned. L
insurance aggregates $\$ 7,500$.
A letter from Ripon, Wi
A Letter from Ripon, Wis., dated Feb. 10 ning light for that reason." wheat and run
ing "ight for
The Staples new flouring mill at Stillwater, Minn., is in complete working order, and has a capacity of 150 barrels per day
The flour mill at Melrose, Minn., heretofore owned by Edwin Clark, is now oper
by the Clark Milling Co., incorporated.
W. T. Conn \& Co, have recently purch the flour mills of E. D. Treanor at Milledge ville, Ga., and will improve and operate same
At Billerica, Mass., Jan. 18, the grain ele vator and mill of C. A. Holt \& Co. were burned. Loss about $\$ 5,000$; covered by insurance. Wm. Plewes' flour mill, at London, Ont. Wm. Plewes' flour mill, at London, Ont.,
which was burned Jan. 16, was insured for $\$ 3,000$ in Millers' Mutual and for $\$ 3,000$ in the Citizen's.

AT Watson, Ill., Jan. 31, the grist mill and stave factory owned by Henderson \& Reynolds were burned. All the machinery was

Mills caught fire, Find Jan.21, the old Broo taining the machinery, was burned out. Los 1,500; insurance $\$ 1,100$.
Ar Dannebrog, Neb., January 17, the elevator owned by G. B. Salter was burned. ance is $\$ 2,200$, but does not cover the loss.
AT a recent meeting of citizens of Bancroft, in shares, to aid any party that might be induced to build and managea grist mill at that place.
AT West Fairfield, Pa., Jan. 15, J. J. Kepof flour and grain were burned a large stock the fire was the work of an incendiary. Total loss, $\$ 40,000$.
Near Sparta; Wis., Jan. 22, a grist mil owned by Manual Roherts, was burned. The
property was under mortgage of $\$ 3,000$, and was to be sold at Sheriff's sale at LaCross the following day
At Hamburg, N. Y., Jan. 21, the Hamburg steam flour mills, owned by Long \& Reist were partially detroyed by fire. Loss, $\$ 4,000$
to $\$ 6,000$; insurance on building, $\$ 10,000 ;$ no insurance on stock.
At Baltimore, Md., Jan. 16, the feed and commission house of Snyder Bros. was dam-
aged by fire. Insured for $\$ 2,000$ in Germania aged by fire. Insured for $\$ 2,000$ in Germania
of New York on building, and for $\$ 2,700$ in Baltimore Fire on contents.
According to official reports, the United
States collects an tates collects an amount equal to $\$ 639$ and spends $\$ 461$ each minute, night and day.
The interest on the public debt amounted The interest on the public debt amounted to sum equal to $\$ 96$ a minute.
Near Camden, S. C., Feb. 1, the wheat and grist mill on Sanders Creek, belonging to James H. Vaughn was burned. Loss $\$ 4,500$. to have been the work of an incendiary
The work on the Niagara Falls millin tunnel, which has gone very slow till now, has taken a much more rapid pace. No. 1 shaft shaft similar to these has been begun.
Zech Bros., millers at Chilton, Wis.
consolidated with the mercantile firm of Knauf, Jackson \& Berger, making a stock malt house with a capacity of 200,000 bushect a
AFTER three years experimenting, paper barrels are now being made by an English firm which compete successfully with those
made of wood. Waste-paper, card-board and old sacks are the raw materials for their manufacture.
The Alliance Elevator \& Milling Co., of Sherburne, Minn., has filed articles of incorporation. The officers are C. E. Everett, pres-
ident! H. H. McGovern, vice president; W. F. Brundage, secretary; and Peter Oleson

The first flour mill in California is stated of that year flour was 1852 . During the fall a barrel. Wheat then made and sold at $\$ 40$ pound. Many millers long for a return of these good prices.
A FIRM of millers at Mooresville, Ind., reof Weought $16,000 \mathrm{bu}$. of wheat in the State impossible to , for milling purposes, it being to fill orders. It required a train of 27 cars to ransport the grain.
In New York city on the morning of January 14, E. M. Van Tassel \& Co's grain elevator, corner Eleventh street and Third ave insurance, $\$ 70,000$. The fire is at atrisuted to spontaneous combustion.
Aт Mazeppa, Minn., January 22, the oat meal mill and elevator belonging to E. M on buildings, 860,000 , were burnea. Los grain belonging to the H. J. O Neil Grain Co of Winona was also destroyed.

IT may be interesting to the readers of the knows items relating to the "Cracker War" to | ligerents are: The American Biscuit Co., |
| :--- | $\$ 19,000,000$; United States Biscuit Co., $\$ 5,000$, 000 ; New York Biscuit Co., $\$ 5,000,000$.

Bros. Burnham, of the firm of Burnham Bros., York, Pa., died Jan. 22, He was the the "New Improved Stater-wheel known as the result of his that class of his experience of 35 years with hat class of mechanical contrivances.
Brennan \& Colgan's cooperage shops at Brooklyn, N.Y., were damaged by fire on the morning of Feb. 4. The fire originated in the
Hecla Iron Works situated on the side of the street, and sparks therefrom set fire to the cooperage. Loss from $\$ 25,000$ to $\$ 30,000$.
One of the flour barges owned by the Staten Island Milling Co., of Mariner's Harbor, N.Y sank at Pier 14, East River, Tuesday morning Feb. 10. She was loaded with 800 barrels of flour, destined for Pernambuco, by the Clyde

Line. The loss on the flour is about $\$ 3,000$;
insurance unknown asurance unknown
January 31, the Hydraulic flour mills at
Connersville, Ind., was closed by on an attachment suit by thed by the sheriff Bank for $\$ 11,800$. The the First National Wank for $\$ 11,800$. The proprietors, B. P. milling business at Connersvill The liabilities am Connersvile for 20 years. \$18,000.
W. P. Ingle, proprietor of the Beloit (Wis.) roller mill, lost a horse valued at $\$ 300$ by an unusual accident, on the night of Jan. 23. The horse broke out of a box stall and deep well gave way, letting the floor over a the hole, hind quarters first the animal into dead next morning
ders first. It was found
dind oxt morning.
AT Waseca, Minn., Feb. 1, the Waseca roller mill, owned by Everett Aughenbaugh \&
Co., burned. There was no one in the mill co., burned. There was no one in the mill til the watchman returned and it was not unip. m., that the returned from dinner, about p. m., that the flames were discovered. The building was totally destroyed, involving a loss of $\$ 30,000$, about half insured. Stock Lut R as valued at $\$ 20,000$, fully insured. Lute R. Smith, second miller in a flouring mill at Columbus, Wis., narrowly escaped a horrible death recently. He was engaged in oiling some machinery when his jacket caught in a large gearing. Smith braced his feet and catching hold of a post, hung on for dear life. Gradually the jacket was drawn into the gearing and the head of the wearer was only then ar
AT St. Louis, Jan. 31, the American Biscuit Company filed a mortgage amounting to $\$ 545$,000 , on all its property in the western States, making the Jenness Trust Co. of Chicago, trustees. The deed of trust is to secure the payment of the bonds issued to pay for the real estate on which the factories in St. Louis, Wichita, St. Joseph, Mo., Kansas City and differenare located. The agreement with the different parties from whom the pieces of real estate were purchased, provided that payment therefor should be made in bonds payable in 1901. The deed of trust covers nothing but that real estate, and has nothing whatver to do with the New York factory which as just been completed. Means to purchase and equip that factory was provided in anoth-

## THE RUSSIAN MILLERS' MEETING

AMOST interesting re. proceedings at a meeting of South Russian millers, held last September, was published by the Novosti. The attendance was light but the milling trade of South Russia was fairly represented. The proceedings had an official character, certain questions being formally submitted by the government, which is very anxious o promote the wellfare of the milling trade. The first question was, "Are the conditions of South Russia favorable o the manufacture of flour for export?" while the second was thus worded: "Can South Russian flour compete with foreign flour in foreign markets?" To both of these queries an affirmative answer was returned. Thirdly it was asked, "To what countries isSouth Russia flour now exported, and what other markets might be won or it?" The reply was that at present South Russian flours, especially the finer grades, go to France, Egypt, Italy, Turkey and Great Britain. In the latter country, it was added, the middle grades find a ready market under the marks $1,2,3$ and 4 , the Russian middle grades bring of better quality than similar foreign grades. As future markets, Spain and Brazil, were indicated as worthy of attention. The fourth question, "Does the flour manufactured in South Russia meet the requirements of foreign consumers, and what means can be taken to make Russian millers acquainted with the demands of oreign countries?" brought forth the reply that care must be taken to deliver the grades of flour as equal in quality as possible, and under distinctive trade marks. With, regard to the second part of the query, the congress thought it would be desirable to establish information bureaus to keep the milling trade
posted as to foreign markets. To the fifth question, "What wheats give the best flour, and is it not a fact that there is a dearth of such wheats as produce good flours" it was answered that "Ghirka" summer wheat and red winter wheat yield the best flour; but it was added that these wheats would not always produce a superior flour, as the quality of that article was entirely dependent on the harvest and the soil on which the grain was grown.

A paper on the state of milling in South Russia was read by Mr. Borinowic. He remarked that as Odessa is the emporium of South Russia, and as the flour export trade is no exception to this rule, the statistics carefully collected in Odessa may be taken as applicable to almost the whole of the South of Russia. With respect to the export of flour, the figures collected by the custom house of Odessa show that there were shipped thence in 1884, 1,513,070 pouds; in 1885, 2,957,515 pouds; in 1886, 2,122,811 pouds; in 1887, 2,013,688 pouds; in 1888, 1,853,600 pouds; and in 1889, $1,662,188$ pouds (a poud is equal to 36 pounds.)

In the export of flour, Odessa holds the first place among Russian markets, for whereas the shipments from other Russian ports are far from reaching $1,000,000$ pouds, Odessa ships from $1,500,000$ to $2,000,000$ pouds. In the period from 1885 to 1889 the total amount of flour exported from Russia was $3,705,000$ pouds, the share of Odessa being $2,098,223$ pouds. Taking the decennial period of 1870-1879, the flour shipments from Odessa were in the proportion of one-sixth of the grain shipments, but in the decennial period of 1880-1889 this proportion shrunk to one-eighth. So far as flour exports were concerned Odessa was a long way behind North America, where in 1884 the flour shipments were one-fourth of the grain shipments. In Hungary the proportion stood at 18 per cent; in
Austria at 30 per cent. Koenigsberg and Dantzic ship nearly one-eighth of their total grain exports in the shape of flour, which for the most part is ground from Russian grain. A portion of the flour shipped from Odessa is brought from the country. During the last four years more than 850,000 pouds of wheat-flour, and about 110,000 pouds of rye-flour have been brought to Odessa by rail, of which the largest part, about 50 per cent, came from the district of Elisabethgrad, from the Birsula station. The manufacture of flour in Odessa has fallen off as the arrivals from the country have increased, which is easy to understand, as the country mills work under more favorable conditions. Only 381,000 pouds of flour were brought to Odessa by coasting vessels in 1889 , whence it will be evident that the carriage of flour by the waterways is comparatively insignificant. The shipments of flour from Odessa in 1888 to Great Britain were 220,000 pouds; to Turkey $1,075,000$ pouds ; to Egypt 310,000 pouds; and to Italy 7,500 pouds. The market in Italy for Russian flour has contracted year by year. The shipments to Turkey diminished in a single year by one-half, but on the other hand the exports to England in three years have almost quadrupled. The difficulty in the way of exporters lay in the heavy freightage, and above
all in the high foreign tariffs on imall in the high foreign tariffs on imported flour.
Then there were charges to be borne by flour shipped abroad. These consisted of-
(a) Brokerage charges.
(b) Costs of working from the rails on board the ship.
(c) The shortage which occurs in the rail transit from leakage due to the heedless manner in which the flour sacks are handled by the railway porters. A truck ful of flour has usually a freight of 609 pouds. According to the regulations the shortage allowed on each car is 1 per cent. But that figure was a great deal too high, and as a rule the loss through accidental leakage of flour was much less. The legal shortage on each truck load is at present, in round numbers, a sack of flour of 6 pouds ( 216 lbs .) and to make up the weight which the law allows, a sack of flour is usually stolen out of the truck.
(d) A full truck of coals takes 609 pouds; by the time the coal reaches its destination another shortage, amounting to 19 to 20 pouds, has to be booked. This shortage makes coal dearer, and that in turn increases the cost of flour manufacture. Lastly,
(e) The manufacture of flour is rendered dearer by means of the duty levied on flour sacks imported into Russia. This duty surcharges each poud of flour by 1 to 2 copecks.
It was resolved to petition the Government to direct that the shippers shall receive from the custom house an attestation respecting the number of sacks of flour sent by them abroad, and that this document shall afterwards sacks into Russia; further, that the export of flour and coals should be placed under more stringent regulations, so that the shipper be held responsible not only for the full weight of the trucks he has despatched, but also With a view to cheapening the railway carriage of flour, the directors of the South-Western line are requested to erect flour and grain warehouses at
their stations, in the same way as has been done with good results by the Warsaw-Bromberg Railway. Flour could be stored in these warehouses,
while the company might advance upon it to the amount of 50 per cent of its value. The charge for storing flour in these warehouses should be 6 roubles per truck for the first month, and 3 It was proposed that in the interests of the milling trade the following reforms should be asked of the Govern-ment:-

All foreign milling machinery and apparatus to be admitted duty free. All sacks used to export flour, bran or other mill products from Russia to be freed on return from the import duty, whether of Russian make or

Foreign coals to be likewise free of duty, if destined for use in flour mills.
4. Credit in the case of millers to be reduced to a minimum.
5. With a view to training competent millers, technical training to be pread as widely as possible.
Among other petitions to be laid before the authorities was one in favor of permitting all foreign sacks to enter free of duty; one regarding the rebates
allowed to flour exporters by the railway companies, which rebates should, it was urged, be 25 per cent, instead of 10 per cent; and a request for the establishment in all large ports of exporting offices, which should transact all business connected with the shipping of flour, and by doing away with brokers, free millers of the charges of those middlemen. Finally, a lowering of into ruin.

## tRADE NOTES.

Branching OUt. - The Wadhams Oil and Grease Co. of Milwaukee, Wis., whose advertisement appears on first page of this journal, has opened a branch establishment at 915 West St., Seattle, Wash. The Western branch is in charge of Mr. Eugene C. Kirby, vice-president of the company, who is an old oil man and he will undoubtedly make many new friends and customers for the company in his territory. A complete stock of lubricating goods will be carried at the branch store and all orders from the Pacific coast will be filled from that point.
Citizens Light and Fuel Co., Oconto, Wis.; Diamond Match Co., Oshkosh, Wis.; W. H. Warren, Chicago, IIl.; W. H. Rice, Clintonville, Wis.; Mexico E. L. H. and P. Co., Mexico, Mo., and M. B. M. Peacock, Markesan, Wis., have placed their orders with the Menasha Wood-Split Pulley Co., of Menasha,Wis., for hickory pulleys and hangers, cone pulleys, clutch pulleys and pickers.
The following letters received by The Jonathan Mills Mfg. Co. are self explanatory:

Indianapolis, Ind., Feb. 5, '91. Jonathan Mills Mfg. Co., Columbus, Ohio.
Dear Sirs:-The writer arrived home a few days ago and found our Mr. Paine so enthusiastic over the Purifiers that he cannot rest night or day until he gets the rest of them. Thinks he will want six more. So please send them want six more. So please set us them
along as soon as possible. Let us how soon we can expect them.

Yours Very Truly,
Acme Milling Co.,
By S. F. Robinson, Pres.
Magnolia, O., Dec. 15, '90.
Messrs. Jonathan Mills Mfg. Co.,
Columbus, Ohio. Columbus, Ohio.
Gents:-Enclosed please find my draft on First National Bank for \$... for payment of your bill of Nov. 14. We are using the Purifier on our fine middlings and it is doing excellent work. Will not make any more changes before spring. Will want two more of your Purifiers then. Yours, etc.,

> A. R. Eison.

## Alliance, Neb., Dec. 9, '90.

The Jonathan Mills Mfg. Co., Columbus, 0 .
Gentlemen:-Enclosed please find draft for \$.... to pay for "Air Belt Purifier" and pulley as per your invoice of Oct. 20. Please acknowledge receipt. The machine is doing excellent work. Yours Truly,
Alliance Milling Co.,
Per H. C. Draver
At a Council meeting of the National Association of British and Irish Millers, held in London, England, on January 21, the chairman stated that the committeeappointed to consider how to increase the usefulness of the Association had not been idle; they had met that very morning and closely examined many suggested improvements. He might mention that amongst these proposals was the appointment of a standing analyst, and also the engagement of a milling expert, who should be ready to advise members respecting the value of any machine, but the committee were not prepared to lay their report on the table that day.

It was suggested that in place of an expert a committee of two or three mill ers should be elected to examine and report on any new machinery which might be brought into the market. There was no question as to the large sums of money which millers threw away year after year in buying machinery that looked well, but turned out quite useless for the purpose required. I' it were necessary, the committee might purchase and practically test machines, purchase and practically test machines,
for in that case the cost which on a single machine would be comparatively trifling would be distributed over their whole body and not felt at all.

## MILWAUKEE ITEMS.

The Merchants' Association of this city are considering the matter of erecting a building of their own.
The Cockle Separator Mfg. Co., of Milwaukee, Wis., has recent orders for Kurth Cockle Separators from Ed. Sitz, Peterson, Ia., A. M. Forest, Rochelle, Ill.; McDaniel \& Co., Franklin, Ind.; Cerea Milling Co., Chicago, Ill., (large 4-cylinder machine; D.J.Tew, Rush ford, Minn. and H. R. Heath, Fort Dodge, Ia., (2-cylinder machine.)

The Superlative Purifier Mfg. Co., of Milwaukee, Wis., has recent orders for New Era Scalpers from Deubel Bros., Ypsilanti, Mich.; Commercial Mill Co., Detroit, Mich., (second order); G.\&D.M. Green, Princeton, Wis.; Sioux Rapids Mill Co., Sioux Rapids, Ia.; F. M. Mooney, Steubenbille, O.; Walsh-De Roo Milling Co., Holland, Mich.; J. \& O. C. Jenkins, New Philadelphia, O.; Spencer Milling Co., Spencer, O.; J. H. \& J. T. Johnson, Centralia, Ill.; Kellogg \& Buck Morenci, Mich.; City Roller Mills, New Castle, Pa.; Minier Milling Co., Minier, IIl., Novelty Milling Co., Parkersburg, W. Va., (second order); Strauss, Elston \& Co., Marietta, O.; Farmland Milling Co., Farmland, Ind.; Thos. Moses, Shar on, Pa.; S. Bigler \& Co., Painesville, O. S. M. Stambaugh, Sharon, Pa.

The Edw. P. Allis Company has lately been awarded several large contracts for flour mill work among which is probably the largest and nost important flour mill contract ever let in this country. It calls for the complete reconstruction of the east side of the Washburn "A" mill at Minneapolis and increasing its capacity from 1,500 to 2,500 barrels. The Allis Co., is given carte blanche to produce the most perfect mill it knows how, and promises to make one second to none now existing. The contract involves the expenditure of about $\$ 125,000$. The work is being pushed with vigor and will be completed within the specified time which will be about May 1. The Edw. P. Allis Co. has also received the contract for enlarging and rebuilding the Zenith roller mills at Minneapolis, thereby increasing its capacity to about 1,500 barrels dailywhich will involve an expenditure of about $\$ 45,000$. Still another large contract awarded this firm is for building the new 1,000-barrel mill for the Model Roller Nill Co. of Nashville, Tenn. Their contracts for work on the Columbia Mill at Minneapolis, amounting to $\$ 75,000$, has been completed. The "Columbia" now ranks as a 2,000 -bar rel mill.

## OUR LEGAL DEPARTMENT.

Specially prepared for The United States Mille
and Milling Engineer, from the latest
False Pretense.-In order to constitute the offense of false pretense, there must be secured by such false pretense either money, wares, merchandise, goods or chattels, or other valuable thing, and the procuring by false pretense of a signature to an instrument which could not be enforced against the signer if he showed that it was obtained by false pretense, is not a valuable thing, and does not constitute the offense.-Robinson v. State, Supreme Court of New Jer sey, 20 At . Rep.
False Pretenses.-The charge of committing the offense of obtaining money or property under false pretenses cannot be maintained in any case unless it appears not only that a false pretense was in fact made, but also that it was
defrauding some person, and that such person was in fact cheated or defrauded to his or her injury. Whenever one
of two innocent persons must suffer loss of two innocent persons must suffer loss
on account of the wrongful acts of a third, he who enabled the third person to occasion a loss must be the person who shall suffer.-State v. Matthews, Supreme Court of Kansas, 25 Pac Rep. 36.
Acceptance of Risks of Employment. -An employe accepts the risk of all dangers incident to his employment which are apparent to him and of which he has notice, and one who works near and around a stairway built for the use of employes which is steep and narrow, without railing and with steps at irregular distances and which he has used, is chargeable with knowl edge of the defects, as they are plainly obvious, and he assumes the risks of injury in using the stairway arising from such defects.-Sweet v. Ohio Coal Co., Supreme Court of Wisconsin, 47 N. W:-Rep., 182.
Injury of Water-power by Improvements of Strean.-Where a city is authorized by the legislature to improve the channel of a stream by removing obstructions and altering the course where necessary, providing that any one injured in his property by any thing done in connection therewith should be entitled to compensation therefor, the owner of a mill located on the stream is entitled to damages, if, by reason of such alterations and improvements the flow of water is diminished during any part of the year, by reason of which he is injured in his business.-Boston Belt ing Co. v. City of Boston, Supreme Judi cial Court of Massachusetts, 25 N. E Rep. 613.
Termination of Contract of Employ-IENT.--Where a contract of employment is made which it is agreed shall be for one year if continued without cause of complaint, and was further agreed that it should not be terminated except upon notice of one month, the agreement that it might be terminated upon such noice must be taken in connection with the agreement regarding just cause for complaint, and without such cause the employment could not be terminated upon notice of one month, or any other notice.-Hannay v. Zerban, Common Pleas of New York, 11 N. Y. Supp. 577.
Shipment of Freight Prior to Time Agreed Upon.-Where freight is delivered to a railroad company for shipment, and for any reason a future time of shipment is agreed upon, the shipper has a right to rely upon the shipment of the goods at that time and not earlier, and where a railroad company refuses to ship freight until the charges are paid and agrees to hold them a specified length of time to give the shipper an opportunity to make payment, if they are shipped before that time and the shipper sustains any damages by reason of their premature shipment he may re cover such damages from the company A contract not toship until a certain time is just as binding as a contract to ship at a certain time, and for a breach of such a contract the company is liable as it would be for a delay in shipment.Campion v. Canadian Pacific Ry. Co., Circuit Court of the United States, North ern District of Illinois, 43 Fed. Rep. 775
Construction of Provision in Insurance Policy for Arbitration.-While a provision in a policy of fire insurance, providing that any dispute as to the amount of loss under the policy shall be settled by arbitration is valid, yet a
be maintained on the policy until after such arbitration, is void, as tending to oust the courts from their lawful jurisdiction. Individuals will not be permitted to contract away the jurisdiction of Courts.-Wright v.Susquehanna Mut Fire Insurance Co., Supreme Court of Pennsylvania, 20 At. Rep. 716.
Presentation of Note Executed by Agent.-Where the word agent is affixed to the signature of a promissory note it is merely descriptive of the person and not a limitation of liability, and in order to bind the endorsers of such a note it must be presented at maturity and the demand made upon the maker, and the presentation to his wife upon the averment that she was the principal for whom he acted as agent is not sufficient although she was in fact such principal. In order to bind the endorsers of a promissory note presentation must be made strictly to the maker. -Stinton v. Lee, Supreme Court of Mississippi, 8 South. Rep. 272.
Certification of Note by Mistake.
-Where a note has been erroneously certified by the teller of a bank, although the teller is negligent in certifying it, the bank which certified it may recover back the amount paid to the holder as for money had and received by mistake, if it appears that upon discovering the error, all possible diligence was used to discover the holder and correct the error. And it is immaterial that on previous occasions the paper of the same parties had been certified without reference to the state of their account, it appearing that in each prior case this was done by express authority of the officers. One who relies upon the certification of a paying teller does so upon his own peril that the teller acts within his au thority.-National Park Bank of New York v. Steele \& Johnson Mfg. Co., Supreme Court of New York, 11 N. Y. Supp. 538.
Rights of Accommodation Endorser.
-When a note is presented to a bank for discount and discount refused unless more strongly endorsed, the fact that it is subsequently presented for discount again, with the same names, and one in addition, is enough to give the bank notice that the additional endorser is an accommodation endorser and as such is entitled to the benefit of any collateral deposited by the maker as security for the payment of the note. -Riverside Bank v. Tolten, Supreme Court of New York, 11 N. Y. Supp 519.

## PANICS IN LONDON.

领层HE first great crisis in the commercial history of this country took place in the year 1696, just two years after the
establishment of the Bank of England. In consequence of a too libe ral latitude of credit on the part of the Bank, it was compelled to suspend the payment of its own notes, and but for prompt and extraordinary assistance af forded by the Government of the day, a crisis would have followed which must have involved the country in financial ruin.
In the year 1720 came the collapse o he historic "South Sea Bubble," the climax of a long series of preposterous speculations which ruined thousands of credulous investors. This panic was stupendous in its magnitude, and the nation reeled under the blow for seve

In the year 1746, when the Pretender
In the year 1746, when the Pretende further stipulation that no action shall there was an awful panic in the city.

Consols fell from 107 to 76 at a single jump, and other stocks and shares became practically unsalable. The Bank of England was saved from stoppage by a curious and clever stratagem. The Bank agents were entitled to be paid first, and when the great "run" upon the bank commenced they claimed their privilege. They demanded their money in sixpences, and then left by the front door to reappear at the bank. This involved great delay in dealing with the general body of credit and the breathing time thus gained saved the bank.

Another disastrous crisis began in the year 1793. A commercial house of high and honorable standing was compelled to stop payment because of the unwillingness or inability of the Bank of England to discount the firms bills. The alarm caused by this stoppage was widespread, and a general panic ensued. Over one hundred provincial banks were compelled to close their doors. Two years of bad harvests followed, and the Bank of England was armed with exceptional powers as to the issue of paper money to assist the country over its troubles.

The years 1807 and 1810 were memorable for city panics, followed by innumerable failures of commercial houses all over the country; but these were only preludes to the famous 'Waterloo" year, when no less than 240 provincial banks smashed
In 1825, as the result of extensive gambling in foreign loans - sixty millions sterling being absorbed another big crash came. Sixty-three country banks succumbed, and the Bank of England only escaped disaster by the timely loan of two millions from the Bank of France.

In 1836 the country was deluged by a tide of speculation flowing from New York. Two hundred and fifty firms in that city became bankrupt, and trade in England was completely paralyzed. In Manchester alone no less than 50,000 artisans were thrown out of work.
The year 1847 brought the historic "railway mania," with its dismal story of ruin to thousands of English homes. Credit virtually collapsed, and the Bank of England charter was only suspended by Parliament on condition that not more than 8 per cent should be charged for discounting bills of exchange. Only bills of the highest class were dealt in even at this high rate.
What was called at the time a "financial earthquake" occured in the year 1857. Over-speculation in American railways was the primary cause. Within two hours eighteen banks in New York stopped payment, and many Scotch bankers followed suit, with aggregate liabilities of six millions.
The year 1866 - the memorable "Black Friday" year-witnessed the sudden stoppage of eight London banks and discount houses. The Bank of England charter was again suspended, and Lombard-street was declared to be in a "state of siege."
It speaks well for the soundness and elasticity of the commercial life of England that is has not only survived all these rude shocks, but that it has thrived and prospered more abundantly than ever during the quarter of a century that has elapsed since the last gigantic "panic in the city."- City Press, London

All persons desiring to reach the entire milling and grain trade of America, by circular or otherwise, should obtain a copy of Cawker's American Flour Mill and Gbain Elevator Iirectory for 1890-91.

## hints to be heeded.

THE Western Manufacturers Mutual Insurance Company and the Factory Mutual Underwriters' Union have issued a circular which should receive the special consid eration of every manufacturing concern, and storekeepers and householders will do well to regard some of the many good hints embodied in the circular.
Special attention should be given at this season of the year to protecting fire apparatus against cold weather during the winter, and to ascertaining that all appliances are in order, and everything in its proper place, so as to be able to extinguish a fire, should one occur, with the smallest possible loss. As defective stoves, furnaces, stove and steam pipes, chimneys and other fues are the most proper attention at this season of $t$ year, when they are in constant use. winter all hydrants and valves should be carefully examined and oiled, preferably with heavy mineral oil, which will not corrode the brass. All hydrants and standpipes and all branch hydrants should be opened after the pipes are
emptied, to let out any entrapped water which may have leaked past the valve when the pipes were full, and care taken hat all the drip-valves are in good condition
The rotary pumps should be oiled, and if exposed to freezing turned backward to empty them of water. Pipes exposed to freezing should be emptied, and care taken to let the water out from above be marked with an arrow, showing the proper direction to open them
In all buildings equipped with automatic sprinklers, where it is impracticable to keep the buildings or rooms warm enough to prevent freezing, the system pipe system. It is very important that some reliableperson or persons should be put in charge of the fire apparatus, and the same, and that every part is in order, and they can be sure only by making a week. A fire organization among employes is essential to the handling he apparatus.
Buckets of water are the most effective fire apparatus, as any person can handle them. They should be kept full and
distributedinabundance throughthe various rooms or floors of nearly all risks other than dwellings. They may be placcumstances may require. Galvanized iron or indurated fiber pails are better than wood. They should be marked "For
fire only." Casks of water are generally needed to furnish a further supply to the fire pails. To prevent freezing, add chloride of magnesium or salt to the Stoves should be in order, and free from cracks, set firm on metal legs, and the floors underneath should be protect-
ed by zine or stone, or enclosed with scantling nailed together and filled with brick and mortar or cement. They should not stand nearer unprotected work nearer than three feet should be first covered with asbestos paper, and then covered with tin, or protected in some other equally safe manner. A good guard is made of gas pipe securely screwed to the floor, and should be placed about stoves where there is a liability of stock being placed against them in manufacturing establishments.

Ashes should always be placed
fire-proof receptacle when taken from stoves and furnaces.
Stove pipes should be thoroughly cleaned and all unsound lengths replaced by new ones. All stove-pipes should enter good brick chimneys and should enter the chimney horizontally with but one elbow. In all mills and factories where there is considerable vibration, or where dust is liable to accumulate, the horizontal pipe lengths should be carefully riveted together and an additional pipe placed outside, leaving at least one inch air-space between the inner and outer pipes, supported at requent intervals by wires, also well wired to hold it in the chimney. In all cases where pipes pass through wooden or lath and plastered partitions, there should be a double collar of metal, with from two to four inches air space, and holes for ventilation, or at least eight nches of masonry about it.
The chimneys should be examined carefully, especially where they pass through floors and roofs, as the settling of the building may cause cracks that would let sparks escape. A long-bladed case knife serves well as a probe for this

All pipe holes not in use should have close-fitting stoppers. There should be no woodwork of any kind framed into chimneys, and the entire surface of the trimmers and headers next to the flue should be entirely covered with tin or light sheet iron.
Where steam pipes pass through floors or partitions, the woodwork should be ut away from around the pipe at least wo inches, and covered with asbestos paper, and then covered with tin. Cut -shaped piece out of the tin where it and nail securely to the woodwork. The pipes should be supported by gas or steam pipes, earthen rings, or other equally safe material. Do not permit the pipes to come in contact with any

## milling ano mechanical notes.

An experiment with a lubricant
Mr.G.Bissellof Ithaca, N. Y-This experiment was undertaken for the purpose of determining the law governing the variation of the coefficient of friction of a lubricant, and the rate of feed of the same to the journal, all other con ditions being constant. It was conduc ted in the Mechanical Laboratory of
Sibley College. From the data obtained the author decided the rate of feed should in every case be so high, at least, that the coefficient of friction will not vary. The temperature was maintained
constant by circulation of water through constant by circulation of wator thrilroa lubricant testing machine, which wa used in the experiments. Tests were made with loads of 2000 lb ., 3000 lb . and 4000 lb . on the journal, corresponding to about 70 lb ., 105 lb ., and 140 lb . per square inch. The results indicate that with low rates of feed the effect of pressure on the coefficient of friction is practically nil, which would tend to prove that under such conditions lubricated rubbing surfaces follow the laws of solid or "immediate" friction; but at the rate at which this state of affairs begins to be apparent the augmentation of the coefficient is dangerous to the continuance of the smooth running of the journal. It is unsafe to reduce the rate of feed below .003 c.c. per square inch of projected area of journal per minute. The Steam Cylinder.-A good deal of recent discussion brings out prominently once more how little the wisest really know about the behavior of steam
in the cylinder of a steam engine. Jus ${ }^{t}$ now the discussion as to the utility of
the steam jacket is in the front, and the conflicting testimony and opinions are anything but reassuring. The unpre judiced engineer is likely to conclude, from all this discussion, that there are cases where the steam jacket represents economy; also that there are cases where it brings about the reverse. But just what brings about this difference no one is wise enough to tell. What is needed is further knowledge of the law governing the condensation of steam in the cylinder of a steam engine; how it is affected by different conditions, etc. Then from this as a standpoint, figures can be made to apply to steam jacketing. Until a good deal more is learned about condensation of steam, the doctors will disagree as to the value of any means tending to prevent it. - American Machinist.
Rope Driving.-Charles W. Hunt in recent essay on this subject, describing the methods of conveying power by cotton or manilla rope and their limitations, so that the engineer can decide on the advantages or disadvantages of any proposed speed, says: "Horse-power, catenary are the main features." He stated, as a result of experiment and observation, that 200 lbs on a rope 1 in . in diameter is a safe and economical work ing strain; when this strain is increase materially the wear is rapid. He found
on investigation the normal working strain on cordage to be one-thirty-sixth of the breaking strain, and one-twentyfifth of the strength at the splice. The ctual strains are greater, owing to vibration and imperfectly adjusted
tension mechanism. At a speed of 80 ft . per second the centrifugal force increases faster than the power from increased velocity of the rope, and at about 140 ft . equals the assumed allow-
able tension of the rope. Computing this force at various speeds, and then subtracting it from the assumed maximum tension, gives the force avail able for the transmission of power.
Loose Pulleys.-There is really no necessity for a loose pulley becoming a huisance, provided it is properly constructed in the first place and well taken care of afterward. One of the principal faults in construction is imperfect bal ancing and the manner in which the oil is applied to the shaft. Frequently the loose pulley with a light hub is provided, with no other facilities for oiling xcept a hole drilled through the hubperhaps not more than one-fourth of an in diameter-with no provision cluding the dust. A wooden plug is sometimes inserted, and while this may answer a good purpose for excluding the dust, is necessarily of such a length that when forced in the oil-hole the greater portion of the oil that has been applied is forced out, so that only a few drops are left to answer any useful purpose; and while a small space on each side of the oil-hole may be lubricated, the ends will often be found dry and cutting. With such pulleys, no matter how care ful the operator may be, it will only be a question of a short time when they will begin to rattle and become a general nuisance.
The report of the Bureau of Statistics for the month of January, 1891, in its statement of the exports of domestic breadstuffs shows that the amount of wheat flour exported during the month was $1,060,784$ barrels, against 699, 875 barrels for same time 1890. The total valuation of breadstuffs exported during the
month was $\$ 9,718,586$, while for , the same month was $89,718,586$, while for the same
month 18950 it was $\$ 1,557,624$, The list of
breadstafs incle breadstuffs includes wheat, wheat-flour, rye
oats, oat-meal, corn, corn-meal and barley.

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acit pacity 1001 barrels, situated in the cou Valley, the best wheat country in Kansas in good repair, and running steady. EleU. P. R. R. Address

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Having lost my water power, I offer for sale my complete outfit for a small mill, con-
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elevators, belting, etc. Correspondence soelevators,
licited.
More
More Reciprocity.-A proclamation of reciprocity with Venezuela, similar in terms to that made with Brazil, is announced and takes effect about the same time as the agreement with the latter. While the commerce of Venezuela is not so large as that of Brazil, this country has for several years enjoyed a much larger proportion of its importing business than any other nation dealing with Venezuela. The imports of Venezuela in 1886 were about $\$ 9,000,000$ of which amount they look from us more than $\$ 2,000,000$, and in 1888 they took from the United States products to the amount of $\$ 3,000$,000 , which includes about $\$ 600,000$ worth of breadstuffs, principally wheat worth
flour.

## don't be a miler.

Since time began it's been in vogue To call the miller arrant rogue. He may be honest, true and brave, But still he's dubbed the city knave He grinds your grist and takes his tollJust what was right-but then he stole, And nothing good was ever said About a miller, until dead. Some of his patrons will insist He stole their sacks as well as grist, And then they try to make it seem He followed 'round to steal the team. So, if by labor you exist,
Just swear you'll never grind a grist. Work at something, dig or bust,
And save yourself from being cussed.
Daily Business.
final government chop report for 1890.

THE estimates of the products of corn, wheat and oats of 1890 , as completed by the statistician of the Department of Agriculture, and published January 10, make corn aggregate $1,489,970,000$ bushels, wheat 399 ,262,000 bushels, oats $523,621,000$ bushels. The area of corn, which was slightly increased in planting, was reduced by utter failure and abandonment by more than $6,000,000$ acres, the area harvested being $70,970,763$ acres. The average yield per acre was 20.7 bushels, and the supply for consumption per head of population is 23 bushels, or 11 bushels less than last year. The rate of yield was lower in 1887 and 1881, years of very severe drouth.
The aggregate wheat area is 37,087 , 154 acres, nearly the same as in 1889, and the yield per acre 11.1 bushels. These are measured bushels of a quality grading somewhat lower than usual, the weight of which will be given in the March report. Past records have shown that the annual differences in weight of the crop are not often more than a pound above or below the average weight for a series of years, the lowest for seven years being 56.5 in 1888 and the highest 58.5 in 1887. The yield per acre is the same as in 1888, when the product was nearly $416,000,000$ bushels, and with two exceptions, is the lowest rate during the past decade.
The area In oats was $26,431,369$ acres, and the yield per acre was 19.8 bushels. This is only 74 per cent of the average of ten years past, which was 26.6 bushels, and the smallest rate of yield ever reported by this office.

The December condition of the growing wheat crop is returned at 98.4 , and of rye 99. This is better than the December returns for two years past. Along the Atlantic coast a slight depreciation is noted as the result of excessive moisture in some localities, making planting late and giving rather small growth before the advent of freezing weather. In the Ohio valley the season was generally favorable for seeding and early growth, and the plant entered winter quarters in promising condition. Some damage was done by the Hessian fly, especially in early sown fields. Condition in Missouri and Kansas was variable, local injury from drouth and fly combining to somewhat reduce the state averages.

## contimental money.

THE condition of American finance in 1780 was simply horrible. Pelatiah Webster, the ablest political economist in America at that time, a thinker far in advance of his age, was almost alone in insisting upon taxation. The popular feeling was expressed by a delegate in Congress, who asked with unspeakable scorn why he should vote to tax the people, when a Philadelphia printing
press could turn out money by the bushel. But indeed Congress had no power to lay any tax save through requisitions upon the State governments. There seemed to be no alternative but to go on issuing this money, which many people glorified as the "safest possible currency," because "nobody could take it out of the country." As Webster truly said, the country had suffered more from this cause than from the arms of the enemy. At the end of the year 1778 the paper dollar was worth sixteen cents in the Northern States and twelve cents in the South. Early in 1780 its value had fallen to two cents, and before the end of the year it took ten paper dollars to make a cent. In October Indian corn sold wholesale in Boston for $\$ 150$ a bushel butter was $\$ 12$ a pound, tea $\$ 90$, sugar $\$ 10$, beef $\$ 8$, coffee $\$ 12$, and a barrel o flour cost $\$ 1,575$. Samuel Adams paid $\$ 2,000$ for a hat and suit of clothes. The money soon ceased to circulate debts could not be collected, and there was a general prostration of credit. To say that a thing was "not worth a Continental" became the strongest possible expression of contempt. A barber in Philadelphia papered his shop with bills, and a dog was led up and down the streets, smeared with tar, with this unhappy money sticking all over him -a sorry substitute for the goldenfleeced sheep of the old Norse legend. Save for the scanty pittance of gold which came in from the French alliance, from the little foreign commerce that was left, and from trade with the British army itself, the country was without any circulating medium. In making its requisitions upon the States, Congress resorted to a measure which reminds one of the barbaric ages of barter. Instead of asking for money it requested the States to send in their "specific supplies" of beef and pork, flour and rice, salt and hay, tobacco and rum. The finances of what was so soon to become the richest of nations were thus managed on the principle whereby the meagre salaries of country clergymen in New England used to be eked out. It might have been called continental system of "donation parties. - Atlantic Monthly.

## WIRE ROPE.

眮WIRE ROPE manufacturing company gives the following hints. There are two kinds of wire rope manufactured. Ropes with nineteen wires to the strand are more pliable and are generally used as hoisting ropes. Those with twelve or seven wires to the strand are stiffer and best adapted for guys, ferries, rigging and transmission purposes. Wire ropes are made of six strands, laid about a center of hemp or wire, the former being more pliable, and wearing better over small pulleys and drums.
Wire rope is as pliable as new hemp rope of the same strength. The greater the diameter of sheaves, pulleys and drums, the longer the rope will last. For safe working load, allow one-fifth to one-seventh of ultimate strength, according to speed and vibration. Speed increases the wear.
Wire rope must not be coiled or uncoiled like hemp rope. When not on a reel, roll upon the ground like a wheel to prevent kinking.
To preserve wire rope, cover it thoroughly with raw linseed oil, mixed with vegetable tar. This mixture forms protecting surface, and preserves it from undue wear.
To preserve wire rope under water or

## ENGINE AND BOILER FOR SALE.

A 25 horse-power Reynolds Corliss engine, with 40 horse-power boiler and heater and connections, all in first-class condition and in use at present. To be delivered in May, 1891. A bargain for anyone in need of same. Reason for selling, more power required. For further information address,

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under ground, add one bushel of freshslacked lime to a barrel of mineral or vegetable tar, boil well, and saturate the rope with the mixture hot.
Galvanized wire rope should never be used for running rope. One day's use will wear off the coating of zinc, and the rope will soon begin to rust.
Too much care cannot be taken with the pulleys, sheaves and drums over which ropes are run. The grooves should be lined with well-seasoned blocks of hard wood set on end, rubber, leather or some soft metal. Thus the life of the rope will be greatly lengthened and greater adhesion secured than when the rope is operated over smooth and hard surfaces.
Iron ropes, operated under proper conditions will give perfect satisfaction when the work to be done is not too heavy. Steel ropes should be substituted for iron when lightness is required or when a greater strength becomes necessary. The object in substituting steel for iron is to decrease the wear rather than reduce the size of the rope -The Engineer.

## FOREIGN ITEMS.

India is building flour mills on the roller principle, and from the returns of the Bombay Flour Company, a profitable business has been secured, paying a dividend of 15 per cent.
Russian millers of the province of Tver propose to make a strong effort to convince the people of London that their flour is superior to the American article. They have compared the American flour usually quoted on the London market with Russian flour, and they claim that the comparison proved unfavorable to the American flour. In order to show the Londeners the "superiority" of their flour they will establish a bakery in the metropolis where only Russian flour will be used in making bread.

A Curious Custom.-The following superstitious custom prevails in certain parts of France, especially in the "Arondisement" of Boulay. On the day before Epiphany twelve full-sized grains of wheat are placed in a row on the stove. Each grain represents a month in the year. The heat causes the grains to burst and move from their places.

Next day the distance which separates each grain from the straight line is measured in order to ascertain which has jumped the farthest. Supposing it to be, for instance, the eighth grain in the row, it is taken to mean that the price of wheat will be highest in the eighth month of the year, i. e., in Au-gust.-Il Corriere Nazionale.
The Mark Lane Express (London) says: What are our "miscellaneous" yearly receipts of breadstuffs? The United States, Russia, and India are the three great foreign powers recognized at Mark Lane, and after them come Australia, Canada, New Zealand, Germany, Austria, Roumania and Chili. A comparison of recent years shows that these ten countries send us within a million qrs., of our total imports. The receipts from all other powers were $747,287 \mathrm{qrs}$. in 1888-9, 945,008 qrs. in 1889-90, and for four months of 1890-91 they have been 303,226 qrs . The chief of the extra countries is La Plata, then comes Persia and then Turkey. Now and again a cargo comes from France, Egypt, or Sicily, while small consignments have been recorded from Morocco, Algeria, Tunis, Tripoli, and even Japan.
The Hungarian Mills in 1890.-The Pesth milling companies have had a much more profitable year in 1890 than in 1889, the result being a decided advance in the market value of their respective shares, which compare with the quotation at the end of 1889 as follows:

## 


The following divid been declared: Ofen-Pester 70f., Miller \& Baker 35f., Elizabeth 28fl. to 30fl., Louise 16f., Victoria 20fl., Walz Muehl 25fl. to 30fl., Concordia 35fl., Pannonia 50fl. to 60fl. per share. The Hungarian wheat crop, it must be remembered, was this year the biggest on record, and its effect will probably be felt all through the present year. Since 1886 the yield of each year has been as follows: Wheat $36,245,000$ hects ; $188751,420,000$ hects ; $188847,880,000$ hects; $188932,958,000$ hects ; 1890 54,679,000hects. (A hectolitre is equal to $25 / 6$ bushels.)

We shall be pleased to receive from any of our readers, short, crisp, sensible letters on subjects of interest to the flour and grain trade for publication.

## ＂THE FINEST ON EARTH．＂

 The Cincinnati，Hamilton \＆Dayton R．I is the only line running Pullman＇s perfected safety vestibuled trains，with chair，parlor sleeping and dining car service between Cin cinnati，Indianapolis and Chicago，and is theonly line running through reclining chair only line running through reclining chair
cars between Cincinnati，Keokuk and Spring－ field，Ill．，and combination chair and sleeping car Cincinnati to Peoria，III．，and the only di－ rect line between Cincinnati，Dayton，Lima，
Toledo，Detroit，the lake regions and Canada． The road is one of the oldest in the State of Ohio and the only one entering Cincinnat over twenty－five miles of double track，and patrons speed，comfort and safety．Tickets on sale everywhere，and see that they read C．H \＆D．，either in or out of Cincinnati，
Indianapolis，or Toledo．E．O．McCORMICK， General Passenger and Ticket Agent，Cin－ cinnati，Ohio．
The Winter Resorts of Florida and the Sunny South．
At no time in the history of southern travel have The indications pointed to so brilliant a season at the
Winter Resorts of Florida and the South as is prom－ sed for 189－91．At Jacksonville，St．Augustine，and
along the Indian River extensive preparations have and all visitors can rest assured of the old－time ho
pitality for which the southern host is famous．Wit
ts customary enterprise，the Big is ireat Florida Line，＂has placed on sale round－trip preparations to handle the southern tourist business．
All persons contemplating a trip to Florida should
ask for tickets via that popular line．Solid vestibule rains run daily between Chicago and Cincinnati cars，and elegant parior cafe dining－cars，lighted by
yas and heated by steam，making direct connection
n Central Cnion Depot at Cincinnati with trous rains for all points in
ne Big Four Route．

## REGENT MILLING PATENTS

The following are a list of Patents relating to Milling and Grain－handling appliances， granted during the month of January，as spe－ E．Brock，Patent Attorney，Pacific Building， Washington，I

44，34s，Roller grinding－mill，W．D．Gray Milwaukee，Wis．，assignor to E．P．Alli
ompany of Wisconsin
Milwaukee Wi ding－mill，W．D．Gray Allis Company，of Wisconsin．
444．350，Roller grinding－mill，W．D．Gray Milwaukee，Wis．，assignor to the E． Allis Company，of Wisconsin．
H．Hammer Washington and sifter，W
H．Hammer，Washington，Ohio
444,745 ，Coal and grain chute，W．W．Em ery，Minneapolis，Minn．
$4+4,763$, Grain－scouring machine，W．Mor gan，Chicago，Ill．
444，798，Coffee－mill，E．H．\＆C．Morgan Freeport，Ill．，assignor one－third to A Bumgarten，same place．
church，NewZealand，S．W．Lees，Christ－
cherer church，NewZealand，S．W．Lester，Syden－ ham，New Zealand，assignors to the Can－ terbury，（N．Z．）Seed Company，Limited，
Christchurch，New Zealand． Christchurch，New Zealand．
444,847 ，Process of comminuting seeds and
spices，H．R．Pomeroy，Indianapolis， assignor of two－thirds to E．E．Stout，same place． 445,071, Crushing－mill，A．Olsen，Hallock， Minn．
445,089 Screen，W．E．Selleck，Chicago，Ill 445．133，Separator，A．Cook，W．L．Har－
vey，SanFrancisco，Cal．，assignors of one－
third to T．J．Parsons，same place．

There are few mills in this part o the country that ship as much flour to the British Isles as do those of Apple ton，says the Appleton（Wis．）Post． The two carloads shipped from here Feb．9，to London and Dundee con－ tained as fine flour as is made in the country．Appleton is fast gaining a world－wide reputation for its flour as well as for its paper．
About a month ago a number Minneapolis capitalists organized company to build and operate three large flour mills in Superior，Wis．
The site and capital have been secured and investigations are being made to determine the cost of operating．The idea is to use electricity for the power， and a Chicago company is figuring on the cost of a plant therefor．The name of the mills will be the Great Northern Flour Mills．

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Passenger Agent．$\quad$ Sec．and G．T．M．
Exporting millers should write to the Riverside Printing Co．，Milwaukee，Wis．，for the best Flour Cable Code ever published． There are more copies of this Code in use than imple and accurate．It is called＂The Riverside Flour Cable Code．＂


THE KEYSTONE
4 Roleler Wheat Mile.

## Flour Mills. <br> 哭

ALBiA, IA., July
The J. B. Allfree Co., Indianapolis, Ind.: 1880. Dear Sirs: We have now been running our mill for about a week, and it is giving us entire satisfaction in every respect. We are doing splendid work, and our flour is ahead of anything that comes to this market, and we have \& Lisle, Leavenworth, Kans.; Blair \& Auld, Atchison, Kans.; Louisiana, Mo., Mills, and many others. Our straight grade is whiter than any patent on this market, and our patent is par excellence. We hereby
accept the mill.
Yours truly, accept the mill.

- J. A. EDWARDE \& AON.

Important Features in our 6 Roller Gorn MIII.
Entire Belt Drive,
Independent Tightener on Both Belts. Simult Absolutely Positive Differential. Automatic Vibratory Feed.
Perfect Alignment of Fixed Rolls. Running.
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Roller Corn Mill.


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## American Flour Mill e erain Elevator Directory

It contains: 1. A list of Flour Mills in each State, Territory and Province, with names of owners, P. O. and county; in thousands of instances giving their capacity in barrels per day, kind of power used, etc., also indicating such firms as are supposed to be worth $\$ 10,000$ and upwards. Total number of mills given, 17,145 .
2. A list of miscellaneous mills, such as Corn, Oatmeal,' etc.
3. A list of Millwrights.
4. A list of Grain Elevator Owners and Grain Dealers.
5. A list of well-rated Flour Brokers, Merchants and Bakers in all parts of the United States and Canada, which has been compiled with extraordinary care, capital and credit being considered in the compilation.
6. A list of Foreign flour and grain importers, secured by our own special correspondents and believed to be thoroughly reliable. In short, it is a complete KEY for reaching the Flour and Grain Trade, enabling ANY department of the trade to reach ANY other desired.

The price is invariably Ten Dollars per copy, on receipt of which it will be sent, post paid, to any part of the world. The complete work only is sold. We do not supply lists for single states. These Directories have been issued every two years since 1878, and have been declared indispensable by the prominent mill-furnishers, flour brokers, millers, etc., of this country and Europe. Address,
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 Requires no cloth, no dust house, nor dust catchers. All grades of middlings perfectly purified with absolutely no waste.

In use in many of the representative mills in the country and being rapidly adopted in all sections by all classes and sizes of mills.

THE JONATHAN MILLS MFG. CO., Columbus, 0 . Gents-On receipt of this, please send me another Jonathan Mills Air Belt Purifier, same as the ones heretofore sent. The more I use these out waste and almost without power, the amount required to run the machines being so small. Respectfully yours,

HOMER BALDWIN.
THE JONATHAN MILLS MFG. CO., Columbus, O.: CARLINVILLE, ILL., Sept. 11, 1890. Dear sirs-The sieve purifiers are now all in the scrap pile, and your machines are in full swing, and the work is simply perfeet. There is nothing left to wish for. It has made a wonderful difference in our flour. Yours will

HENRY $C$. YAEGER
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* Mill Builders and Mill Furnishers, *


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Sixteenth Year.-No. 3.
"wiew

## FROM DOMALDSON ON THE ROAD.

## The Vipws of a Flour Salesman-How the Job bers Talk of the Present bers Talk of the Preesent Market-The absorb- ing Question is " What are the People Living ing Question is " What are the People Living on "-New Mills in the Shenandoah Valley-

THE question, "What do the people eat or what do they live on," is becoming a very serious matter with most of your patrons, the millers of the country, and they are not the only class of people that are trying to solve the problem.
I have been a bull on the market and I cannot now divest myself of the conviction that my reasoning has been correct, but I have been so often disappointed that I am with the millers, asking the above question.
The "staff of life" has become "a bruised reed." Now that I am no longer a buyer of flour but a seller only of other men's products, my testimony may be added to the report of others and taken for what it is worth, but in the mouth of three witnesses the truth should be established.
Now, there are many millers that be lieve that the jobbers are reuping a golden harvest, while they-the millers -are working for glory. Let me tell you, brother dusties, I have been among this class some three months, and the following is a fair specimen of the experience of the jobbers generally : Soliciting orders from a prominent jobber here to-day. He said, no sir ; I would like to dispose of some that cost me less than that, at what it cost. I assured him it was good property. Yes, said he, I thought so and began on the crop at $\$ 5.75$ and have been obliged to sell down and replace to the present time and now I can't sell at all. I don't know what is the matter; sometimes I think my customers have all left me; that I have offended them in some way; that some one has got them away; but 1 find in looking up their stock that my brands are on their shelves and careful inquiry reveals the fact that they are not selling. Tell me what the people have found to live on?
Flour is the cheapest article on the whole list and people are crying " har.l times," and yet nobody seems to be using flour.
Now, Mr. Editor; assure the millers that the jobbers, so far, have not grown fat on the profits of the trade.
They are all loaded to the muzzle, 'tis true, and if, if they shall be found to be well loaded when the long looked for boom shall come, they may make something in a speculative way, but so far they are all sick with hope long deferred, and they are bitterly cursing the miller for overproduction.
With wheat above the $\$$ mark and flour below the $\$ 5$ mark the miller must certainly be tempted to run his mill to its full capacity to get rieh.
Well, millers, dealers, readers, all, whatever may be before us as a cause to effect the price of the commodity,
we must not now shut our eyes to the can then only be used for the manufacture fact that there are large stores on land of starch and paste.* and that 90 days will bring a new crop to mill in some parts of our great country. Nevertheless, wheat and flour will be wanted before the new crop is available.
Maryland and Virginia had good crops of wheat last season and they have large areas seeded this season and it is looking fine. There can de no serious danger of damage to the crop this season, except on low land where the excessive rain may choke it.

There will be a number of new flour mills erected along the Shenandoah and Cumberland valley.
The people in those sections are count ing on great things from the reciprocity treaty with South America. That article is thought to be the greatest thing yet for the South. I think they are right, and James G. Blaine is get ting due credit for it, whether he or the President deserves it.

The Rio flour trade which at presen is fairly respectable in volume, is ex clusively in Baltimore brands, and a prices said to be considerably above other brands of flour. Why this should be so is not quite clear to the writer.
This matter and this South American market might be a good subject to discuss at the Millers' National Convention.

Donaldson.

## Philadelphia, March 10, 1891.

What is to be understood by good FLOUR?

## By Augustin Maulvault.

(9)HAT is to be understood by good flour? 1. Is it that which gives the most bread? 2. Is it that which gives it the best flavor? 3. Is it that most easily preserved? 4. Is it that which makes the whitest bread? Finally, 5. Is it that which makes the bread most nutritious? I now take up the fourth question. Is that which makes the whitest bread?
Moisture.-Well harvested wheat, white or red, within a radius of about 150 miles round Paris contains about fifteen per cent. of moisture. In the space of one year it loses about three per cent. As the wheat grows old and dries, the millers find it necessary to moisten the grain ; they dampen it with two or three per cent of water, according to the hygrometric condition of the air, in order to make it swell and become unwrinkled,
and avoid, in grinding, the pulverization of the bran. If the wheat is dampened ex cessively, owing to the heat developed by the grinding only causes a slight evapora tion of water, the flour retains a surplus quantity, which causes fermentation and may then make it to lose as much as ten per cent. of its market value, according to the rates; and even, if the damage is great, makes it unfit for panification, even when mixed with newly-made flours; it

There is a fact demonstrated in chemistry. It is that a body absorbs proportionally more water according to its greater dryness. It is thus with flour. When flour contains more than 15 per cent. of moisture every unit it possesses in addition makes the baker lose $1 \frac{1}{2}$. This is a loss fur him on his average yield of bread, yield on which is based the local tax of the price of bread. Bakers find it very advantageous to buy flour only from millers who give them genuine guarantees of regularity in their fabrication
Cosclusion.-Well-preserved flour is a certain indication of good manufacture, but is not an absolute certainty of good quality
The
The fourth question was-Is it that which makes the whitest bread?
Whiteness.-Very white flours are produced with ligbt wheats, but on con dition of diminishing the extraction of white groats, and consequently increasing the quantity of brown groats for the production of inferior flours.
These flours, especially if produced with soft wheat, are deceptive to purchasers, for these flours and all their derivatives are of inferior qualities, in spite of their fine appearance; and it is to guard against the inferiority of these products that buyers must appeal to their theoretical and practical knowledge.
Bakers only obtain from these white flours an amount of bread less than one hundred loaves; they are deceptive to his purse, are the plague of the journeyman baker, and give bread of small nutritive properties.
These flours should never be employed except mixed with superior varieties; honever, to make them panifiable mix two to three per cent. of bean flour, that enables them to relax less, and to better support fermentation. That makes them rise, as the journeyman bakers say.
This addition of bean flour does no constitute a commercial fraud, on the contrary, because it only permits these flours to be made panifiable; it rather constitutes an industrial progress; it is for the purchaser to know how to appreciate them, and pay for them what they are worth.
Conclusion.-The great whiteness of a flour is not a proof of the good quality it is only an uncertain indication.- The British and Foreign Confectioner, London.
bread-making qualities of cereals.

会HE chief difference in barley flour, as compared with wheat, is not in the amount of the albuminoid bodies, but in their character. If you take barley flour and knead it with water, as one often does with wheat flour, you would, after washing for some time, find that there was a very small quantity of this crude gluten left, and that barley flour would be a very inappropriate material to form a good loaf with. Barley flour has been used for ages, but if anyone has been in the habit

he same proportion, to obtain a uniform, product.
In order for them to relinquish this condition of pur-
base the spolied flour offered to them must preser


Subscripition Price, Sl.00 Per Year.
of eating barley bread, they will find it is a heavy, sticky, doughy sort of mass. It is more like wheat treated by the boiling process than by the oven process. Rye flour, very rich in the total quantities of albuminoids, is so deficient in crude gluten, that when it is kneaded with water there is practically nothing left, the whole of it passes away alung with the starch; not that it is soluble, but it is not coherent, and therefore does not form that tough elastic mass, which is so characteristic of wheat, under the same conditions. Precisely the same may be said of oat flour Oat flour fermented with yeast in the ordinary way is a heavy mass, and practically the same may be said of maize. Now rye flour is very much used in the north of Europe for the purpase of making bread; and it is with rye flour chiefly that the leaven process is employed; and those who have travelled in the northern parts of Europe will remember perfectly well the dark kind of bread that rye, fermented by leaven gives. To a great extent the same remarks as to the want of cohering elastic gluten would apply to oats, or barley, or any other cereal than wheat. Wheat, then, is pre-eminently fitted for the purpose of making bread by the fermentation process, since it is so rich in this tough, elastic gluten, which holds in the carbonic acid, and enable you to have a light, ærated bread.

## the ampere and the volt.

DURING a recent examination a lawyer put the following question to Thomas A. Edison
"Explain what is meant by the number of volts in an electric current?" To which he replied
"I will have to use the analogy of a waterfall to explain. Say we have a current of water and a turbine wheel. If I have a turbine wheel and allow a thousand gallons per second to fall from a height of one foot on the turbine, I get a certain power, we will say one horse power. Now the one foot fall will represent one volt of pressure in electricity, and the thousand gallons will represent the ampere or the amount of current. We will call that one ampere. Thus we have a thousand gallons of water or one ampere falling one foot or one volt or under one volt of pressure, and the water working the tur bine gives one horse power. If, now, we go a thousand feet high, and take one gallon of water and let it fall on the turbine wheel, we have got the same power as we had before, namely, one horse power. We have got a thousand times less current or less water, and we will have a thousandth of an ampere in place of one ampere, and we will have a thousand volts in place of one volt, and we will have a fall of water a thousand feet as against one foot. Now the fall of water or the height from which it falls, is the pressure or volts in elecricity, and the amount of water is the ampere. It will be seen that a thousand gallons a minute falling on a man at a height of one foot would be no danger to the man, and that if we took one gallon and took it up a thousand feet and let it fall down it would crush him. So it is not the quantity or current of water that does the damage, but it is the velocity or pressure that produces the effect."
"We are only sorry we did not place one in a jear ago"
Don't put off buying the machine referred to. Every day will add to your regret that you also have not put in a

## NEW ERA SCALPER



PRICES LOW. RESULTS GUARANTEED. TRIAL ALLOWED.
SUPERLATIVE PURIFIER MFG. Co., MEW PHILADELPHIA, 0., March 9, 1891. Gentlemen-We started the Scalper the 7th,
Gentlemen-We started the Scalper the 7th, and it is giving good satisfaction. We can see quite a difference in the color of our flour, and are making more middlings than
we did with our old reels. We are only sorry that we did not place one in a year ago, Yours truly,
J. \& O. C. JUNKINs. FOR CATALOGUE, PRICES, ETC., ADDRESS
SUPERLATIVE • PURIFIER • MFG. CO, MILWAUKEE, WIS.

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IF you want a Cockle Separator, write us. We can satisfy you both as to style and price. We build machines with reel or shaking graders, and with steel or zinc cylinders, as desired. Also in connection with Richardson's Dustless Oat Separator Attachment.

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## MILWAUKEE, MARCH, 1891.

## We respectfally request our readers when they write $t$ ) persons or firms advertising in <br> this paper, to mention that their advertisem in

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## DA VIDSON OPERA HOUSE- day and Sumony Matinees. <br> 

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ACADEMY OF ACADEMY $A$ Ondar
matinees. $F$ STANDARD. THEATER-Every evening and usual amatinees GERMANSTADTTHEATER-Regular perfor YTTN ARTGALLERY-Free Tueeddays, Thi
 PUBLIC MUSEUM-O
Visitors to Milwaukee din ily. Exposition builiding.
canniot fail to toid ammuse

$\mathrm{T}^{\mathrm{B}}$HE next meeting of the South Dakota Millers' Association will be held at Madison, S. D., Aug. 4, 1891.

THE next meeting of the Indiana Millers' Association will be held at Evansville, Ind., April 27th and 28th.

MILWAUKEE mill-builders and furnishers report business un usually good for this season of the year

## Ev <br> ERY mill-furnisher, flour-broker and miller should have a copy of

 "Cawker's American Flour Mill \& Grain Elevator Directory". Price $\$ 10.00$. See adv. elsewhere.T$T$ HE report of the U. S. Agricultural Department shows that on March 1,1891 , there were $112,000,000$ bushels of wheat in farmer's hands. Bradstreet's places the amount at $100,437,275$.

0WING to illness in his family and
the pressure of the pressure of other duties, we regret to announce that our able con-
tributor, Mr. J. F. Mueller will be tributor, Mr. J. F. Mueller will be un-
able to write more for the United States Miller, for the present, at least.

$\mathrm{E}^{1 /}$
SEWHERE in this number we publish an article on "Reel Construction," taken from our esteemed
contemporary, The Miller (London). It contemporary, The Miller (London). It
is an interesting article and will repay careful perusal by our readers.

$0^{\circ}$UR Baltimore correspondent "Oriole"
having accepted another assign ment will not contribute for the United States Miller again for some time.* We are making other arrangements and will have an able correspondent from
there by another month.

MILLERS will do well to note very
carefully that there is now an uncarefully that there is now an unusually brisk demand for good rye-flour do to run in a whole straw stack and all do to run in a whole straw stack and all the feed-pile any more.
$\mathrm{W}^{\mathrm{E}}$ E take pleasure in announcing to secured a new technical writer for this


#### Abstract

We appreciated by the milling public We, at his request, withhold his name


 until his first article appears.CONGRESS has adjourned and has made itself notorious by making appropriations amounting to a round billion of dollars. Many of these appropriations were extravagant and many others, to say the least, of doubt ful necessity for the Nation's welfare.
$T^{H E}$ subscription to the fund to establish the Millers' League has reached the sum of $\$ 11,850$ out of the $\$ 20,000$ desired. It is to be hoped that the millers of this country will take interest enough in this matter to subscribe the amount necessary to give it a trial.

## T

 IE Congress of Uruguay has increased the duty on breadstuffs to the following figures: Maize (corn), 80 cents per 100 kilos; wheats, $\$ 1.35$ per 100 kilos; wheat flour, $\$ 2.70$ per 100 kilos; clover and forage, $\$ 1.00$ per 100 kilos. A kilo is two and one-fifth THROU$T \begin{gathered}\text { HROUGH the courtesy of } \\ \text { rick Egan, Mon. Pat- }\end{gathered}$ rick Egan, Minister Plenipotentiary of the United States to Chili, S. A., we are favored with copies of the proceeding of The Milling Congress and a cata-
logue of the display at the Millers' Exlogue of the display at the Millers' Ex-
position held in Santiago, Chili, during the year 1890 .

SNCE the recent election in Canada, showing the drift of public opinion, it is believed that a broad reciprocity treaty will be made by Canada with the United States similar to the one recently made ky Newfoundland. Such a treaty will, we think, prove beneficial to both countries, especially to Canada.

T
$\left[\begin{array}{c}\text { HE total number of explosions oc- } \\ \text { curring in flour mills }\end{array}\right.$ curring in flour mills and grain elevators in the United States during the year 1890 were five. Considering the great number of these establishments there are in this country, the showing as compared with accidents of other natures is extremely favorable.

$\mathrm{N}^{\circ}$OW that seeding and planting time is near at hand, when the "horny handed son of toil" will have his
thoughts turned to healthy subjects for cogitation, we may expect to hear little more from the "Farmers' Alliance" until after harvest and it is a question if some other "ism" will not come to the front then.
Indiana hereafter a stockholder in a corporation will be allowed but one vote, no matter how many shares of stock he may own. It will be difficult o wreck a railroad where such a law obtains and the big fish are all muzzled to prevent their swallowing the little ones. The idea is borrowed from the English statutes.
N the suit of Lee vs. Pillsbury, which is defended by the Cockle Separator Mfg . Co., of this city, a motion for a new trial was argued and it was de-
cided to grant a new trial, cided to grant a new trial, which will review the entire proceedings and will
doubtless produce an entirely different doubtless produce an entirely different
result, as new evidence of an important result, as new evidence of an important
nature has been discovered by the defendants.
ATEST reports indicate that the
Millers' European excursion party Millers' European excursion party is growing in numbers slowly, but is wing. If the excursion proves to be a success The Northwestern Miller will be
entitled to all the glory, and if it fails
$T^{\text {Hi }}$
that paper will get a full quota of commerce and capital, the chief result proves to are not sure even if it of the Fifty-first Congress is a negaproves to be a "howling success," but tive one. It did some good things and than kisses anyway, as that is frequently its that were not good, but after all the way hard work is rewarded.

## A "BADGER CLUB" composed of

 former residents of Wisconsin (the Badger State), has been organized at Portland, Ore., of which John B. Cleland is King Badger and A. C Sandford is Corresponding Badger The club rooms are in the Holton House, named after our fellow townsman Hon. E. D. Holton, and all Wisconsin people visiting Oregon will find at the club.T seems now more than probable that
West Superior will immense flouring mill. A. A. Freeman's mill at La Crosse, it will be remembered, was destroyed by fire some months ago, and since that time he has been considering whether best to rebuild there or else-
where. It is now reported that where. It is now reported that he will stock of his company will be $\$ 250,000$, and citizens of West Superior have already subscribed $\$ 50,000$ of the $\$ 100$, 000 which they are requested to take, The construction of another big mill is
not pleasant news for small mill in the North-west.
THE N. Y. Commercial Bulletin of
March 14th, in concluding its finan-
cial article, says:
"All these things considered, the events that are passing do not justify any alarm in this country. If some pressure comes from Europe, it will have to be met of course, but is likely to pass without much visible effect except perhaps in the current prices of some stocks. The enormous industrial production of the country, and its rapid growth in population and wealth, put it comparatively beyond the reach of foreign financial storms, and make its money market properly the strongest in the world. It might be intinitely stronger if wiser financial measures by the Government ensured the support of all the conservative, productive and commercial forces of the country in every emergency. But it is nevertheless so strong that many financiers of Europ may well envy those of New York.
$\left[\begin{array}{l}\mathrm{N} \text { a communication received from } \\ \text { Messrs. J. A. Hambleton }\end{array}\right.$ Messrs. J. A. Hambleton \& Co.
brokers, of New York city they The quick rebound city, they say: try made from the December pani showed the stability of our securities Except for the recurrence of the foreign troubles we should now be enjoying greater activity and enhanced values, but as long as London remains under a financial cloud there is not much hope of any decided improvement here. General trade is fairly good and, notwithstanding a short crop year, the railroads are transacting a large business and showing satisfactory earnings. Crop prospects for the coming season are promising. The winter has been cold sne for fall wheat and the present cold snap almost assures a good fruit year. Altogether, the situation is quite favorable, and as London has already emptied its strong boxes on this market, as soon as the financial skies brighten values should improve.

HE N. Y. Commercial Bulletin has the following to say in relation to Congress just adjourned :
one thing. It refused to pass, and with much hope it may be said the Fifty-first Congress for ever killed, the scheme for free coinage of silver. Partisanship will differ greatly regarding most other portions of its record. Partisanship will find much to censure, from the beginning of the first session to the end of the last, in the conduct of the speaker, and of the majority in the
House. But the House. But the commercial community, the men throughout the country who have capital and business interests at stake, will feel that in any case they owe candid thanks to the House and to Speaker Reed for the defeat of the Silver bill.

## mILWAUKEE REVIEW.

THE week ending the 14th inst. witnessed something of a revival in general business and the banks report a more active demand or money-in some quarters more active than the banks could supply. The discount market consequently is very firm at 6 and 7 per cent-the outside figure being the prevailing one. The stock of wheat on the 14th was estimated at 431;538 bushels against 923,320 bushels the corresponding day last year, 715,000 bushels in 1889 and $2,190,000$ bushels in 1888.

The market opened rather firm at 97 tc , sold up to 98 c c , and then down to 96 c . Foreign markets were firm, and the weather, with the thawing and freezing, is considered generally unfavorable for the growing winter wheat. At the same time the receipts at primaries are larger than at the same time last year, while the exports are only moderate. There were also reports of financial troubles in Paris, but the market stood up pretty well considering the depressing influences brought to bear upon it. The millers are still bearish, and the later cables were also easier. The market continues nervous and is a most excellent one for speculative purposes.,
The close was quiet. May 96 ${ }^{5}$; cash, ruled even with May. July 11c under and Sept. 5 c under.
The following table shows the closing prices for wheat and course grain on change on Saturday, the 14, as compared with those of same date last year:


The average daily flour production in the city for the week ending the 14th, was 4,700 barrels, against 5,150 the previous week and 3,675 for the corresponding time 1890. The secretary of the Chamber of Commerce reported the stock of flour in the city on the 1st inst. at 90,200 barrels, of which 30,200 barrels held by the mills and 60,000 barrels were in transit. Same time last year there was a stock of 122,000 barrels. The breadstuffs market here remain weak and irregular. Flour is quiet at following prices:
in bo. 2 hard spring wheat patents, $5.10 @ 5.25$. in bbls., 5.10@5.25; soft spring wheat patents, in bbls., $4.85 @ 5.00$; No. 3 wheat, in sacks, $440 @ 4.75$; clears, choice bakers', 4.00@4.25; No. 3 wheat, $3.50 @ 3.75$; straights, choice baker's, $4.50 @ 4.75$; No. 3 do. $3.75 @ 4.00$; low grades, $2.50 @ 3.50$; winter straights, in bbls., 4.70@4.80; rye flour, in sacks, 4.00@4.25; in bbls. 4.40 @4.70.
Millstuffs are firm but quiet. Prices range as follows: $19.25 @ 19.50$ for sacked bran and fine middlings; cornmeal, coarse, in bulk, 20.00@21.00; ground feed, oats

## CORRESPONDENCE.

1The following letters are all from our own specia
correspondents, and reflect thelr views and the view correspondents, and reflect thelr views and the view
of the trade in the location from which they write

## our london letter.

NOW that the late wheats have come up it is seen that there is almost as little fault to find with their condition as that of the early division of the crop. Such an early and favorable seed time has rarely been experienced, although there have been no dykes filled during this February, but they are not yet very low having been replenished when the frost broke up towards the end of January. Where plowing has gone on during the past week there has been often just enough frost to sweeten and break the fresh surface making a good seed bed, but the effect of the weather upon grain samples on offer at the various markets has been injurious to the milling condition ; thus, farmer's supplies have been small so that the business in foreign sorts has been in favor of sellers. The British millers grist has now to be made up of samples for which they have to pay 33 to 40 , as there is no cheap Danubian, or Indian, Persian, or La Plata wheats such as are generally on offer, sometimes as low as 26 to 28. It has been the rule in recent years to have plenty of foreign sorts of wheat 5 to 8 , per quarter of 496 lbs . below the ordinary good sorts. Neither the new Indian harvest nor that of La Plata promises in the future very cheap, when 3066 to 36 , per quarter, being asked for good lots, from the Argentine Republic, Australia and New Zealand sorts sold at 38 6, Old Duluth 42 , Red Winter 37, Bombay red 33, Calcutta white 35 , Danubian 33, Hungarian 35, Saxonska 37 , Saganrog 35, , and Azina 33 to 37 |, per quarter of 496 lbs . The trade for flour has been scarcely so steady as that of wheat. English country flour being sold freely, in London from 26 to 30 , per sack of 280 lbs .

Out of $£ 32,600,000$ paid by the United Kingdom in 1890, for imports of breadstuffs, only $£ 6,000,000$ went to the British Colonies, including India. It is estimated here that Canada, with a steadily remunerative price could lay down another million acres to wheat, and that New Zealand and Australia could largely increase their produce under the same circumstances while the $£ 7,482,000$ paid to Russia in 1890 might
easily be earned by India, to the double strengthening of the British Empire; however the British Colonies in India c.mnot immediately be prepared to take up the burden of keeping the old country in bread.

The British milling engineering trade this year has already seen some rapid progress as regards new machinery.
One new machine is of a concentrated type and performs the breaking down of the wheat or reducing of the middlings, according to whether the rolls are grooved or smooth; the separation of the flour from the meal, and the broken particles of wheat or coarse middlings, and the purification of the middlings. These three operations are performed by the material passing through the rolls and falling into two series superposed in a rocking frame. There is a fan and dust collecting arrangement
fixed on the top of the machine and the latest improved "tray of nozzles." With this machine the inventor Mr.

Higginbottom, of Liverpool, hopes to Lincolnshire, has not made very much increase the percentage of patent flour by doing away with the trituration produced by elevating and conveying the products from one machine to another. The next machine which was privately exhibited this month and christened the "Tornado," is a dust collector. Tests were made for over an hour with a variety of samples from woolen, cotton and flour mills. The dust-laden air being introduced at varying speeds to show the adaptability of the apparatus o all circumstances. A current of dust-laden air was introduced into the
apparatus, having a velocity of about 700 feet per second, the quantity of air passing through the apparatus was about equal to 6,000 cubic feet per minute. The results were shown in the regular discharge of all the dust at one end and of pure air at the opposite end, the dust-laden air being introduced about the middle of the apparatus. The cost is very moderate and the floor space occupied being only about five feet by five feet and about ten feet in height. Several improvements have also recently been made by Messrs. E. R. \& F. Turner, of London, in their Omega" purifier, which is now arranged to collect its own dust.

A very interesting discussion is now proceeding in the columns of The Miller, as to the necessary roller surface required to produce a sack of flour, and when some further facts have come to light, I will endeavor to give some details that may be of interest to your readers.

The tenders for the construction of the roller flour mills for Messrs. James Tucker, limited, of Cardiff, have been sent in, and the selection will no doubt be made shortly. The mills are to have a capacity of 45 sacks of flour of 280 lbs . per hour. The 45 sacks will be produced by three plants, each capable of producing 15 sacks of flour per hour, from any mixture of wheat when required ; but it is proposed when the plants are started that two of them shall work on soft and medium mix
tures of wheat and the other on hard wheats. Two of these plants according to present arrangements will be driven by one engine and the remaining plant, wheat cleaning machinery and warehouse appliances will be driven by a second engine. These two engines are each to be capable of indicating 400 horse-power. The wheat cleaning machinery will be divided into three divisions, 1st, a preliminary cleaning washing and drying system for the dirtiest wheat to treat 200 bushels an hour; 2 nd , one of a capacity of 250 bushels per hour for cleaning ordinary wheat, and the other of a capacity of 125 bushels for cleaning hard wheat. An automatic weigher will precede and another will be fixed to each plant so as to gauge the loss by wheat cleaning, ing the wheat as it is discharged from the ships alongside the mill, are to be of a most elaborate description and the whole set of buildings will be fitted up with pumps, automatic sprinklers and other fire appliances for extinguishing any outbreak of fire. The entire premises will be lighted by electricity, and the flour warehouse and roller plants will be heated and ventilated so that the temperature of any floor may not get below 55 degrees when the outside air is 15 degrees below freezing. The syndicate that proposes to take over some 22 flour mills in Yorkshire and beautiful drive of about 20 miles. The

Godfrey Pond mill is taking in large quantities of wheat in exchange for Attica flour.
Mr. Fred. Ogden has returned from a pleasure trip to Florida. The vacation will do him good, as he has been a steady toiler for many months.
C. S. Thompson, now proprietor of the Star mills, who for many years ran a feed store on Main street, Attica, has retired from his old love, and will devote his time entirely to the mill.
Schoellkopf \& Matthews have put in a new wheel of the Stout, Mills \& Temple make to take the place of one which has for some time caused them considerable trouble.
In the matter of the legal publication of the annual report of the Attica mills which has raised some talk, especially as the old corporation still seems to be in existence, the explanation is that the old company cannot be dissoíved until certain suits now pending against the old Attica mills corporation are settled But Mr. Bock is the absolute owner of the mill. I notice also that flour dealers, who have for a long time stood out against the new proprietor, now handle this flour entirely, having full confidence in the new owner. Buffalo and Pillsbury flour, they say, are "knocked out."

Millstuffs have not advanced here as yet, although the market is very strong. Coarse winter bran is selling at $\$ 22$ per ton and spring at $\$ 21$.

Work on the new Ovens bakery building has been stopped for several weeks. Reason not given
The West avenue mills, Attica, owned by Stedman, Vickeny \& Co., report a very good trade.
Its a cure for weak eyes to see John R. Weld, of Medina, on 'cbange. It also makes old chaps like myself brush up and look as chipper as we can after getting in that rusty habit so common among the older class of dockmen of 40 or 50 years ago. Bright eyes, a neat appearance, with one of the most taking smiles imaginable and a manner most engaging-such as is rarely met with now-a-day-and you have a picture of Mr . Weld, one of the old school gentleman and business man of years long past. How it brings back memories of when David Dows supplied all the country millers with wheat and took his profits if there were any to take. J. A. Sawyer was the agent of this great Dows in Buffalo. I will say no more on that score, but of all the millers who paid into the hands of the Buffalo agent, the only one left to tell the tale, is my old friend John R. Weld. Failure wound-up all but John and how he survived is a mystery which only his pen can tell.
Mr. M. L. Crittenden, for many years one of our largest grain dealers and one who has was mainly intrumental in making the Board of Trade building as popular as it is, having managed its affairs since 1883, is about to leave Buffalo and reside with his sons in Milwaukee, who are in the grain business there. The new owners of the Board of Trade will miss his guiding hand and Buffalo will loose one of its most respected citizens.

The long doleful cry of dull times in the flour trade was suddenly checked by the advance in wheat last week. Not that the situation at present regarding this important cereal warranted high prices anymore than it did three months ago, but the crowd of speculators at Chicago concluded that the "country Jakes" would no longer take
hold and some other racket must be to his door and stop that infernal din. worked. So the damage to French When the boy reached the room he crops' is made the basis and up go found the Buffalo miller in bed. "You prices. Later on when this has been milked sufficiently, the ground will be too dry or too wet, just as the gang want it to be, and the poor sucker will be either high up or down deep in the mud. Buffalo millers have little interest in Chicago, as the number who "short" in that market is growing smaller every year. But the boys have had a superabundance of flour on hand, the lord knows, and for the present advance, which has caused an unusually heavy draft on stocks, let us pray.

One of our largest millers remarked the other day: I was in that mood when a man thinks there will never be a demaud for anything again. This advance put some life in the prospects; the smart buyers are asking for refusals on plenty of time, but I am tired of doing that sort of a banking business when the market is steadily going against me.

Duluth wheat is considered high by millers and not a few who bought around 96 last fall were selling out in preference to grinding, believing it would be cheaper to shut down between the time when they have no wheat on hand and the opening of navigation. This kept the market supplied for some little time, but the bottom of this bin has been reached and there is now not enough in store to last until the 15th of next month, if half the mills here should shut down. Rochester is crying for wheat and other small towns will also need a large amount to say nothing of New York. The only hope now is that Minneapolis wheat will come in liberally and of late the receipts have made quite a fair showing, still it is only a handful compared to what will be wanted before navigation opens.

A new addition to the Phelps \& Sibley mill at Cuba will be commenced soon.

The elevator pool will be organized in a few days, all hands having practically agreed to accept the shares ap portioned.

The amount of flour annually pro duced in what is known as Buffalo, which includes the falls and surrounding country mills, is given as $1,555,000$ barrels. In 1889, $1,506,000$ barrels were reported and in 1888, $1,380,000$. Of course, these are Thurstone's figures and as near right as anything usually gathered here.

The Bennett elevator will change hands some of these bright mornings and without much fuss either. The Lackawanna is reported to be after this property and so are several other parties. Mr. Bennett said the other day "These people want my elevator and I guess I will let them have it. I'm getting old, too old to bother with it. But they must pay me in just the way I want it. Three quarters down or good security at 6 per cent."

Hull's flour mill near thaca is to have new machinery and receive a general overhauling.
Mr. George Urban has discovered a new way to make the bell boys attend strictly to their duties. While in New York on a recent trip he could not get his bell answered. This made him tired. Jumping out of bed half a dozen times to touch up the bell and then not have it responded to, is not what we pay our board bill for. So George stuck a match in the side of the button. There was a wild rush to get
bell is ringing, sir." "I am aware of it," coolly replied Urban. "Just step over and take that match out, please, and then bring me up something soothing."
The prospects for an early opening of navigation are better than even the most ancient mariner expected, the majority of the opinions placing the date at April 10th. In view of the blue outlook, vessel owners met to formulate some agreement whereby a long tire some unprofitable season, due to an early opening and no freight to carry, could be prevented. The first meeting was well attended and the feeling was that May 1st would be settled on as the date to start out boats, but at a subsequent gathering only nine men
were present. An organization effected with Capt. Frank Perew as president. The agreement, if one is never be lived up to. The thing has been tried for 40 years and not once has it been a success. The line boats will be the first to break the agreement s they did in 1886.
I see a Rochester miller has an idea that Buffalo could ship flour by canal nstead of by rail. Years ago large shipments were made by canal, but since Pittsburg sent two boatloads in 1885 to New York, nothing worthy of mention has been done. With the present through rate obtained by the northwestern mills the rail is cheaper and safer than the canal.
Mr. Conway W. Ball, chief inspector of the Merchants Exchange, with his partner in the joys and sorrows of this world has just returned from a needed vacation. They took in New York, Washington and several smaller cities on the road. Mr. Ball refused to say whether he saw his old friend Grover Clèveland when in New York.
Mr. Horace H. Eldred, formerly mana ger of the Attica mills, is in Washing ton. There is no doubt about his ability to make money in some lines of business, but as a miller he was a flat failure. It was well known here that he had a thorough knowledge of the telephone business, and also that if he would push his claim against a certain company "there was millions in it" This may be his mission in Washing ton at present. Like Steve Sherman Horace needs a balance wheel.
The "hay deal" of the great feed dealers of Buffalo, Messrs. Heinold \& Rhodebough is turning out as everything else they undertake an immense success. If this firm does not realize a profit of $\$ 7$ per ton on their hay, I am no prophet.
Messrs. Spann \& Chandler the largest barley dealers in this city have secured the services of Mr. C. F. Rockwell, a agent for their grain department.
Oregon white wheat was sold as low as 93 cents in this market when No. 1 white Michigan brought 104. The last sale of Oregon was at 104, yesterday and Michigan at $106 \frac{1}{2}$. A few traders in this market outside of the first owners have made quite a speck in handling this wheat and we are looking for a big trade in it next year.
Mr. A. J. Wright has gone to New York having won a point or two in his case. He is also reported to have remarked "we have treed that coon" Ma'by ma'by, but that special coon will keep the two hunters from their dinner a long time yet. Coon is a good fighter and proposes to win.

I want to close with a prediction on $\mid$ the loss of shrinkage while the wheat was barley, viz: that this cereal will sell at lying in the elevators.
$\$ 1.00$ per bushel for Milwaukee No. 2 before the malting season closes.
A new 225 horse-power Corliss engine is being built by the Tifts of Buffalo for the Attica mills and will be "set up" for operation in about six weeks. Miller Bork found it necessary in order to keep up with his orders to get more and better power than the mill now posesses. Although there are now 12 hands employed in the Attica mills besides the head miller and manager Gillespie, all unnecessary expenses have been lopped-
off and probably for the first time in off and probably for the first time in the history of these mills the business pays. The mill at present is rnnning night and day. Mr. Bork manages to in Attica five days in the week.
The most ridiculous quotations of the flour market in this city are published in one of the milling journals, which considers itself authority on everything connected with the trade. Think of $\$ 6.25$ for patent spring wholesale and adding 50 cents per bbl. for a retail price. These prices appeared for weeks before the last advance and there are furnish flour at the quotations given hem. Yes and something less too.
The advance in rye flour astonished such old hands as Mr. Philip Houck Last year the best grade was selling at $\$ 2.75 @ \$ 4.00$, to-day $\$ 5.25$ per bbl. is being obtained. J. B. A. Kern \& Son, of Milwaukee have the best reputation among our rye flour buyers of all outside firms.
The Imperial Mill Company of Duluth will soon begin work on its 50,000 bbl. warehouse. The building will have frontage of 500 feet and be situated so that it will have connection with all railroads. Docks and dredging ar nearly finished.

Buffalo.
Buffalo, March 14, 1891.

## our st. louis letter.

cuit Co's Evident Preparation for a Fight
with the
Commerce Commission Against St. Louis and

THE Missouri legislature continues to flounder on in its legislative course and the farmer and granger element continues to make itself conspicuous by its attempt at legislating. Its last endeavor was to introduce a bill making the freight rates on wheat lower and those on flour higher than they are at present. The granger element fails to see that in this as in everal other bills which have been intro duced the effect will be anything but profitable to themselves and insteal of benefiting they but injure themselves and their customers, the millers.
Another action of theirs is that of trying to separate the state grain inspecto rom the railroad and warehouse commission. This resulted from an inspection of the state grain inspection department when it was found out what salaries 850,000 ) these inspectors were getting. This separation would be well enough did it not make the position of chief grain inspector an elective one, which means that no matter how he may act, the chief nspector, after election is good for four years four years of favoritism. An ther part of the bill provides that all wheat must pass through the hands of and be registered by the state. That this good, in so far as it makes inspection more in accordance with the grade of wheat is approved by all, but that it should be weighed and receipt given for the amount with no respect to loss of weight by shrinkage, is undoubtedly wrong as far as the elevators are concerned who would be obliged to stand all yocal consumption from elevators

Hon. F. M. B. A. Fogle's bill, otherwise known as a "short treatise on milling, ' has been killed.
With the passage of the Union depot bill the value of the Camp Spring and the Anchor mills sites rose about 200 per cent. The Camp Spring mills are situated right where the new Union depot will be built while the Anchor mills, or rather the ruins of the mills, are situated in the immediate neighborhood. These two concerns are to be congratulated on their good fortune in having so advantageous a position.
Speaking of real estate it is rumored that the New York Biscuit Co. has bought up a large piece of property for the purpose of building an immense factory. It is said that over $\$ 300,000$ has been expended in land alone. This action is the result of its fight with the American Biscuit Co., of which concern the St. Louis bakers are all members. It is thus proposed to fight that trust on its own grounds. This will be of much advantage to St. Louis millers, adding greatly to the local demand.
The Inter-state Commerce Commission has handed down its decision on the differential freight questi•n and decides against St. Louis. Our readers may remember that some time ago the Kauffman Milling Co. made complaint before the commission that the rates on flour and wheat from Missouri and Kansas to Texas were hardly just - that while wheat was shipped at 46 cents per 100 pounds flour was carried at 51 cents per 100 pounds, a difference of 5 cents, and that this enabled the Texas millers to buy our wheatat this low rate, and hence destroy our southern trade by underselling our prices. Under these circumstances it demanded that the differential of 5 cents be lowered so that we might not lose through tbe unjust railroad discrimination. The commission holds that the discrimination is not unjust in view of the circumstances surrounding the case; that a greater discrimination, such as the railroads at harvest time sometime make, is unlawful. This is a defeat which St. Louis had not expected and is of mumh importance to all Missouri and Kansas millers who were backing the Kauffman people in their fight and were confident of a successful ending.
Some time ago David B. Kirk \& Co., of Kansas City, offered a prize of three barrels of flour fur the most appropriate name for their new flour. They claim it to be a "combination of six of the leading top patents from hard wheat selected for strength and color, skillfully blended by machinery constructed for the purpose." They believe this to be an innovation in the milling line. In reply to their announcement of a prize over 2,000 answers were received. The name chosen was the "Three B's" or Bakers' Best Blend.
Death has again visited the Kalbfleisch family and another well known miller of St. Louis departed this life. John Kalbfleisch, father of the late Henry Kalbfleisch, of the St. George mills, and grandfather of the late August Kalbfleisch, vice-president of the Kalbfleisch Milling Co., died in his eighty-eighth year on March 9,1891 . He was at one time head of the St. George mills and has long been recognized in the milling trade, though of late the business has been carried on by his children. His death is a source of sorrow not only to his family but to all the milling fraternity of which he has long been a member.

## wheat.

Receipts this week amount to 286,683 bush. as against 247,948 bush. of last week. Shipments are 120,661 bush. as against last week's 140,637 bush. There is also an increase in stock in elevators, the reports showing $1,295,838$ bush. for his week and $1,275,937$ bush. for last. amounted to 39,552 bush., while 93,338
bush. were drawn for rail shipment. The local milling demand for No. 2 Red was good at a fair quotation. No. 2 Red is at present selling at $81.00 @ 81.00 \ddagger$, No. 3 Red at $81.00 \frac{1}{2}$ and No. 4 at 68c.
The flour market wes
The flour market was very quiet this week and very little was done, prices were stiff and buyers few. Receipts for the week amounted to 30,864 barrels as against 24,768 barrels of last week. Last
week's shipments were 70,634 barrels, this week's, 71,372 barrels. The output fell off 1,700 barrels adding up only 62,300 barrels, divided as follows:

|  | Last Weok. Barrel | This Week Barrels. |
| :---: | :---: | :---: |
| Alton City | 4,000 | 4,000 |
| Camp Spring. | . 4,100 | 3,700 |
| Carondelet | - 800 |  |
| Crown | 3.000 |  |
| Eagle St | 5,50 |  |
| Hezel | 2,600 |  |
| Jeffers | 3,500 |  |
| Kehlor | 8,00 | 7,200 |
| Merame | 1,200 | 1.300 |
| Plant |  |  |
| Planet | 4,500 |  |
| Presiden |  | 3,000 |
| Regina | 3,800 | 650 |
| S. Geo |  |  |
| saxony | 3,0id |  |
| Victoria | 2,201 | 2,210 5 5 |
| Yaeger....... | S,000 3,800 | 3.900 |
| otal | 64,0 | 62.300 |

Present quotations on flour are $\mathrm{XXX}, \$ 3.00$ (a3.10; family, $\$ 3.25(13.40$; choice, $\$ 3.60 @$ 3.75; fancy, $\$ 4.10(a 4.20$;
4.55; patents, $\$ 4.75(a 4.95$.

## NOTES

Henry Yaeger sailed for home from Liverpool the other day. He comes on the Britanic and is due in a day or two. Wm. H. Scudder, an ex-president the exchange, died in the past month. Henry Stanley, of Todds \& Stanley, returned this week from a trip through Georgia. Walter Howard Bain.
St. Louis, March 16, 1891

## MILWAUKEE ITEMS.

Peter Ekern, of Pidgeon Falls, Wis., is erecting an Allis roller-process flour mill.
A. D. Godshall. \& Bro., of Launsdale, Penn., are remodeling their 150 -barrel mill to the Allis system.
The Texas Star Flour Mills, of Galveston, Texas, are putting in a 400 -barrel roller process cornmeal outfit on The Edward P. Allis Company's system.
The Edward P. Allis Company, of Milwaokee, Wis., are furnishing a 50 -barrel roller mill to Señor Gonzalez Bocas, of Cuchillo Uegro, Paraguay, Suuth America. L. S. Moore, of Hillsboro, Va., has placed his contract with The Edward P. Allis Company, of Milwaukee, Wis., for a 30 -barrel re
flouring mill.
Worthy \& Duncan, of Woonsocket, S. Dak., are remodeling their 100 -barrel roller mill with rolls and machinery furnished by The Edward P. Allis Company, of Milwaukee, Wis.
Petrie \& Scheur, of Mishicott, Wis., are building a 100 -barrel roller flour mill to replace the one destroyed. by fire and have placed their order with The Edward P. Allis Company, of Milwaukee, Wis.

Schlafer, Huebner \& Co., of Menominee Falls, Wis., contracted last week with Company, of Milwaukee, Wis., for a 100 barrel roller mill driven by a Reynolds Corliss engine.
$\mathrm{W}_{\mathrm{E}}$ are pleased to note that the Prinz \& Rau Mfg. Co., Milwaukee, Wis., are doing a fine business in cockle machines
and grain-cleaning machinery among both millers and brewers. If their trade continues to increase, they will soon be obliged to again enlarge their plant.

NEWS.-The losses by fire at Armmourdale, Mo, on Feb. 24 were:
On the elevator of On the elevator of the Campbell
Co., $\$ 30,000$; insurance, $\$ 28,000$. The loss on contents of the elevator is estimated at $\$ 44,500$, on which there was insurance as follows: On 20,000 bushels of
wheat, $\$ 17,0 c 0 ;$ on 14,000 bushels of oats, wheat, $\$ 17,000 ;$ on 14,000 bushels of oats,
$\$ 6,000$; on 3,000 bushels of corn, $\$ 2,000$. The
contents of the seventeen loaded cars, destroyrd at the time, consisted of 12 car loads
of flour, 5.000 bushels of wheat, oats valued at $\$ 600$, corn meal valued at $\$ 1,210$ and $\$ 2,500$ worth of corn. The 5,000 bushels of wheat was insured for $\$ 4,000$ and the flour for \$7,000. The company also carried insurance
on the corn meal and oats. Kelly Bros the on the corn meal and oats. Kelly Bros., the
coopers, whose loss on their plant was about $\$ 35.060$, were insured for about $\$ 10,000$.
At Tecumsch, Mich., March 4, Heck Bros. flour mill was
ance, 821,000 .
At Butler, Mo., Feb. 18, J. T. Shannon \& Co's flouring mill was burned. Loss, $\$ 35$, 000; insurance, $\$ 12,000$
Chicago capitalists are said to be interested in a big company incorporated a Baltimore to establish a line of steamers to Brazil.

AT Cincinnati, O., March 15. Fire damaged the Sam Weidler \& Co. flour and feed mill on C
Insured.
At Goshen, Md., March 10 , the roller mill of R. D. Riggs, and his saw mill were burned. The fire was the work of an incendiary. Loss $\$ 6,000$; insurance light.
Ат Halstead, Kan.. Feb. 14, the flouring mills of Hoover \& Dunham, and contents, including two cars of flour,
Loss, 825,000 ; insurance, $\$ 9,000$
An exchange says that a man named Corn was married to a lady named Wheat, in a church at Creston, Iowa, and the choir
stunned the audience present upon the occastunned the audience present upon the occa-
sion by singing "What Shall the Harvest be?" Near Dodge, Wis., March 8 , the grist mill and feed mill were burned, together with a large supply of grain that was in stock for feed grinding. The mill was owned by par-
ties in Milwaukee, who took it under a mortties in Milwaukee, w
gage. Loss, $\$ 7,500$.
Fire at Kansas City, Mo., on the night of Feb. 24 destrosed the cooperage establishment of K. R. Kelly \& Bro.; the Armourdale elevator, owned by J. P. Campbell \& Co.;
forty freight cars and about 100 , 0 o 0 bushels of grain, entailing a loss of about $\$ 150,000$ Hooker Hughes Co., Phillipsburg, Pa.; F. N. Ellis \& Co., Glandorf, Ohio; Jno. A. Cole, Rochester, Minn.; Shawano Shoe Co.. Shawano, Wis.; Barlow \&t Lawrence, Thorn-
ton, Ohio; Spiceland Glass Co., Spiceland, Ind.; have placed their orders with Menasha Wood-split Pulley Co., of Menasha Wis., for Hickory Pulleys.
At Chicago, Ill.
AT Chicago, Ill., Feb. 25, the Counselman grain elevator at 3äth street and the Santa
Fe R. R. tracks was almost tally destrod Fe R. R. tracks was almost totally destrosed by fire, involving a loss of $\$ 100,000$. The
building was a five-story structure building was a tive-story structure and had a
capacity of 200,000 bushels. At the time of the fire 50,100 bushels of wheat was stored in the building and was destroyed. Counselman \& Co., Board of Trade operators and the
original owners of the elevator, sold out some time ago to other parties.
Steelton Flouring Mill.-Negotiations were perfected Feb. 16 for the lease of the Steelton Flouring Mill at Steelt $n$, Pa., by the veteran manager and miller of the Pax-
ton and Lochiel mills, Mr. John Hoffer, and ton and Lochiel mills, Mr. John Hoffer, and
others. An application for a charter will be made March 5 , for the Paxton and Steelton Flouring Mills Company for the manufacture and sale of the products of cereals of all kinds, by Henry McCormick, James McCormick, John Hoffer, James Newby and J. W. Barker.

Everett Aughenbaugh \& Co., of Waseca, Minn., have begun work on a new
mill, to be constructed on the site of the burned several weeks ago. J. W. Aughenbaugh has purchased W.G. Ward's interest in the site. The new mill will be of 500 barrels daily capacity, five stories high, built of Chaska brick. The engine will be a Corliss of 150 horse power, and the mill machinery will be full roller. A four-story elevator will about 850,000 connection. The mill will cost dass.
The Northwest Furmer, of Winnipeg, is responsible for the following: "A member of the Winnipeg Grain Exchange shipped a car of wheat to a mill in Ontario recently. As 'Wheat very badly out of condition.' The Winnipeg dealer wired back: 'Examine car carefully and send full report of condition.' To this the Ontario miller sent the following: And again the Winnipeg dealer telegraphed: 'How did you know it was out of condition?'" 'How did you know it was
Comment is unnecessary.
The Stoughton Milling Co., of Stoughton, Wis., refused to accept an offer of $\$ 25,000$ damages by the Dane Cuunty Drainage Commission, holding out for the sum they first demanded- $\$ 190,000$, a sum sufficient to afford an iucome which would pay the additional
expense of steam over water-power. It is understood that the commission will award
damages at about 815.000 and then take immediate possession of the water-power as
they are authorized to do under the law The milling company can then appeal to the Circuit Court and have the damagesappraised by a jury, but the work of the commission by a jury, but the work of the commission
will not be delayed to await the decision of the court and the work of removing the dam may begin immediately. The commission will take possession in a short time ; when it awarded by the court. The case may go to the Supreme Court before its ©nal settlement, as the mill-owners seem determined to stick for heavy damages.
H. C. Page was president of the Page Mill Company and the Fergus Falls Nationa bank at Fergus Falls, Minn, and when the mill company became insolvent the bank began an action and got a judgment for $\$ 45,000$ ency of the mill company. The bank then attached all the assets of the mill company, altached athing assets of the mill compans
leaving nothing to pay the other creditors. leaving no Brg to pay the other creditors.
Maurin Bros.. of Elizabeth, who were caught for $\$ 5,000$, and the National GermanAmerican bank, of St. Paul, which was caught for $\$ 10,000$, began suit to set aside the judgment on the ground that there was col When the first hearing ef the case was han. When the irst hearing ef the case was had, sidered that the bank would hold its judgsidered that e bank would hold its judgthe attorneys for Maurin Bros. put in an affidavit claiming that new and direct testimony had been discovered to prove collusion, and the judges decided to grant a rehearing of the case. It will come up at the April of the
ofm.
which he knows, he cannot be held to accept dangers arising from defective appliances of which he has no notice, and which would not come to his knowledge in the ordinary course of his em-ployment.-Philadelphia \& R. Ry. Co. v. Trainor, Supreme Court of Pennsylvania, 20 At. Rep. 632.
Recovery of Embezzlement.-While the presumption of innocence which must be removed by proof obtains in civil actions to recover money embezzled, yet if it be shown that an employe receives money belonging to his employer which it is claimed has not been paid over, and of which he has made no account, it is then incumbent on him to show that the money was actually received by his employers.-Shaak v . Lyon, Common Pleas of New York, 11 N. Y. Supp. 720.

Expert Work as "Labor Clama."Under a statute making claims for labor against an insolvent preferred claims, the amount due an expert machinist, whose duty it was to adjust and start machinery supplied by his employer, and to operate it until it was demonstated that it fulfilled the contract for its purchase, and to discover and report any defects, although in its nature expert work involving the exercise of skill, education and judgment, was nevertheless accompanied by much manual labor and clearly within the provisions of the statute.-In re Black, Supreme Court of Michigan, 47 N. W. Rep. 342.
Grant of Grist-mill Property.Defendants contracted toconvey "all that certaingrist-mill and water-powerknown as the C. B. Knight Grist-mill Property, including a tract of land at Round Pond, together with all the rights and privileges to the waters in Round Pond that the late C. B. Knight possessed in his lifetime, or belonging to said property." C. B. Knight obtained the property by devise from his father, describing the land by metes and bounds, which included a strip adjacent to the pond, and near the lower part, and a mortgage on the property which was excepted from the covenants of the contract described the property in the same manner, and the strip was included in a map of the property given by the defentant to the agent who made the sale, though the map was not shown to plaintiff. On the other hand, several witnesses testified that the mill property only included the land devised by C. B. Knight, and which was rented and used with the pond, but which there was nothing to show that the purchaser had knowledge of such change. Under these circumstances the strip described should be included in the deed.-Nostrand v. Knight, Court of Appeals of New York, 25 N. E. Rep. 948.

Guaranty of Note-Application of Deposits.-One who is not a party to a note, who has guaranteed it without protest, is liable for the amount, although no proceedings have been taken to collect it from an endorser who is perfectly solvent, and liable on the note as a guarantor as well as endorser, his liability as endorser having terminated by failure to protest, and his liability as guarantor being subsequent to the other party. A bank is not bound to apply to a note deposits made by the maker, after the maturity of the note, or a balance on deposit at that time, which taken together do not equal the amount of the note.-First National Bank of Lancaster v. Shreiner, Supreme Court of Pennsylvania, 20 At. Rep. 718.
Patentability of Mechanical Skill.

288,525, granted June 8, 1880, to William D. Gray for the improvements in roller grinding-mills, namely, "(1) In a roller grinding mill, the combination of the countershaft, provided with pulleys at both ends, and having said ends mounted in vertically and independently adjustable bearings, the rolls, C, R, having pulleys connected by belts with one end of the counter shaft, and the rolls, D, F, independently connected by belts with the other end of the counter-shaft, as shown," does not disclose any patentable subject-matter. The application of belting to drive roller grinding-mills did not originate with Gray, and his peculiar arrangement resulted at most in an improvement in degree merely, and said combination evinced only the exercise of ordinary mechanical or engineering skill. In view of the terms of the specification and the prior state of the art, said claim could not be so construed as to cover a roller-mill manufactured in accordance with letters patent, No. 334,460 , granted January 19, 1886, to John T. Obenchain. By the Austrian patent law, the fixed longest duration of a patent for an invention is 15 years, and every patentee whose privilege has been granted for a shorter period than the longest may claim its prolongation for one or more years within the fixed longest period provided such prolongation be demand ed before the privilege had become extinct. In the original grant of an Austrian patent, the allowance of the franchise was for one year, but on reques it was four times extended, from year to year, and at the end of the fifth year the franchise was suffered to expire. A United States patent to the same patentee, and for the same invention, was issued after the Austrian patent was granted and during the first year it was in force. By the original grant of the Austrian patent the patentee was invested with the right at his mere option, to have the patent prolonged for the full term of 15 years, and, under section 4887 of the Revised Statutes, the United States patent ran for that term, notwithstanding the expiration of the Austrian patent at the end of the fifth year. Un der the Austrian patent law, the ministry of commerce, in deciding the length of the term which appertains to every Austrian patent, exercises a judicial function, and its opinion on that subject will be followed here, agreeably to the established rule that the Courts of the United States adopt the construction of a statute of a foreign country made by the courts of that country.-Consolidated Roller-mill Co. v. Walker, Circuit Court of the United States, Eastern District of Pennsylvania, 43 Fed. Rep. 575.

## trade notes.

The Millwaukee Bag Co. is supplying the wants of a great number of millers, and warehousemen in all parts of the northwest. Their goods and prices give universal satisfaction.
The Vortex Dust Collector Co., of Milwaukee, although they have quite recently increased their facilities, have been obliged to run nights part of the time the past month to keep up with orders.
"The Wadhams Oil \& Grease Co., of Milwaukee, Wis., and Seattle, Wash., are giving away to any one making application, samples of their "World's Fair Metal Pomade" free of charge. Send in your applications early before these samples are all gone."
The Cockle Separator Mfg. Co., of
nished Morgan Scourers to J. B. A. Kern \& Son, Milwaukee, and Willford \& Northway Mfg. Co., Minneapolis, Minn. They have also shipped Kurth Cockle Separators to H. R. Heatl, Ft. Dodge, Ia. (two cylinder machines) ; B. F. \& D D. Hix, Flat Creek, Tenn., and N. H. Nepud \& Co., Coon Valley, 9 Vis. They are furnishing a large number of steel cylinders, and also report a considerable trade on perforated and indented metal.

The Superlative Purifier Mfg. Co., of Milwaukee, Wis., have recent orders for New Era Scalpers from Worley, Reif snider Co., Ellettsville, Ind.; Niles Milling Co., Niles, Mich. (4 machines) Wm. Partlo, Ingersoll, Ontario (double machine); Wm. A. Coombs, Coldwater, Mich. (3 machines); Charles City Water Power Co., Charles City, Ia. (3 machines to go in Cosgrove mill); Goshen Milling Co., Goshen, Ind.; W. B Carithers \& Son, Moscow, Idaho; Chas S. Henning, Cherokee, Kas.; Jacob Geib, Louisville, O.; McKim \& Hamilton, Pittsburg, Kas., and Nordyke \& Marmon Co., Indianapolis, Ind.
The Nebraska City Cereal Mills, Nebraska City, Neb., finding the de mand for their goods far beyond their present capacity, decided to erect new and more extensive mills, etc., and after a careful investigation of the dif ferent systems and machines for the manufacture of cereal products, have awarded their entire contract to The J. B. Alfree Mfg . Co., of Indianapolis, Ind. These new mills will have a capacity of 4000 bushels per day and will manufacture Pearl Hominy, Grits, Pearl Meal, Cream Meal, Export Meal, Brew ers' Corn Malt, Corn Flour, Buckwheat Grits, Rye Flour, Farina, Rolled Wheat, and other rolled cereals and feed.
These new mills in connection with their present oatmeal and cereal mills, and the 100,000 bushels elevators, extensive warehouses, cooper shops, and feed mills, now in process of erection will be the largest and most complete cereal mills in the country. This great establishment has grown up from a comparatively small mill a few years ago, under the efficient management of Mr. Theodore Beyschlag, a young man of rare executive ability and sterling business qualities. The firm is composed of Frederick Beyschlag, Sr., Theo dore Beyschlag and Joy Horton, and has a world-wide reputation as manufac turers of high-class cereal products.

## SHAFTING.

BON'T buy light hangers and think they will do well enough, when your own judgment tells you that they will spring. Remember that shafting is turned one-sixteenth of an inch smaller than the normal size.
Cold rolled and hot rolled shafting can be obtained the full size.
The sizes of shafting vary by quarter inches up to three and a half inches. The ordinary run of shafting is no manufactured longer than from eighteen to twenty feet.
For line shafts never use any that is smaller than one and eleven-sixteenths inch in diameter, as the smallest diameters are not strong enongh to withstand the strain of the belts without springing.
The economical speed of shafting for machine shops has been found to be from one hundred and twenty-five to one hundred and fifty revolutions per
from two hundred to three hundred revolutions.
A jack-shaft is a shaft that is used to reive the entire power direct from the engine or other motor, which it delivers the various main shafts.
Keep the shaftings well lined up at all times, and this will ward off a break own and avoid a waste of power.
Know that the pulleys are well balanced before they are put in position, as a pulley much out of balance is quite a sure method to throw shafting out of line.
Look to the pulleys, and see that they have been bored to the size of the shaft, for unless this is done the pulley may be out of center on the shaft and prevent smooth running.
If possible, apply the power to a line of shafting at or near the center of its length, as this will enable you to use the lightest possible weight of shafting
Hangers with adjustable boxes wil be found to be the most convenient for keeping the shafting in line.
Keep your drip-cups cleaned, and do not allow them to overflow or get loose
Have a supply of tallow in the ooxes; in case of accidental heating it will melt and prevent cutting; this rule, while good for general use, applies particularly to special cases where ther is a supposed liability to heating.
Never lay tools or other things on belts that are standing still, for they may forgotten and cause a break-down when the machinery is started.
Don't attempt to run a shaft in a box that is too large or too small, as you will waste time and fail to secure good results.
A loose collar held by a set-cerew will cause the collar to stand askew, and it will cut and wear the box against which it runs.
In erecting a line of shafting the longest sections should be placed at the point where the power is applied. The diameter can then be gradually de reased towards the extremities remote from this point.
Don't put loose bolts in plate coup ings, as this will give no end of trouble in shearing and the wearing away of the bolt holes.
Don't think that because your shaft ing has been well erected, and you oil it regularly, that it will never need any inspection or repairs.
Don't try to economize in first cost by having long distances between hangers, for a well supported shaft will always do the best work ; short shafts are the surest to be straight and to remain so.

The length usually adapted to shafting bearings is twice to four times the diameter of the shaft, varying with the diameters of shaft, kind of bearings and the material used in them. Large shafts in the gun metal or bronze boxes may have bearings only twice their diameter in length. Cast-iron bearing up to, and including three-inch shafts are often made four diameters of the shaft in length, particularly for selfadjusting hangers.
If babbitt is used for the boxes use only a good material ; do not adopt the common mixture of tin, antimony and lead.

Insist upon having good iron in your shafting, as the bearings will take a finer polish and you will not be subject o sudden ruptures.
If the strain on a pulley is so great that the set-screws already in will not hold it, do not let them score in the shaft, but put it in an extra screw, or cut a key-way and put in a key.
one-quarter of an inch for each inch of diameter of the shaft.

The depth of the key-way is one-half its width.-Western Machinist.

## matzos, of the unleavened bread of the hebrews.

 HE Times-Star of Cincinnati, says the making of this article has become a considerable industry in this country. For three months before the Feast of Passover the matzos bakers are busy, and nearly $8,000,000$ matzos are baked in this city from the middle of January to the middle of April. This represents about 8445,000 .
Said the head baker at Moses Bing, Jr.'s, bakery: "We make about 8,000 matzos a day, for which we use four barrels of flour."
"Do you use the ordinary flour?"
"Yes, but it is the finest quality, and has to be examined by a Hebrew, who judges whether it is satisfactory. We buy ours in this city. Then the water used must be put into a vessel before sundown and remain to settle for the whole night. This bakery is for baking unleavened bread only, and everything is especially got for this bakery, even to the rags we use."
"How do you prepare the flour?"
"We take, say, fifteen pounds of flour, and mixing it with water, we put it into a copper kettle, where it is thoroughly mixed. Then this man, the kneader, takes it, and on this block by means of pressing on this heavy beam, he kneads the dough to the proper cohesiveness.' The reporter saw a block, on top of which was a beam four feet long, fastened by a spring at the back of the block; and there was a man jumping on and off the beam so as to make a sort of artificial kneader, the beam rising when the man jumped off.
"It is then taken to the next room," said the baker, "and about a third of it at a time is passed seven times through these rollers, which you see are arranged like a clothes-wringer's rollers, only these are iron. Having been so pressed, it is of the proper thickness. Care has to be taken here that while one piece of dough is being pressed the other pieces should not become too hard; therefore a man is continually beating them. The piece of dough, now a strip ten inches wide by ten feet long, is put under the hands of a man who uses the rollers much like the ordinary dough roller, except that there are sharp projections sticking out all around to make little holes in the cakes. Next to him is a man with a sharpened wheel which he uses to cut the strip into peces, each the length of a cake. These pieces are put into an oven, and in two minutes they are done."
And the gentleman handed the reporter a matzo, which was almost tasteless except for the slight browning it had received.
"Are these cakes made the same way in Europe?"
"No; abroad there is more hard work. Women knead the dough by hand, and the cakes are thicker than we make them here.
"Matzos cost about 10 cents a pound, and the meal which we make by grinding broken matzos costs 11 cents a pound. We make 100 pounds of meal a day."
Susquehanna Water Power \& Paper Co., Conowingo, Md.; Rose Valley Mills, Media, Pa.; Henry Hadley, Gardner, Mass.; Winnebago Paper Mill, Neenah, Wis.; Lockport Pulp Co., Lockport, N. Y.; have placed their order with the Menasha Wood-Split Pulley Co., of Menasha, Wis., for hickory pulleys and hangers, cone pulleys, friction clutch pulleys and pickers.

[^2]

## "PRINz"

 PATEIT IMPROVED COCKLE MACHINESImmense increase of trade without traveling agents. OUR COMPETITORS GROSSLY ADVERTISING and imitating our STEEL REELS, we have decided to reduce our prices still more.

Among the BIG MILLS using our machines are in MINNEAPOLIS: The Holly Mill; the Zenith Mill and the Pettit Mill.

MILWAUKEE: The Phoenix Mill; the Jupiter Mill; the Gem Mill; the Daisy Mill and the Duluth Mill.

## to be sure of getting the best machine buy the genuine

"PRINZ" IMPROVED STEEL COCKLE REEL.

## THE PRINZ \& RAU MFG. CO., MILWAUKEE, WIS.

## An Important Communication.

TO THE TRADE:
MILWAUKEE, February 28, 1891.
The Duluth Imperial Mill Company, of Duluth, wrote to us some time ago requesting us to discontinue the use of the word "Imperial" as a Brand of Flour. It is hardly necessary to say that we declined to comply with this modest request, but we did tell the gentlemen that if the Brand was of any special value to them we would sell it to them.

After they had notified us that they had our offer under consideration and before they had declined it, they commenced a suit in the United States Court here against us for alleged infringement of their Trade Mark. Since the commencement of the suit, we have ascertained that the attorneys for the Duluth Imperial Mill have been writing to our. customers whenever they could find them, threatening them with prosecution if they sold our Flour of the Imperial Brand. It is perfectly clear to us that both the suit and the threats made to our customers are no more than impudent attempts to bluff us and to build up a trade for the complainant upon the reputation of our flour, and in proof of our assertion, that there is no merit whatever in their claim, we desire to submit the following facts

First. The Duluth Imperial Mill Company only claims to have used the Brand in question since September, 1889. We have used it continuously for over four years, having commenced its use about two years before the mill of the complainant was built.

Second. Complainant has no possible legal claim upon the Brand and does not even pretend to have copyrighted it, or attempted to copyright it. The bill contains the customary interrogatories which the complainant asks, that we be required to answer under oath as to how much flour branded "Imperial" we have sold since September, 1889, and to whom we have sold it. The only possible object we can see in requiring us to answer questions of this character is, to afford the complainant knowledge to which it is not entitled, as to the extent and nature of our business to post them as to who our customers are and where they live, and to enable them to write threatening letters to those customers and endeavor to secura them for their own.

We have retained counsel who have entered appearance for us in the suit, and we assure all our customers that they need have no fear whatever of the idle and empty threats of the complainant.

Our flour branded "Imperial" has attained a reputation so enviable that it is evident that customers could not be induced to forsake it for other Flour, except by threats of prosecution; but we shall protect all our customers fully in the premises, and we intend to bring suit against the complainant at an early date for damages done our business.

FAIST, KRAGS \& CO.
moomenton of DULLUTH ROLLLER MILLS, MILWAGKEE, WIS.

## F○R SALE.

A roller-process flouring mill; 80 miles west of Baltimore; neverfailing water power ; capacity 300 bbls. a day; railroad at door, with shops, store-houses and dwellings.
R. D. MUSSEY, Lawyer,

WASHINGTON CITY, D. C.

## ENGINE AND BOILER FOR SALE.

A 25 horse power Reynolds Corliss engine, with 40 horse-power boiler and heater and connections, all in first class condition and in use at present. To be delivered in May, 1891. A bargain for anyone in need of same. Reason for selling, more power required. For further information address,

RIVERSIDE PRINTING \& ENG. CO.,
124 Grand Avenue, MILWAUKEE, WIS.

ORGANIZATION OF MILLERS IN THE UNITED STATES.
THE MILLERS' NATIONAL ASSOCIATION.

| President-A. R. James, <br> Ist Vice-Pres't-Wm. Sandehson ${ }^{2} 1$ Viee-Pres't-H. L. Halliday, Treasurer-S. H. SEAMANE, Secretary-Frank BARRY, Secretary-Frank Barry, | $\begin{aligned} & \text { Buffalo. N. Y. } \\ & \text { Milwaukee, Wis. } \\ & \text { Cuiro, III. } \\ & \text { Milwaukee, Wis. } \\ & \text { Milwaukee, Wis. } \end{aligned}$ |
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JOSEPHINE ROGERS A HEROINE AT GETTYSBURG.

G
EN. HENRY W. SLOCUM, in an article in the February Review, gives the following reminiscence of the late war:
"We called at the house which has always been an object of interest to all who visit this field. Near the line occupied by the brigade under command of General J. B. Carr, of Troy, N. Y., stands a little one-story house, which at the time of the battle was occupied by a Mrs. Rogers and her daughter. On the morning of July 2 General Carr stopped at the house and found the daughter, a girl about 18 years of age, alone, busily engaged in baking bread. He informed her that a great battle was inevitable, and advised her to seek a place of safety at one. She said she had a batch of bread baking in the oven, and she would remain until it was baked and then leave. When her bread was baked, it was given to our soldiers and devoured so eagerly that she concluded to remain and bake another batch. And so she continued until the end of the battle, baking and giving her bread to all who came. The great artillery duel, which shook the earth for miles around, did not drive her from her oven. Pickett's men, who charged past her house, found her quietly baking her bread and distributing it to the hungry. When the battle was over her house was found to be riddled with shot and shell, and seventeen dead bodies were taken from the house and cellar-the bodies of wounded men who had crawled to the little dwelling for shelter. Twenty years after the close of the war General Carr's men and others held a grand reunion at Gettysburg, and learning that Josephine Rogers was still living, but had married and taken up her residence in Ohio, they sent for her, paid her passage from her home to Gettysburg and back, and had her go to her old home and tell them the
story which they all knew so well. They decorated her with a score of army badges, and sent her back a happy woman. Why should not the poet immortalize Josephine Rogers as he did Barbara Frietchie?"

## [Complied for the United States Mileer.] <br> \section*{milling and mechanical notes.}

In firing to keep steady steam, and up to the proper pressure, I watch the.steam gauge, and when the pointer ceases to move, I know the fire is about spent; then I put in more fuel, and by the time the fire is burning bright the steam has fallen but little. I always avoid having any bare spots on the grate, as cold air going through these will hinder steam making.
No mechanic, however high in his profession, will have all the knowledge there is on the subject; and while it is the learner's duty to obey and help execute the designs of his superior, he should always have the mental reservation that he will accept nothing as final on the mere statement of an authority, but will seek for the reason or proof for everything mechanical when the proper opportunity arrives.
As between a "plain side valve" and an "automatic cut-off," there is now seldom any question for most situations. Under 40 -horse power there may be cases where it will pay to get a plain slide; very few above that, where it is not best to buy an automatic cut-off. There is to be considered not only the fuel but the matter of regulation; and even if fuel costs nothing, the engine which consumes the most steam requires the largest boiler, and boilers are not free in any part of the country that I have got into yet.-Robert Grimthat I
shaw.

## an essay on reels.

BOLTERS or reels are among the oldest and best known appliances in a flour mill. At various periods modifications of construction and varieties of dressing material have been adopted to enhance capacity, improve the work and to diminish the power required ; yet withal there is retained some resemblance to machines of earlier construction, not unfamiliar to the miller, and no special skill has been called for in operating them. As a means of separation large dependance is placed on dressing reels, since by the adoption of a suitable clothing a somewhat decisive line is drawn between what is fit to go and what is thrown off; indeed some aver that all the needful separations of milling can be accomplished if only a sufficient dressing surface be provided. Few would be content with such a result at the present day, but notwithstanding this a long life may be predicted for reels; when rightly applied, they accomplish with ease and certainty much good, whilst in the majority of cases they arrest and conceal that which is imperfect and prevent its leaving the mill.
The amount of work to be obtained from a reel or bolter, according to the space occupied and power entailed, has fluctuated greatly. The modern centrifugal reel in this respect has a considerable advantage over the hexagon reel previously used, which occupied more than twice its space. This latter was slow in operation, a small portion of its dressing surface only being in action; also liable to obstruction of the mesh and other irregularities. In addition to its inconvenient size, in its old form it was altogether ill adapted for the manifold separations of modern milling. We shall have to advert to its various applications again. But with regard to the centrifugal, a more energetic distribution of the material was effected over more of the dressing surface, which in consequence was better utilized, more and better work being done in much less space than with the long silk reel of less perfect design. The old inclined wire machine with internal brushes had some features in common with the centrifugal, but the brushes seem to have been employed to force the flour through the meshes of the cylinder in the least possible time and space, it being no uncommon thing to dress 20 sacks of flour per hour with a 20 -in. reel. Though coarser mesh was then used, the power required was still very great and the work altogether too forcible for present day requirements. Whether the centrifugal is the offspring of this old machine or not, it is difficult to explain why further improvement was not attempted in a machine of such proved capacity. Centrifugals have in recent years been largely applied, and with some of the first forms, the objectionable features of the old wire machine were not altogether abandoned; silk in most cases took the place of wire, and beaters were substituted for internal brushes. After all, we are not sure that the use of the term "beaters" has not been unfortunate; it may seem appropriate to those disciples in milling whose energy is always ahead of their work, and who are everseeking out theshortest wayand forcing the work ; such may be counted on to try to their utmost what heaters can do.
It will be claimed, in some circumstances, that material must be well loosened up before it can be freely dressed, and there would be little objection to this, if the two things did not take place
together; but as not unfrequently hap- grinding, and in the mode of grinding pens, a more energetic speed of beaters is employed in proportion to the fine ness of the mesh, and reels being heavily fed a state of things is brought about which is destructive to the silk, and not conducive to good separation. It were better almost that the reels were blind for a short distance from the head, while this more active agitation takes place and afterwards the dressing could proceed through the rest of the reel in a more rational manner, supposing it cannot be accomplished in a better way, of which more is to be said. The old bolter, not so well known as the wire machine, had a loosely fitting cloth which when charged with meal, was thrown out by the rapid rotation of the reel itself, and the cloth coming in contact with beater bars fixed within a small distance of the reel's periphery, the flour was dashed out in this way, but not so effectively. Springs were applied to the tail of the cloth to give a more uniform tension, but the capacity after this, seldom exceeded five sacks per hour, the clothing being still coarse. Much could not be expected from the brush machine and bolter in the way of separation worked as described, and little appears to have been attempted save a rapid and forcible bolting; very commonly the flour offals and bran were obtained at a single operation, just as one might attempt to bolt all the meal in one of the horizontal bran dusters stilr in use. There were occasional instances of rebolting, but a section of the public has always had its eye on the miller, and formerly this was an innovation, regarded with much suspicion. The deprivation in this case seems to have been different to present day complaints. It was urged that the poorer classes were robbed of the best and whitest flour and received more than their fair proportion of bran, yet it.is urged now by some that they are being starved with too much of the former and too little of the latter.
In the old styles of bolting there was not much of method-it hardly deserves the name of dressing-but it was neces. sary to refer to them to show the direction in which we are going.
The innovation of silk reels from France must have been a noticeable change, when their extraordinary size and diminished capacity is considered in relation to the practice it supplanted. We may infer that a demand for better dressed flour caused a reversion to this more rational manner of sifting, for not only was a different material used for the covers and a finer mesi, but the effect was a near approach to the older system of sifting with sieves. In many of these reels the flour offals and bran were separated in a single chest, the bran present not being without effect in helping to clear the meshes of the flour sheets and keeping the material more loose and easy to dress. The old wire machine was sometimes placed in advance, having a coarse cloth to scalp off the rough bran before the rest was passed to the silk reel. Sometimes a series of reels arranged to follow each other would be seen in the better mills, the work being more subdivided. Knockers, brushes, curtains, currents of air drawn through the silk were, in turn, called up as devices to keep the mesh of the silk clear and keep pace with the recurring difficulties of dressing.

These latter were occasioned some. times by conditions of the atmosphere, at others by the condition of the material itself, as in bad harvesting of the grain, its improper preparation for
itself, not to mention inadequate dreserisk in this respect is increased as the ing surface, and this only imperfectly used. In part, these drawbacks may be obviated by preserving more uniform temperature within the mill by conditioning the grain before grinding, on the kiln or with more modern apparatus designed for this end, or the meal may be dried or cooled after grinding and before dressing. It was formerly the practice to allow the ground meal to stand for some days in sacks before dressing; there was manifest advantage in this, the slight fermentative change resulting from the moderate grinding heat gave a more pleasant aroma to the flour, and it separated better, but this has succumbed to more go-ahead and automatic methods of working. It was the American practice to foster rapid grinding, the output of stones being more than twice that usually practised in this country; the meal was delivered dangerously hot, and required it should be promptly cooled. Means were devised for this end rather than to mod erate the practice of large outputs, and this enabled the bolting being proceeded with, disposing of all delay. As the temperature rises, within certain limits, fermentation proceeds more rapidly, and not unnaturally it has been found safest to grind as cool as possible, but the amount of moisture present in the grain or supplied to it during the tempering process, as also the period of time during which the heat and moisture are together retained, are factors to be considered in relation to fermentative change. They are also likely to create difficulties of dressing, and, if such be overcome whilst in this condition, the retention of moisture in the finished flour in certain circumstances

## it again peril

We have now a greater number of operations to follow in a milling process and the application of reels to these is in some cases preparatory in addition to their use for dressing the finished flour. There are special modifications for special circumstances which can only be glanced at, whilst there are universal applications to all the purposes of a mill. Without questioning the efficiency of any reel or system of reels, the requirements under various which these are or may be met, seems fair matter for consideration. It will be sufficient to refer only to such features as seem most important when applied in the different operations of scalping, grading, dusting and dressing the finished flour under the new sys. tems of milling.
Scalping reels are commonly associated with the breaking processes of milling. In lower grinding systems they were styled catch reels, and much larger. In addition to the breaking down, there are other stages during the reduction of semolinas and branny matters where scalpers can with equal advantage be employed as a preliminary to further dressing. In modern systems it is well known the character of the breaking vary from the breakings; they are often of a brittle and fragmentary nature, combined with a small amount of semolina and flour, and towards the end we have a pliable, curly bran, associated with softer material. In the majority of cases there is no attempt to remove detached particles of bran at each break by aspiration. The bran, having to run the gauntlet of a series of grooved rolls working with differ ential speed, could not be expected to emerge entirely wifhout injury, and the
rolls it passes through, are set closer. Moreover, if the mode of scalping be that of the simple hexagon reel or sifter, these detached particles are in large measure floated off in each reel, etc., accumulating faster in the latter breaks, and giving the meal from these a more discolored appearance than if the loose bran had been aspirated away each time. Where discoloration of the break meal occurs, it is more to be attributed to the retention of so much bran under treatment in the rolls than from any supposed rasping action of wire coverings in the scalpers described. This latter hypothesis starts off with the idea that the bran is in almost perpetual contact with the wire cover from one end of a reel to the other, and after counting up the number of reels in a eries, a very imaginary amount of evil is debited to them. Usually a careful miller mellows such of his wheats as require it before breaking down ; his apprehensions do not extent to any chipping or rasping of the material within such reels, since the light and coarse particles will ride on the surface of the material until as much is discharged through the cloth as required when the time has come to throw off what remains.
The comparative absence of friction in the hexagon reels have caused them to be preferred for scalping over some centrifugals, and they were adopted without attemft at improvement. As with larger reels of this kind, the dressing surface was not well employed, and the cylinders were set with sufficient inclination to forward the material through them. Their speed of rotation is limited, as is well known, too high a speed causing the material to cling to the cloth, which carries it round and prevents dressing; too low a speed, on the other hand, not giving that free rolling motion to the meal which throws the coarser matters to the surface, facilitating a cleaner seperation. The reel bars in these are an obstruction, and objection is raised to them on account of their elevating material a certain distance, distance, from whence much of it has an unbroken fall on to the bottom of the reel, producing irregular dressing. These successive thuds are noticeable, and though it does not follow that the material is precipitated upon bare cloth always, it is an irregularity that called for a remedy. The congregation of material in the lower part of the reel is not favorable to dressing, probably not more than two of the sections formed by the reel bars-and these on the rising side - can be counted on as dressing surface. This traveling over a large surface, with little dressing effect, in part explains why less surface will suffice when more effectual methods of distribution are employed. Currents of air drawn through the cloth are not now in much use ; they are disturbing to distribution and interfere with the order in which meal naturally arranges itself in sliding over the cloth.
Wire covering is a necessity in handling gritty substances, but it is a somewhat rigid material-as also perforated sheet metal - and when the meshes get blocked the matter is not easily dislodged without brushing. The application of outside brushes is more simple in the case of horizontal reels, whether these te prismatic or cylindrical, and there is a disposition to favor the latter. In conjunction with proper means of distribution this shape can be made more effectual ; but without it the circular form is not so good a sifter as the hexagon. Usually such methods seek to elevate the material, discharging it against the cloth, heretofure of little effect, i. $e$, the top part of the reel, and by this or other means th, material is at the same time propelled forwards. Obstructions, such as real bars, are in most
gases removed as far as possible, so as not

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to interfere with the free rolling of meal over the surface of the cloth. The aim is to cause the reels to dress equally over
their whole circumference, which with this type seems hardly possible, though considerable improvement has been effected in this direction.
In some reels the bars or rails are retained as lifters, but are not placed quite close to the cloth, allowing some portion to slide down behind them ; whilst in the higher part of the reel the material on the bars is lifted or trailed over a fixed saddle conforming to the shape of the reel. Having reached the top, the saddle on the down side is formed with a slope sufficient to discharge the material down it, throwing it against the reel cloth on this side, and channels are formed on this slope to pass forward the meal towards the tail. It is plain the whole circumference here is not utilized-probably the half of it could not be fairly counted upon to dress -the use of the saddle prevents the meal on the lifting bars falling back as in the hexagon reels, and the bars themselve are
not a serious obstruction to sliding of the material, or to the cloth itself; yet the top part of the reel is is doing no dressing work, and the sides next to nothing, on account of the too vertical disposition of
the cylinder side walls for a portion of the distance traversed. Dressing commences where the gravity of the meal is sensibly felt against the cloth, which is in the lower half of the reel. The frequent lifting and increased sliding motion set up
here is so far an improvement on older reels, and may be expected to have greater capacity and dress better, owing to this better distribution.
Another means, having the same end, somewhat less diameter than the reel within and rotating with it; upon the surface of this cylinder, serrations are formed or lifters placed, spirally arranged and in miniature not unlike a grooved this cylinder and the reel cloth the meal is introduced; the serrations or lifters continuously raise the meal as it is being dressed, throwing it lightly against the cloth, the spiral arrangement of the lifters propelling the material forward. The space allotted for the handling of meal is
limited by the introduction of the inner cylinder, which may not be a fault where machines are properly fed. This form, like the preceeding one, has better distribution and fewer obstructions; the meal has free motion and the lifters may be considered as continuously skimming to the surface. Akin to this type is a reel in which the lifters are parallel, but fixed upon the edge of a spiral screw, which may be regarded as taking the place of the internal cylinder. This spiral is used to forward the meal lengthwise, and
of course it does not occupy the internal space of the reel in the same way that a cylinder does, and any risk of the meal wedging itself between the cloth and cylinder, as in overfeeding, is avoided.
The cylinder machine, on the other hand, carries more lifters or serrations on its surface, and any meal falling from these does not fall through space to the bottom of the reel with non-dressing effect. Of these two types there is not much to
choose, but it is too much to say the whole circumference is made to dress in either. If the reel rotates at a speed to cast meal from the lifters towards the
cloth before it arrives at the top, then there is none to cast on the down side; if, on the other hand, they do but lift for the most part up the rising side on passing over the top, they may be discharged
with some little impetus against the cloth on the down side, in addition to the gravity of the meal itself, as lifters may of course, be assumed to be overcharged and part with some of the material being raised, which, in the act of sliding back, would be dressed in the lower half of the reel as before described. We have also
means for elevating meal within the reel which, on attaining the top, is tilted over,
discharging more energetically against the cloth than the before-mentioned fixed lifters. These discharges are, however, of a more intermittent kind. It is possible the capacity of these latter may be a little greater through this additional energy given, by tilting, but in all we see a difficulty in attaining to a continual sifting over the whole circumfrence. Their adaptibility to the various purposes set forth we shall attempt to summarize at some features in centrifagal reels. These as is well known, have beaters rotating within the reel at a higher speed than the latter, effecting more active distribution. As in the old wire machine, the reel has been made a fixture, and in occasional instances caused to rotate in opposition to the beaters without moderating the speed of these latter. In these cases the cloth offered in such as have tight cloths, but there was an attempt to introduce a fixed reel having a loosely fitting cloth, and this machine had also fewer beaters. The manner of feeding it along its length instead of the end assisted distribution, but what was the record of its durability we have not enough experience of it to en-
able us to say. The rotation of the rel in the same direction as the beaters at slower speed was adopted in the old wire machine, and it is retained in the centrifugal; it lessens the wear on the cloth, because it is a yielding surface, instead of steadfast or opposing one. The beaters disposed with a certain amount of draught to cast the material outwardly against the cloth in the most favorable way for ressing, at least this is the explanation turned back, possibly with the idea of striking the material in a direction more at right angles with the surface of the cloth. They, however, worked so near to the surface as to cause undue compression on it in the lower part of the reel where softer material had also a plastering action against the cloth, which kept the outside brush busy in removing it. The advantage of this was questionable for
dressing, and often the beaters were plain dressing, and often the beaters were plain high speed, cause such a dispersion a the meal before them as to retard dressing, working more like a fan in such cases, which can be more or less obviated by freely perforating the beater strips. This is also avoided in a large measure by beaters that are not continuous strips, but which allow air to pass. In some
reels the beaters are so numerous as to be an obstruction to each other, interfering with the throw against the cloth. Probably this was intended to prevent accumulations in the bottom of the reel, but benefit has often resulted by the removal of every other beater. In all these the mtal is discharged to one side, according to the direction the beaters run. These are not capable of raising meal from the
reel bottom and casting it over the whole reel surface with equal dressing effect. They have a greater capacity over slow reels because of the more energetic action of the beaters. The accumulation at the
bottom of the reel is a drawback, and it is putting an impossible duty on the beaters to disperse this and at the same time to distribute it properly, in addition to distending the cloth until it sometimes
bursts. Whether the means now tried of inter-elevation be the best that can be adopted remains to be seen, but to relieve the reel of accumulations at the bottom and deliver this upon the beaters at another portion of the circumfrence is undoubtedly a step in the right direction, utilizing more of the surface for dressing. Of these there are two recognized methods One consists of channels or pockets in the cylinder frame, presenting no obstruction to the beaters, which may be placed com-
paratively close to the cloth. The construction of the cylinder is that of segments bolted together, the ribs and rails of which take from the dressing surface, and the introduction of these channels i a still further curtailment of dressing area. An undoubted advantage is gained by the elevation of the meal over non-elevat-
ing reels for the reasons given, and it suggests itself that more frequent eleva tion of smaller quantities might be still more effectively combined with a construction of cylinder giving the largest possible dressing area. The channels or elevating pockets naturally require to be made to discharge their material with certainty at the highest point. The type mentioned empty themselves before reaching so high a point.
In the other form referred to, special swing elevators are fixed inside the reel near to the cloth. There are more of these than in the first-named reel, and they gather up the meal and carry it to a higher point, whire they tilt over and discharge their contents completely. This construction requires the beaters to be
placed at a greater distance from the cloth in order to clear these internal elevators The further off these are their force becomes more spent on reaching the cloth and additional speed is required to compass this. It is conceivable, too, when the beaters run within these elevators, that the meal will be often thrown against them and rebound, to say nothing of the
trituration that may ensue. A third type, which has obtained no extensive adoption here yet, is provided with two sets of beaters-or we may call them such - one set close to the cloth is curved to them at a certain point on to an internal set of beaters curved to throw it out against the cloth. These are said to have an improved capacity, and much may not be said against this. The largest dressing area could be preserved with this type, yet it will be seen the inner set may discharge against the outer set, even if disposed between them. The speed maintained for the inner beaters to throw the meal far enough entails so much greater periphery speed for the outer set that the meal must be cast high when lifted from the bottom. Then something is to be said about centrifugals being when used as final dressing machines it would be well if this detaching could take place before entering the dressing reel. The reels in these cases must detach the flakes and not allow them to pass over the tail, and the speed kept up can be too forcible for good dressing. This is more troublesome in the case of soft stuff.
There are the special combinations of reels intended to scalp and redress and ve space, some of commendable, some of doubtful efficiency for the double pur-
pose. These may be useful in smaller plants or confined situations, and would entail we.
them all.
In the application of reels to the purposes mentioned we require in scalping reels the largest capacity in the least space. The centrifugal answers to this description, and has been freely used. Objection is taken to its triturating action, and we neither want to make flour nor abrade the
bran in handling breaks. As shown, some improvements have been made in these reels, and it seems by no means impossible to apply them here at a speed just sufficient for the purpose, facing the
beaters with leather or making them entirely of leather strips. The same may be said of it for dusting semolina and middlings ; we want to adopt all means to remove the flour without making more in handling it. Applied to finish dressing ing we are disposed to adopt them for dressing the soft and fluffy flours at the tail end of a process which requires more energetic treatment, and the beaters need not be faced with softer material. A
suitable speeds we should prefer their use
with faced beaters in scalping, after smooth rolling of semolinas, counting upon a redressing of these sharper flours in improved slow reels, in this way the centrifugal would detatch and scalp, and the slow reel would redress the reduced quantity, and give a superior flour-it is often the reverse of this. Slow reels, too, are thought best for most of the breaks: but on the ground of greater capacity and limitation of wire cloth surface, we suggest. centrifugals. The latter are used to scalp the last of the breaks, which are not so gritty and destructive to the cloth.
Then, for grading, if a reel must be used, the improved slow reel is preferable to the centrifugal, though perhaps not the most perfect machine for the purpose. The material should be first dusted, and when graded we must try not to make more dust. To make some, is unavoidable, as the friction of these friable particles rolling amongst themselves produces dust. In grading, certain cloths re placed on the reel to sort out sizes corresponding to the mesh over which it travels; but as the material does not travel over a level surface, sizes that should pass through the mesh often pass over, and the next cloth of coarser mesh receives them, in its turn rejecting some sizes it was provided to pass. This is only an attempt at grading, and, properly speaking, such reels ought to be used as distributors to grading sieves, which could then more effectually complete the work. It may be considered that many salient features have been over looked in regard to reels. It is possible; but the attempt to deal with every detail might be too formidable. Those features referred to, may strike others in a different light ; but that is how the world is com-
posed.-In The Miller, (London), January and March number.

By "Edible".

## minety thousand dollars.

THE city is to be congratulated on having an accession to its capital of $\$ 90,000$, through the nization of the J. B. Allfree Manufacturing Company, which is engaged in the manufacture of mill machinery and is at present located on Shelby street. The success of their business and the notice which their line of machinery has attracted in the milling world, drew the attention of some New York capitalists, who, without the knowledge of the company, began an expert examination of their line of machinery and methods of business, and were so well pleased that the manager of the company, J. B. Allfree, of this city, was recently surprised by a letter requesting him to come to New York for a conference. The writer was Mr. F. O. Matthiessen, the leading man in the sugar business of the country and many times a millionaire.
Mr. Allfree found that Mr. Mathiessen had had his attention called to the J. B. Allfree company, of this city, which up to that time, had been doing a successful business on a paid up capital of $\$ 60,000$. Mr. Matthiessen controls the patents on a German invention in the line of mill machinery and having made a thorough investigation as to the Allfree company, with the promptness characteristic of New York men, further surprised Mr. Allfree t the conference in New York by at once proposing to arrange with the Allfree ompany for the manufacture of this new machine in this country, in connection with its other line of machinery. To enable the company to enlarge and extend its business, he next proposed an increase of the working capital, and that he and his friends would pay in at once $\$ 90,000$ and furnish from time to time as much more capital as it might require to exend the business.
As a part of the reorganization, Mr. Matthiessen's proposition having been accepted, it was agreed upon that the company should at once build extensive
works to accommodateits increasing busi-
ness, which will be done as soon as the building season opens. The patents owned by the company and the machines made by it enable it to furnish a complete equipment from the basement to the attic of the mill, and the unlimited financial credit which the firm now possesses will at once make it one of the most important enterprises in the country. The officers of the company are: Robert Shriver, president, of the First National Bank of Cumberland, Md.; J. B. Allfree, vice-president and general manager; M. H. Escott, secretary and treasurer, and William H. Ruef, superintendent, the three latter being citizens of Indianapolis. Notwithstanding the fact that as much as $\$ 25,000$ has been offered the company to remove its works and business into the gas belt, it is arranging for the crection of its plant in this city.-Indianapolis News (March 14).

## LONGITUDINAL VS. GIRTH SEAMS.

Uhave heard surprise expressed that boilers are made with triple riveted
ong the longitudinal seams, butt joints along the longitudinal seams, riveted. It is true that such a construction hardly looks right, at first sight, to one who has never given the matter consideration; but a little investigation will show that the girth seam is even stronger, in proportion to the load it has to carry, than the longitudinal one.
The strain on the longitudinal seam, per inch of its length, is known to be equal to the
diameter $\times$ pressure
This rule is demonstrated in all the textbooks on the subject, so that we need not repeat, in this place, the reasoning on which it is based.
To find the strain on the girth seam, per inch of its length, we have to remember that the only strain that comes on this seam is the pressure that acts on the heads of the boiler, and tends to pull it apart endwise. The area of the head being $.7854 \times$ (square of the diameter), the total pressure upon it will be
$.7854 \times$ (diameter $^{2} \times$ prissure.
This pressure acts endwise along the boiler, tending to pull it apart; and it is withstood by the plates of the boiler, and, where these come together, by the girth seams. The length of each girth seam is the same as the circumference of the boiler; that is, it is equal to
$3.1416 \times$ diameter.
The strain on each end of the length of the girth seam is found by dividing the total strain upon it by the length of the seam. That is, it is equal to
$.7854 \times(\text { diameter })^{2} \times$ pressure $3.1416 \times$ diameter.
Since 3.1416 is exactly 4 times $.7854_{2}$ we find from above, by cancellation, that the strain on the girth seam, per inch of its length, is
diameter $\times$ pressure
By comparing (2) with (1) we (2) the strain on the girth seam of a boiler is precisely half of the strain on the longitudinal seam; so that if the former is half of the strength of the latter, the two are equally well adupted to the loads they have to carry when the boiler is in operation. If the boiler has a triple-riveted butt joint, with a strength of 87 per cent of the solid plate, the girth seam will be abundantly strong if it is equivalent to 432 per cent of the solid plate. Now a well constructed single-riveted joint may easily have a strength of 56 per cent, so that it would still be amply strong, even if a longitudinal joint could be made with a strength equal to that of the solid plate. In fact, if the girth seam has a strength of 56 per cent, the plates themselves should rupture longitudinally before the girth joint would give way.
Of course it will be understood that the
foregoing remarks apply only to boilers
in which the construction and materials in which the construction and materials are perfect. As a matter of fact it is
occasionally recommended that girth joints be doubly riveted, though this is done only when the particular circumstances of the case seem to require it.The Loc, motive.

## or. bichardson on alcohol.

(2xR. B. W. RICHARDSON, who is one of the ablest physicians in Great Britain, says: I became an abstainer from alcohol for the most commonplace and selfish reason in
the world, the instinct of self-preservation. From a lecture delivered in one o my experimental and practical courses to medical brethren, on December 7, 1869, I infer that I had got, at that time, very near to the practice of abstinence, and quite near to the truth; for I find mysell closing the lecture with the following words: "Speaking honestly, I cannot, by any argument yet presented to me, admit the alcohols through any gate that might distinguish them as apart from other chemical bodies. I can no more accept them as foods than I can chloroform, or ether, or methylal. That they produce a temporary excitement is true; but as their general action is quickly to reduce the animal heat, I cannot see how they can supply animal force. I can see clearly how they reduce animal power,
and can show a reason for using them in and can show a reason for using them in order to stop physical pain, or to stupefy mental pain; but that they give strength, i. e., that they supply material for the
construction of fine tissues, or throw force into tissues supplied by other material, must be an error as solemn as it is widespread. The true character of the alcohols is that they are agreeable temporary shrouds. The savage, with the mansions of his soul unfurnished, buries his restive energy under their shadow. The civilized man, overburdened with mental labor, or with engrossing cares, seeks the same shade; but it is shade after all, in which, in exact proportion as he seeks it, the seeker retires from the perfect natural life. To resort for force to alcohol is, to my mind, equivalent to the act of searching for the sun in subterranean gloom
until all is night. It is time now for the until all is night. It is time now for the
learned to be precise respecting alcohol, and for the learned to learn the positive value of one of their most potent agents for good or for evil; whereupon, I think, they will place the alcohol series in the position I have placed it, even though their prejudices in regard to it are, as mine are, by moderate habit, but confessed inconsistency, in its favor." I have heard it said many times that this was the strongest utterance I ever made against alcohol; because, when I made it I was not an abstainer. But I have a
word more to add. At the time when the word more to add. At the time when the lecture above named was delivered, 1 hal
looked only at the physiological side of the matter. Afterward I studied, in the same experimental way, the power of alcohol in producing disease. Thereupon I discovered that so potent is alcohol in producing structural and fatal àisease, just as certainly as I could make an animal dead drunk by it, so I could conjure up organic disease to order, if I may so put it, according to my will, and almost according to fixed time and season. Also, I detected that the fatal changes were much more quickly and surely brought about than I had ever supposed possible. I was startled at what I witnessed, and, selfish-like, applied the moral. I said to myself, May be I am experimenting on myself. But why should I? "If thy right hand offend thee, cut it off," was the daily plea of conscientious knowledge; and, at length, the plea prevailing, I cut off alcohol root and branch. Then, when 1 found how strong and healthy I was, as well as safeunder total abstinence; I thought it my duty, even at the risk of speaking less forcibly against alcohol than I might do
if I partook of it-as the spirit of evil
suggested-I began and continued boldly to expound all the facts; and that is the way I became an advocate of total absti, nence, as well as a total abstainer.
an unusual accident in a boiler ROOM.

层PECULIAR accident came to our notice not long ago. A
fireman had allowedthepressure in his boiler to go down at night, and had then opened the blow-off valve and gone home, leaving the boiler to empty itself during the night. In the morning he entered the boiler room and closed the blow-off valve, as no water was escaping through it, and presumably there was none left in the boiler He next loosened the front hand-hole plate and knocked it in. A considerable amount of air rushed in, and immediately afterward a stream of hot water burst forth, throwing the fireman against a wall opposite the front of the boiler, and scalding him severely.
The explanation of this strange action seems to be that there was little or no pressure in the boiler when the blow-off
was opened, and no vent through which air could enter. The result would naturally be that water would escape through the blow-off until a partial vac-
uum was formed in the boiler. Then uum was formed in the boiler. Then the flow of water would cease, and in-
stead of an empty boiler when the blowoff was closed next morning, the fireman had a boiler nearly full of scalding water. Upon opening the hand-hole a considerable amount of cold air rushed in, owing to the partial vacuum inside. As this air bubbled up through the water it became heated and expanded so rapidly that the pressure in the boiler immediately rose sufficiently to force some of the scalding water out into the fireman's face. This is the explanation that seems to us most likely, though it must be confessed that one would hardly expect any very violent

## -The Locomotive.

## benefit of compeition.

(21)OMPETITION has developed many new and important feat-
ures in mill machinery and milling systems. It has been brought about principally by the wide-awake and energetic mill builders. It cannot be disputed that milling engineers and mill builders have a better opportunity than regularly employed millers for making experiments and perfecting machinery in general. One can build a better mill for a given sum of money at this time than
ever before. This is true not from the fact that material and labor are cheaper, but owing to the energy and thought which are put into the planning and general arranging of mills. Competition has worked wonders for millers. Not the competition which cuts down prices, but the competition that makes men thoughtful. Competition has made a difference in the construction of mills which can only be appreciated after one has recalled the dirty, irregular, ill-contrived mills of the old millstone days. The art of mill building, like all other industrial arts, and like all human knowledge, grows or advances only as new facts are brought to light and demonstrated to be facts. - The Roller Mill, Buffalo.

## a plain speaking clergyman.

According to the London Figaro a Welsh preacher of the Calvinistic Methodist persuasion, when lately delivering his farewell discourse to the congregation he was about to leave, concluded his remarks as follows: "And now, brethren, I will tell
you why it is that my separation from you does not seem to me altogether pain-

Ameriean Steam Cauge 00. Burifon Siceam Gaulyes wwn Lames nemonumant 00020000000000000000000
THOMPSON'S


Indicatop
mepiar
or Locomotive, Stationary and Portable
Boilers, and Instruments Inciden for Price List I.
36 Chardon St., BOSTON, MASS.
Send for Catalogue K.

## Patents for Inventors.

CHAS. E. BROCK,
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## FOR SALE-In Wisconsin.

ith stone roller flour mill, 4 stories, frame power for 4 water wheels. Flume, daty water mill in good condition. Frame warehouse and office close by, and long sheds for farmers' teams. The whole property in full operation 16 hours daily, doing profitable
business. Has big grist business. City of 2,000 population; two railroads. Good trade with citizens, farmers and lumbe men, for
flour, feed and rye. Good local grain, a d
plenty of it. Good place to live, has good flour, feed and rye. Good tocal grain, a d
plenty of it. Good place to live, has good
schools and churches, and close to other
large citie. Owner non-resident, which is large citie
reason for
on for selling. Address, $4-\mathrm{tf}^{\mathrm{M}}$

## A GREAT SNAP

We offer for sale a first-class steam flouring mill at a price that will astonish you. Ca-
pacity 100 barrels, situated in the Soll pacity 100 barrels, situated in the Solmoon Valley, the best wheat country in Kansas.
In good repair, and running steady. Ele-
vators and warehouses complete. On the vators and warehouse
U.P.R.R. Address

Bank of Glasco,
Glasco,

## FOR SALE.

Having lost my water power, I offer for
sale my complete outfit for a small mill, consale my complete outhit for a small mill, con-
sisting in part of one of E. P. Allis Co's 4 break roller mill, 2 pairs single rolls, burrhs, bolts, puritiers, cleaning machines, scales,
elevators, belting, etc. Correspondence so${ }_{2-1 \mathrm{t}}^{\text {licited. }}$

Winona, Minn.
ful. It is for three reasons, dear friends. Firstly, because you do not love me; secondly, because you don't love one an other; and thirdly, because God does not love you. For if you had loved me you would have paid me those arrears of my beggarly stipend you still withhold; and if you loved one another I should have had the pleasure of celebrating many more marriages among you ; whilst if God loved you he would have had, ere this, called many of you above, and I should have had more funerals to conduct." That minister was not asked by his deacons to withdraw his resignation."
Much of the advertising of the present day is no more than intelligent adopta-
tion. With this idea in mind note the tion. With this idea in mind note the
following: An ingenious four-y ear-old boy up town amazed his father a day or two ago by swaggering into the paternal presence with the remark: "Papa, I've made a good motto for undertakers to put in their shop windows". And the indulgent father, preparing to look amused, asked "What is it, my son?"
"Why, it is this," explained the youngster: "You kick the bucket; we do the rest."
And the father's amusement and amazement were looked without more prepara-
tion.

## fecent milling patents．

The following are a list of Patents relating to Milling and Grain－landling appliances， granted during the month of February，as spe
cially reported for the U．S．Miler，by Chas E．Brock，Patent Attorney，Pacific Build＇ng， Washington，D．C．：

Minneapolis，Minn．
445．821，Grinding－mill，V．L Rice，New York，N．Y．This consists of an internal ly－circular chamber，a main shaft arrang shaft connected by a universal joint with the main shaft in a line with the center of the chamber，having a roll at its lower end for revolving around the interior of the chamber，and a spiral flange around the roll－shaft．
446，026 P＇ueumatic grain transfer，storage and preservation station，L．Smith，Chi－ Igo．Ill．，assignor to the Smith Pneu－ West Virginia
446027 ，Floating grain－silo，L．Smith，Chi－ cago，Ill．，assignor to the Smith Pneu－ West Virginia
46，040，Grain－apron，J．E．Van Horn lenderson Station，Ill．
446,043 ，
iermany．
46．155，Flour－bolt，C．Schied，Rochester
446 219，Grinding－mill，J．\＆A．J．Jones， Thorold，Canada．
46．266，Automatic weighing and packing machine．J．A．Ostenberg，Des Moines， lowa．
446，365，Fanning－mill，J．Pelzer，J．Wer I．Humbird，Wis．
446，507 Dust－collector，E．Bretney，In－ dianapolis，Ind．，assignor by mesne as signments．to the Cockle Separator Man
ufacturing Company，Milwaukee，Wis． 46 566，Grain－conveyer．J．B．Barth． mew，Des Moines，Iowa．
446．759，Means for manufacturing 46．759，Means for manufacturing homi－ ow Springs．O．
46，788．Grain－register，J．H．Peachey，At lensville， P ＇a
446．794，Grain－separating apparatus， ．Simons，Omaha，Neb
ector，F．C．Miller，J．I．W and dust－co City，Oregon．This covers the combina od to swithe frame and a screen mount to swing，of an arm adapted to be en－ the lower end of the arm and to pited second arm adjustably secured to the fist arm and a link pivoted to the ure nd of the second arm and to the screen． 446,881 ，Alarm－bell for grain－elevators， 47.026, Dust collo．
amden，
147,072 ，Feed－device for grain－cleaning machines，roller mills，\＆c．，W．W．Hunt－ assignments to Huntley，Crauson \＆Ilam－ mond，same place
The Future of Rye Flour．－The New York Commercial Bulletin has the following：＂Mr．R．W．Thatcher，was on＇change the other day and gathered quite a crowd of flour men by the an－ nouncement that he expected to see rye flour cross the price of the best patents，
before we go into another rye crop before we go into another rye crop，
because Germans prefer rye bread at the same or a higher price than wheat， and because the rye grain to make barrel of flour costs as much as No． 1 hard wheat，taking，as it does，one bush el more of rye to a barrel of flour than of wheat．
Knew Her by Her Bread．－－＂Mad－ ame，＂said Puffer，addressing Mrs．Skim－ pin，at the breakfast table in her select boarding house，after gnawing at an es pecially hard piece of last week＇s bread Mrs．Skimpin，you believe thoroughly the Bible？
said that amiable lady ipation of the usual attack
＂And you believe that all set down in good Christians．＂
＂Certainly，I do；certainly，Mr．Puf
＂I thought as much，for it is written in it that by the sweat of his brow shall a man eat bread．＂
民AエITAY．

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CHICAGO
INDIANAPOLIS
－CINCINNATI
The Only Line running the Popular Buffet CHICAGO and CINCINNATI

The Only Line from Chicago running Solid
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Cincinati，where connection is made with
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B．MARTIN orncinnati，o





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The Winter Resorts of Florida and the Sunny South．
At no time in the history of southern travel have
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ised for 1890－91．At Jacksonville，St．Augustine，and along the
been made for the entertainment of northern guests，
and all visitors can rest assured of the old．time
$\qquad$
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cars，and elegant parior cale dining in Central Union tepot at Cineinnati with through
trains for all points in the South．Ask for tickets via he Big Four Route．

D．B．Martin，

## THE FINEST ON EARTH，＂

The Cincinnati，Hamilton \＆Dayton R．R safety vestibuled trains，with chair perfected sleeping and dining car service betw，parior cinnati，Indianapolis and Chicago，and is the only line running through reclining is the cars between Cincinnati，Keokuk and chair field，III．，and combination chair and spring ear Cincinnati to Peoria，III，and the sleeping rect line between Cincinnati，and the only di Toledo，Detroit，the lake regions and Cima The road is one of the oldest in Canada Ohio and the only one entering Cincinnati over twenty－five miles of double track，and from its past record patrons speed，comfort and safety assure its patrons speed，comfort and safety．Tickets on sale everywhere，and see that they read Indianapolis．or Toledo．E．O．MCCORMICK General Passenger and Ticket Agent，Cin－ General Passe
cinnati，Ohio．


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Fast Vestibuled Trains
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Pullman and Wagner Sleeper CHICAGO to SAN＋RANCISCO without change
COLONIST SLEEPERS CHICAGO TO PORTLAND，ORE and SAN FRANCISCO．

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For Maps，Time Tables，rates of passage and freight， etc．，apply to the nearest station agent of the ：iH1
CAGO，MILWAUKE $\&$ ST．PAUL RAILWAY，or to Any Railroad Agent anywhere in the World．
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Short Route to Florida．
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Steamers leave Milwaukee daily，except Saturdays，
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LEAVE MILWAUKEE FOR



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Sec．and G．T．
Exporting millers should write to the Riverside Printing Co．，Milwaukee，Wis．，for the best Flour Cable Code ever published． There are more copies of this Code in use than of all other flour codes published．It is simple and accurate．It is called＂The


THE KEYSTONE


| St. Francis, Kan., October 5, 1890. <br> E J. B. ALLFREE CO., Indianapolis, Ind. Dear Sirs-In reply to yours, we have been running ks, and can say that your rolis are the bext we have ever ted, and the adjustments cannot be beat trouble since sers and centrifugals are "daisies," They work ju a charm, and the cleaner and scalper do splend k. They can not be beaten. All the other machine o trouble to set it up. We can make fffty barrels of flour ours from No. 3 wheat. Our wheat is very poor is giving very good satisfaction, and The . J. B. Allfr is the best frm we ever had any dealings with. They more than the contract called for. If we need any mo minery after this, they will get the order. |  |
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| James̀town, Ind., September 10, 1890. <br> THE J. B. ALLFREE CO., Indianapolis, Ind.: <br> Gentlemen-We have been running the mill you built here since February last, and can say we do not regret having given you the contract for rebod one, but you have certainly improved on it, as we make a better cleun-up if possible that the old one. Our flour compares favorably with that of other mills making four or five times as much low grade flour, and weare only making but two to three per cent with a very shif is first-class throughout, nnd certainly requires as littie power to run it as any mill of the same capacity. Yours truly. |
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the Jamestown milling co.

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Adim, THE J. B. ALLFREE MFG. CO., 76 wos Shably Sth, INDIANAPOLIS, IND.

NEW YORK BELTING\& PACKING CO
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## American Flour Mill eGrain Elevator Directory

$\Rightarrow$ FOR 1890-1891 俧

It contains: 1. A list of Flour Mills in each State, Territory and Province, with names of owners, P. O. and county; in thousands of instances giving their capacity in barrels per day, kind of power used, etc., also indicating such firms as are supposed to be worth $\$ 10,000$ and upwards. Total number of mills given, 17,145 .
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3. A list of Millwrights.
4. A list of Grain Elevator Owners and Grain Dealers.
5. A list of well-rated Flour Brokers, Merchants and Bakers in all parts of the United States and Canada, which has been compiled with extraordinary care, capital and credit being considered in the compilation.
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The price is invariably Ten Dollars per copy, on receipt of which it will be sent, post paid, to any part of the world. The complete work only is sold. We do not supply lists for single states. These Directories have been issued every two years since 1878, and have been declared indispensable by the prominent mill-furnishers, flour brokers, millers, etc., of this country and Europe. Address,
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Requires no cloth, no dust house, nor dust catchers.
All grades of middlings perfectly purified with absolutely no waste.
In use in many of the representative milis in the country and being rapidly adopted in all sections by all classes and sizes of mills.

THE JONATHAN MILLS MFG. CO., Columbus, O.: ded
Gents-On receipt of this, please send YOUNGSTOWN, O., August 4, 1890. more I use these machines, the better I like them. Our mill is so much cleaner than it ever was the ones heretofore sent. The loating in the air, no waste whatever caused in the purifying process. Our middlings are absolutely perfect, and mave no dust waste and almost without power, the amount required to run the machines being so small. Respectfully yours,

E JONATHAN MILLS MFG. CO., Columbus, O.: night or day until he gets the rest of them. Thinks he will want six more. So please send them along as soon as possible. Let us know how soon we can except them.
kours Very Truly, So please send them along as soon as possible. Let us
ACME MILLING CO., by S. F. Robinson, Pres.

## THE JONATHAN MILLS MFG. CO.

Write us for particulars and references.

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WITNESSETH:
THE BRADFORD MILL CO., Cincinnati Ohio:
AKRON, OHIO, September 23, 1890.
Gentlemen-Mr. Clark has just given me his order for the Dunlap Bolt, and wants it shipped as soon as possible. Make up and ship with the Bolt a Conveyor as per enclosed sketch. * * * Respectfully,

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The general experience of American Millers unites in pronouncing these rolls the very best for Flouring Mill use.
These Rolls are now used in all Leading Flouring Mills Chilled Rolls for Paper Mills a Specialty. Montion this papor whon you writo to un.


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IT WILL PAY FOR ITSELF IN A SHORT TIME By Giving MORE POWER and USING LESS WATER than any other Wheel,

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We are sole makers of hardwood bent rim, oak
spoke arm, 1ron hub pulleys; gripped to shaft with
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seats. No glue or nails used in thelr contrity

 box and are adjustable, same. as an Iron Hanger.
Send for cireulars and discounts. MEMASHA WOOD-SPLIT PULLEY WORKS, MENASHA, WIS.



Sliteenth Year.-No. 4.
G. M. MANN.

## MILWAUKEE•BAG•COMPANY, - manufacturehs of COTTON, PAPER AND JUTE

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 - dealers in -Grain Bags, Tuines, Centals, ete
TELEPHONE NO. 427.
236 East Water Street,
MILWAUKEE, WIS.
J. B. A. KERN \& SON, Merchant Millers
Capacity 2,000 Barrels Pee Day.
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MILWAGKEE, WIS.

By most approved roller process, guaranteed the best and purest rye flour manufactured. we invite correspondence from cash buyers.

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Upright and Horizontal Smut Machines, Upright and Horizontal Close Scourers, Upright Adjustable Scourer and Polishers,
Horizotal Adjustable Scourer and Polishers
with Revolving Scouring Case,
Upright and Horizontal Adjustable Brush Machines,
Empire • HorizonlaI • Duslers
with outside revolving brush, to keep the wire cloth clean, And Niagara Upright Dusters.
send for mew catalogue. procure the latest and best.
RICHMONO MANUFACTURING CO.
LӨGKPORT, N. V., U. S. A. Are you in it?

We guarantee a saving of 25 to 50 per cent in the cost of lubrication where our
$\therefore \quad$ Compression Grease Cups and Badger Lubricants are used.

Fine Cylinder and Engine Oils.
Extra Roller Mill Oil,
Magnolia Babbitt Metal Mill Greases, and Cotton Waste.

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 MILL SHELLER.The most Compact, Durable, Best Sheller and Best Cleaner.

Takes up but little room, runs at low rate of speed, requires no attention. It is in Best Sheller ever offered to the Public.

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That
first
revolutionized
the system
of
milling,
lined
the
millowner's pocket and
lightened the labor of the operative filler.

## Buy it and recommend it to your friends.



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* Mill Builders and Mill Furnishers, *

RELIANCE WORKS,
MILWAUKEE, WIS.


AND THE TNILLING ENGINEER.
Sixteenth Year.-No. 4.

## Written for the United States Miller.]

 THE BEST FLOUR.
## By Joserpa Lacroix.

What is to be understood by good flour-
Is it that which gives the most bread? Is it that which makes it the most palatable?
Is it that which makes the whitest bread?
Or is it the flour which makes the most nourishing bread?
I shall endeavor to answer these questions in the most precise manner.
1st, Is the flour that gives the most bread the best? Gluten. There is a notion amongst millers that flour containing the most gluten makes the most bread. It is wrong, because bread made with pure gluten, or that made for people suffering from diabetes is as light as soap bubbles, it hardly retains any water; and the flour it has been taken from absorbs and retains a large quantity of it. Then it is not gluten but starch that absorbs and retains water.
Gluten, besides its chemical qualities also performs a physical part in bread. It builds it up, gives it volume and lightness.
White flour made of purified middlings contains more gluten and therefore takes less water and makes less bread than break flour, with the middlings out, but it has more body and lightness, which is an advantage if bread is sold by its bulk. The poorer the flour in gluten the more water it takes and the more bread it makes in weight.

Flour that does not contain a sufficient quantity of gluten, or in which the gluten has not enough elasticity, as it is the case with flour made from wheat raised on poor ground, in shady valleys or harvested before sufficient maturity, would only make flat bread, with small pores, giving a large surface in the oven, and giving but a small quantity of bread. The small quantity or bad quality of the gluten in flour whose tenacity is weakened by its fermentation, causes it to make bad heavy and indigestible bread. It produces less than $127 \frac{1}{2}$ per cent of bread, which which percentage is considered the best. Flour made with too light wheat gives the same result.
A good patent or straight flour ought to give $127 \frac{1}{2} \mathrm{lbs}$. of bread to 100 lbs . of flour. All flour that produces more bread than that makes it more watery and consequently less nourishing. All flour that produces less than $127 \frac{1}{2} \%$ of bread comes from an inferior quality of wheat in which the gluten is too slender or in too small quantity, and in which the starch is not sufficiently ripe; the bread from such wheat is not very nourishing.
We must then conclude that the best flour is not that which gives the most nor the least of bread, but the one that gives as nearly as possible $127 \frac{1}{2}$ per cent of bread.
2 d , Is the flour that inakes the sweetest bread the best? Sweetness. The germ of wheat contains the greater part of its es-
sential oil, about 12 per cent. The more aromatic oil the white flour contains the better the bread it makes. Ripe wheat contains the most. Thus it is essential to good taste in bread that it should be made from flour containing the largest possible quantity of aromatic oil. Still in grinding, and especially in roller grinding, the germ is eliminated, its fatty and glutinous nature now allowing it without much difficulty to be ground into flour except for a very small part, and it finds its way almost completely into the inferior products of the mill. It is only in low or close grinding that some of it will find its way into the flour; and generally in the lower grades. This explains the quality of some low grades of flour.
Thus it would seem that flour containing the most germ should have the most agreeable flavor, but such flavor is partly annulled by that given to it by the cerealine contained in flour made from a low grade of middlings, at the tail end of the mill, in the proportion of 4 to 5 per cent, such as that made by low and coarse grinding, or when a sufficient quantity of low grades is not taken out. The grinding with rollers, and especially that by the long system eliminates the whole or very nearly the whole of the germ, and the flour coming from such grinding contains only the essential oil of the internal covering of the wheat.
Flour may lose some of its good flavor and become more or less acid by undergoing a commencement of fermentation. Panification will be difficult and the good taste diminishes without getting musty; its oils concrete it and it loses
its liveliness; bread made from it has its liveliness; bread made from it has
no more masticating property, as connoisseurs express it.
Thus we must conclude that good taste in bread is partly due to the good quality of the flour it is made from, and partly to the manner of manufacturing it.
3d, Is the flour that makes the whitest bread the best? Whiteness. Very white flour may be made from light wheat by leaving the white middlings in it, and throwing off the dark ones. Such flour, especially if it comes from tender or soft wheat, is deceiving to buyers, and the bread made from it is of inferior quality, whatever its appearances may be. To guard themselves against such deceiving appearances, buyers need all their theoretical as well as practical knowledge and experience. Such flour should never be used without being mixed with strouger and superior flour. Thus the whiteness of flour is not always a certain proof of its good quality. It is only a doubtful indication of its being such.
A baker wishing to do a paying business must try to satisfy the public amongst whom he exercises his trade, whatever he may think and whatever may be his opinion of the best bread. To redress a public error would necessitate a long lapse of years, and the manufacturer who would undertake to correct the
errors of his customers would soon see hem get away from him.
Between the two kinds of food the consumer very seldom chooses the most nourishing, but the one whose flavor suits him the best, such as white instead of dark bread. The public thinks that dark bread may be very nourishing and good. He likes to eat it once in a while, but for his daily consumption he prefers white bread. It is more agreeable to his taste and to his sight. The baker has to satisfy his customers, although bread made with any other flour than the ne he uses might be more nourishing. To our daily acquisition of food we pay less attention to what is nourishing than what suits our taste. We care more for the variety that will render our meals agreeable, taste being that one of our five senses we are most anxious lo satisfy. We must then conclude that a baker is bound to satisfy his public and that the best flour for him is not the one which makes the most nonrishing bread, but that makes the bread his customers prefer, and which he is bound o furnish them.
But if we ask a scientific and intelligent baker which is the flour he prefers for his own use, he will answer: It is the one that makes as nearly as possible $127 \frac{1}{2} \mathrm{lbs}$. of bread to 100 lbs . of flour. It makes the most savory as well as the most nourishing bread.

## steam boiler insurance.

WHEN the principle of boiler insurance was first broached on this continent, in 1886, the risk was limited to the actual damage done to the boiler itself. In other words, boiler insurance insured only the value of the boiler. All other losses arising from the explosion were upon the unfortunate owner; so that he received possibly only a few hundreds in compensation for an explosion which might cost him, directly or indirectly, many thousands of dollars. When the United States Supreme Court decided that steam boilers do not explode unless there is carelessness on the part of somebody (either in the way which they are operated or the manner in which they are made), and that the explosion itself is prima facie evidence of negligence, and one which renders the owner of the boiler liable for all loss by death, injury or damage to surrounding property, it was felt that theold policy, was no longer adequate, and that there was room for a company which should insure the steam-user from all loss whatsoever arising from an accident to his boiler.

Given the need it was not long before companies were found ready to issue a blanket form of policy, covering every hazard of a boiler explosion, and paying not only for all loss to property and also indemnifying their policy-holders from all loss to life and injury to person, by paying $\$ 5,000$ for the death or total disability of any person and $\$ 50$ per week
for fifteen months for any person tem-
porarily injured. In addition the newest policies recoup the owner of the boiler for loss he may sustain by the damage or stoppage of work consequent upon such an explosion
It may be asked how can such a comprehensive policy be rendered remunerative? Simply by a vigorous inspection of the boiler before insurance, and by a careful supervision over it at intervals afterwards. Each company has on its staff skilled mechanical engineers, who enter the boiler itself and by application of the hammer test, ascertain beyond a peradventure its actual condition without straining or in any way weakening its structure. Except in the case of new boilers the hydrostatic test is never used; as it has been found that thistest strains an old boiler far too much and that it is frequently the cause of explosions when steam is once generated. The gauges and appliances are carefully tested and corrected, the safety valve is set for the number of pounds allowed, and necessary alterations are suggested and improvements required are pointed out. The inspector leaves the boiler quite safe before he issues his certificate, and this, too, without unnecessary interference or cessation of work.

## A problem in grain testing.

The Country Gentleman prints the following letter from a farmer residing in Jefferson County, Ohio: "Recently, in talking with our grain dealer, a problem rose which I wish to lay before your readers. He had bought a few carloads of this year's wheat without using a tester, and as it was sold on the Pittsburg market and graded by a tester, he said he lost money. He then bought a tester, and has been using it ever since. He pays 90 cents for wheat that weighs 60 pounds per bushel. If it weighs but 59 pounds he takes 61 for 90 cents; if but 58 he takes 63 , and 65 where the wheat weighs but 57 pounds per bushel. This, he says, is according to the rules laid down by the millers' association. They take the amount of flour made from a bushel of wheat weighing 60 pounds as a standard, and claims that it takes 61 pounds of wheat weighing 59 pounds to make an equal amount of flour, and 63 pounds of 58 pound wheat, etc.
There is no quarrel with this; but here comes a farmer with a bushel of wheat that weighs 62 pounds. How much should he receive by the same rule? The dealer tests it and says he will pay him 90 cents for the 60 pounds and $1 \frac{1}{2}$ cents for the extra 2 pounds, or 93 cents for the bushel. The farmer pockets the money with a satisfied air, but he has been cheated. I say that according to the millers' rule above mentioned 58 pounds of this wheat would make as yuch flour as the 60 of a standard bushel, and the farmer should have received 90 cents for the 58 pounds, plus the same rate for the extra 4 pounds, or over 96 cents for the bushel 4 pounds, or over 96 cents for the bushel
instead of 93 cents as paid by the dealer.
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## E. HARRISON CAWKER, Editor.

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We respectfully request our readers when
they write $t$ ) persons or firms advertising in this paper, to mention that their advertisement
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AND THE MILLING ENGINEER. You will thereby oblige not only this paper, but the advertisers.

T
HE Central Indiana Millers' Association will meet in Indianapolis, April 27.

GREAT macaroni factory having been established in this country, the Italian war may now go on.

0UR May number will contain a report of the proceedings of The Millers' National Association, at their annual convention in New York.

0UR Buffalo correspondent furnishes the United States Miller with an
usually interesting letter this month. It will well repay a careful reading.

$\mathrm{M}^{4}$AY 1, The Millers' Mutual Insurance Co. of Wisconsin will remove its headquarters to De Pere, Wis. E.
W. Arndt is the Secretary of the Company.

THE Mechanical News, published by James Leffel \& Co., New York City, has been changed in form and has a new dress of type. It looks very unfamiliar to its many old-time readers in its modernized form.

$\mathrm{T}_{\mathrm{p}}^{\mathrm{H}}$HE scheme of our eminent contemporary the Northwestern Miller to increase its subscription list by a voting contest, and that of the American Miller to accomplish the same result by its Life Subscription proposition are evidently "two of a kind."

$S^{T}$$\mathrm{S}^{\text {Took inarame compmié nom }}$ seem to have the trade in insuring flouring mills. If they do not prove too grasping they may keep the business. Should they do otherwise however, the wheel of fortune will make another turn and bring the mutuals again to the front.

THE efforts to secure $\$ 20,000$ with which to start the Millers' League seems to be meeting with very slow success, and we cannot help but wonder at it. If $\$ 20,000$ was wanted to organize a base ball club, it could be raised "in a jiffy" in almost any of our large cities.

$\mathrm{A}^{\mathrm{N}}$NOTHER combination has been formed, or mutual understanding is said to have been arrived at among the oat-meal millers of the United States. Said millers met in Chicago recently, and are reported to have agreed to regulate production. The present prices will be maintained.

THE Centennial celebration of the establishment of the American Patent System was duly observed in Washington, D. C., April 10, 1891. It was inaugurated during the administration
of President Washington. We doubt if even the wisest of the law makers in those days realized what a tremendous part in the affairs of life the patent law was to take. There is no branch of human economy that has not been affected in some degree by our patent laws.

WE trust that there will be a very large attendance at the meeting of Millers' National Association to be held in New York next month. As we understand it, all millers intending to join the Association as well as the present members, are invited. The announcement by Secretary Barry in this issue gives full particulars.

A"
IONG the most important contri butions to the export flour business the new Riverside Cable Code issued this year is doubtless the leader. Years of actual use of former codes have shown up the errors therein, and the present compilation is well nigh perfect. Copies can be obtained direct from the publishers, The Riverside Printing Co., Milwaukee, Wis.

SECRETARY REYNOLDS, of the Michigan Millers' Association, is always on the lookout for matters affect ing the interests of Michigan millers. Recently he discovered that a Michigan legislator had introduced a bill to compel all millers owning water-power to put fish-ways in the dams. He concluded it was a dam outrage on Michigan millers, and went vigorously to work and succeeded in defeating the bill.

A RECENT dispatch says that the new milling syndicate in Minneapolis is complete with the exception of the Crown Roller mill, and that will probably come in very soon. The new syndicate will be called the Northwestern Consolidated Milling Co. This announcement will not create any feelings of great satisfaction with owners of small mills. It now appears to be their turn to organize a syndicate of their own.

THE Commercial Record is the title of a new paper just issued at West Superior, Wis., "Devoted to the realty grain, milling, shipping, lumber, manufacturing and railway interests." If it attemptsto faithfully cover all these interests, in the scope of one paper we think the publisher will soon realize that "he has bit off more than he can chew." The new candidate for public favor has a very presentable appearance and when it strikes its regular mission solely and entirely as a real-estate-boom organ, dedicated to West Superior interests, it will no doubt meet with a support from West Superior people which will fill the pockets of the publisher not only with good coin, but also with I. O. U's of indefinite value.

TO facilitate business it is highly desirable the various boards of trade in this country should have the advantage of direct connection by telegraph with each other. On this subject the Chicago Herald says :
The plan for building a telegraph system between the different exchanges of the country is almost in shape for presentation. But for the illness of certain
members of the committee appointed to forward the matter, the plan and progress made toward perfecting it would now be ready for publication. Chairman D. E. Richardson of the committee appointed by the board of trade topresent a plan for the building of such system spoke of the progress his committee had made as follows: "The illness of Mr.
tee, has somewhat delayed us, but nevertheless, if his recovery is speedy and if
illness does not again interfere we shall illness does not again interfere we shall very soon present our plan to the board of trade for adoption or rejection. I think that the lists will very soon be open. We have been agreeably surprised with the favor with which our advances have been met by the outside exchanges where we have had correspondence, but particularly gratified at the interest shown in our plan by trained investors who look at the venture from simply a money-making stand-point. It will probably surprise the majority of perons interested with us or against us to learn that the building of the line is assured ; that it is now simply a question of
how we want it built, and whether or not how we want it built, and whether or not ourselves. There are responsible peo ple who stand ready to contract to build or us under conditions. We are also rather gratifed to find that the ine at less in the aggregate than we had counted upon. We have gone upon the theory that the best plan is for the exchanges to build it themselves and to keep the control of it themselves. The
scheme contemplates lines between scheme contemplates lines between
Boston, Philadelphia, Providence, New
Yen York, Buffalo, Albany, Detroit, Toledo Chicago. St. Louis, Milwaukee, Minneapolis, St. Paul, Duluth, and such intervening cities as are convenient and profitable to take in. We have found that experts agree with us hat the lines would be very profita-

The little line between Chicago and Milwaukee showed that the money-
making part of the telegraphic business making part of the telegraphic business
is between the commercial exchanges. That constitutes the bulk of the business. It furnishes the profits to the companies."

$\mathrm{H}^{\circ}$ON. CHARLES J. MURPHY, Special Agent of the U. S. Department Agriculture, for the purpose of stimulating the use of Indian Corn in Europe, writes as follows:
"I ams happy to inform you that Iam repeating here the success I had in Edinburgh. Thus far I have brought my exhibit to the attention of three millions of people and have nade many converts. Institutions and pri-
vate families are adopting it in preference to oat-meal, and corn dainties come up smiling alongside Scotland's national porridge. See retary Rusk has appointed me to draw up a report on the use of corn abroad, and I hope to be able to rouse our farmers to the necessity and feasibilty of making known the food value of our national grain to the half.fed millions of the Old World."

## M. N. A.

THE fifteenth annual convention of The Millers' National Association will be held at The Produce Exchange New York City, commencing Monday May 11, 1891, at 1 o'clock P. m. sharp. It is hoped that every member who can possibly arrange to attend this meeting will do so, as there are important measures to be acted upon, which are of vital interest to every manufacturer of flour in the United States. The fact that this convention will be held in New York, which is the central flour market of our country and in near proximity to Boston and other leading eastern markets, together with the very low rate of railroad fare obtained, will doubtless enable many of our members to combine a business visit to their eastern agents and patrons with attendance upon this meeting, and it is believed that the convention will, therefore, be larger than usual. The railroad lines embraced within the Trunk Line, Central and Western Passenger Associations have all granted a special rate of one and one-third fare for the round trip, upon the certificate plan, provided the attendance from their territory shall exceed one hundred. This rate will be good going on May 8, 9

When purchasing your tickets, you pay full first class fare going, and obtain from the agent of whom yoa buy your ticket, a certificate, which when countersigned by the Secretary of The Millers National Association at New York, will enable you to obtain your return ticket over the same route at one-third of the rate paid going. It is important that every delegate should have one of these certificates, and beforeit can be countersigned for the reduced rate returning, guarantee must be given, that the ticket thus purchased will not be sold to "ticket scalpers," but will be used by the holder of the certificate. On Wednesday, May 13th, a party of millers, comprising probably 50 or more of our members, will sail by the Inman Line Steamship, City of New York, for a visit to the British flour markets. The Mimeapolis and Northwestern delegation to the convention, with the European excursion party, have arranged to go east together, starting from Minneapolis via C. M. \& St. P. Ry., Saturday, May 9th. at 6:10 m., arriving at Chicago, Sunday morning and leaving at $8 \mathrm{~A} . \mathrm{m}$. by the Lake Shore \& Michigan Southern and New York Central Limited train, arriving in New York, Monday at 10:35 a. m. Special accommodations will be provided for the party, and any of our members desiring to join this train should write at once to C. K. Wilber, Western Passenger Agent L. S. \& M. S Ry., Chicago Ill., in order that proper accommodations may be provided, and sleeping car berths reserved.
The Hotel headquarters in New York City will be at The Imperial, corner of 32d Street, and Broadway. Ample accommodations will here be provided for the entertainment of those of our mem. bers who may desire to stop there while in the city. This hotel is conducted upon the European plan, the prices of rooms, without meals, ranging from 3.00 per day, upward. It is a thoroughly fire-proof-building and is admirably located for convenience in reaching all parts of the city. A short block from the hotel is located the 33d Street Station of th 6th Ave. Elevated Ry., which carries one almost to the door of the Produce Exchange, near the Battery. The business headquarters will be located in the president's room of the Produce Exchange. The convention will be held in the call room, easily seating 500 , the use of which together with freedom of the floor, library and committee rooms has been kindly tendered us by the management of the Exchange. A com mittee of 35 has been appointed by the Produce Exchange to receive and entertain our members while in New York and no pains will we spared, we are in formed, to make the attendance of $\mathrm{ou}_{\mathrm{r}}$ members to this convention pleasant, as well as profitable from a business point of view. The advantages of a trip to New York, under these conditions, should cause every member of our Association to make a special effort to attend and lend the support of his presence and counsel to the efforts that are being put forth toward strengthening and building up the National Associaion.
Request has been made by the committee of the Produce Exchange that we inform them how many of our members will attend the convention. This can only be done by asking our members to kindly advise the Secretary at the earliest moment possible whether they may be expected. Will you please do this?, Respectfully,

Frank Barry,

## CORRFSPONIIENCE.



## our buffalo letter.

Railroad Encroachments - Grain Weighing
Matters-Canal Freights and Duluth Wheat-Matters-Canal Freights and Duluth Wheat-
A Reminiscence of ' 61 -Joke on an Old Mem ber-Macaronl Factory-Thoman Ryan now
Owner of the Clinton Mills-Merchants, Ex-

Aan illustration of the grasping disposition of railroads, the Lackawanna furnishes one of the best examples. This road
came into Buffalo modestly, but soon commenced to stick out its feelers and before a year had gone by was the owner of a quarter of a mile of the best dock front in the city which included the old Board of Trade. Later on with the aid of a pious alderman and one not given to piety in any shape, secured Ohio and Water streets, the largest and most traveled thoroughfares in the city These they ruined by placing the tracks so that it is impossible to use the road for any other purposes, except their own. Now they have purchased the block in which the tug offices are situated and this gives them the control of the foot of Main street, the only spot on the whole line of the dock where excursion boats can land and take on the enormous crowd of pleasure seekers. There will be a big fight against this powerful monopoly ere long and the people seem to have Uncle Sam on their side, as a suit has been brought against the company by that unrelenting old gentleman to oust them from the pier where they have built an enormous coal trestle on Government lands. We must either have the foot of Main street or the pier for public docks.

Mr. E. S. Richards, of Hopper-scale fame, has been in town the past month for the purpose of looking into the question of car grain transfers and establishing, if possible, some system whereby the charges of "short weight," so detrimental to the grain trade of Buffalo, can be prevented. As far as the elevators are concerned no fault can be found with them, as I stated in my last, although it is just these weights which are found to be wrong when the cars arrive at small towns, like Rochester for instance. The present move is to weigh all grain received from the West and instead of having Chicago or other public elevator weights, estimated weights, etc., etc., the grain will be transferred here under cover, weighed by Merchants' Exchange weighmaster and a certificate issued by him. The railroad agents here are anxious to have this scheme tried as they are as much interested as the grain merchants themselves. Mr. Richards is a hard worker and will push the matter to a final head if the receivers will give the necessary aid both in urging the Exchange to lend a.helping hand and taking stock in the enterprise themselves.

Canal freights, which were just humming a week ago, are now dead Only Duluth stuff has been dealt in thus far, the amount taken being estimated at 700,000 bushels, the bulk of it for May shipment. The rates paid were $3 \frac{1}{2} @ 4$ cents for opening and $3 \frac{1}{4}$ for May. "Sid" Finn, the indomitable, is believed to have the largest share of this freight on hand and threatens to make things warm for all hands. understand he claims to be "as happy as a clam at high tide" and thanks the United States Miller for giving him those words to roll under his tongue.

Sid is straight, and his friends hope he kept on showing more than summe is right on these freights, but no mat- heat. "It must be in the atmosphere," ter what the result may be, you will find him on deck whether the rate be $\$ 50$ per boat against him or only one ent in thitataver
The stock of Duluth wheat here has dwindled down to 125,000 bushels of all grades. With a fair run of the rollers this will have disappeared by the 15 th of this month. Latest reports from the straits are discouraging, being to the effect that the first of May is the earliest date upon which any reliance can be placed, as the ice is solid. Millers complain of a general dullness in their trade and huge stocks of flour, the Duluth and Minneapolis holdings being estimated at 25,000 bbls. in freight houses here. With this state of affairs it is no wonder that they view the present low stocks of wheat on hand with the utmost complacency. The country millers, however, look at it differently and are willing to take the wheat here, if holders will only come own off their high ideas as to its value. Sales were made to Rochester parties of round lots of No. 1 hard at \$1.21@1.22, No. 1 northern at \$1.19@) 1.20 and No. 2 northern at $\$ 1.17$. Buffalo millers seem to prefer selling what they own at these high prices and annot see where their country cousins get the money back. If Minneapolis does not shove in its wheat at a little more rapid rate than in the past the ard wheat mills here will be closed before May 1st. Large amounts of hard have been bought by the big millers.
Mr. George Urban, Jr., who is always unearthning something aged, produced from the innermost recesses of his capaious great-coat the other day an old bill for rye flour dating back to July, 1861, when that article was selling at \$1.75@2.00 per bbl. The shipment was one barrel short, and before settlement could be made the battle of Bull Run had advanced the price to $\$ 3.00$ per bbl. The clerk then imployed and whose signature appears on the bill was no other than Mr. Frank isk, now cashier of the Merchants Bank of this city, whose salary was no doubt then in proportion to the price of
rye flour, as compared with the $\$ 5.00$ how being paid.
The boys on 'change took it out of Mr. Guthrie the other day, not that there is any feeling against the gentleman named, but just a sort of a lesson to the old grumblers who are continually complaining about the temperature of the board room, which, to tell the truth, was very low on this morning. Mr. Guthrie felt chilly when he struck the floor and the boys were soon made aware of it by his fault-finding, but before he could get to the thermometer one of the slickest young chaps in the person of Mr. Seymour put a match to the bulb and when the old man reached that part of the room it registered $80^{\circ}$. This was most unaccountable and he could not believe his eyes: "That thing is not right," he declared; "the floor committee must take it out, I'll sooner was the new instrument in position, than the boys worked up that with a cigar, while he was engaged, and when he examined it the matter was made still worse for the registered temperature was $85^{\circ}$ ! He appealed to his old friends as fast as they entered the room, but all had been previously informed of the joke and were, of course,
"hot as blazes," while the thermometer
finally concluded the victim and no amount of talk such as "you've got a chill," "better go home and take a sweat," etc., could persuade him to leave the room. He stuck to the floor and the boys as faithfully kept watch of the bulb. It was noticed, however, that Mr. Guthrie left his office about an hour earlier than usual and was seen to enter one of the Russian bath establishments.

The tariff placed on macaroni has resulted in giving Buffalo another industry. Mr. Onetto, for many years one of the heaviest dealers in macaroni, both foreign and home made, has started a manufacture of his own and is turning out this Italian fruit by the ton every day. Mr. Onetto controls the Italian trade in this product, and as he is the best judge of macaroni in this city there is no doubt his brand will drive all others out of this market.

The question of who bought the Clinton mills was settled by Mr. Thomas Ryan, the canal forwarder, admitting he was, after being charged with the ownership by Mr. George Sandrock. This was against Tom's grain, as he is accustomed to mature his plans in the dark. But the question of what he intended to do with his mill, not being a miller himself, was of great importance, and Sandrock undertook the task of worming this out of him. His ironical reply to the question was: "I do not know, but you can rest assured I will not decide until I have your advice and several others on this floor." This was a little hard on the boys, but they took it goodnaturedly in hopes of drawing him out. As near as could be made out from further remarks was that he intended to run the mill as soon as it was placed in good shape. It is, however, generally believed that he will make an elevator of the property; still it is hard to make a fair guess at what Ryan will do even if he had declared his purpose. As a gentleman remarked after the sagacious Tom had disappeared: "Ryan means to hit the truth, but you all know he is a very poor marksman." The mill has water power and was last run by George T. Enos, who failed, and it then came into the hands of Judge Daniels who was offered $\$ 12,000$ for it. What Tom paid will never be told by mself
The Merchants Exchange decided to increase the number of trustees from 13 to 15 , in order that at least eight of the old board may hold over, thereby obviating the necessity of teaching an entirely new lot of the duties devolving on them as such officers. A president, vice-president and treasurer will be elected each year, together with four trustees.

Secretary Thurstone and Assistant Secretary Daly have both been confined to their homes for a month past, the former with a cold and the latter with rheumatism. Bookkeeper Miller was the only man able to be around, but the business of the Exchange was not interrupted or delayed in the least. It would not take long to show the members of the Exchange that the amount of their salaries could be saved as well as not.

George Urban, Jr., has a good memory, but occasional small matters will pass unnoticed for quite a long period. For instance, everybody thought he could tell whether this spring was earlier than last. He thought it was earlier as near as he could judge, bu
owing to the neglect on the part of his head gardener he was unable to say just how much. "I have furnished him with a diary every year, but every year I find he keeps it faithfully just long enough to be of no value to me." "Why don't you give him hellick," said a listener. "How can I when I am as bad myself," considerately replied Mr. Urban.

Assemblyman Gallagher, who is a canal forwarder, says the canals will be opened May 1st. If they are not opened by that date the Democratic slow-pokes will hear from the canal fraternity in no gentle voice, but like unto the first impetuous bray of the recreated mule will the scalpers lift up their voice as one man.
The Cataract Construction Company is pushing the tunnel at the Falls as fast as possible. The level will be decided on this week, in the meantime the work of driving a heading and sinking the shaft at the portal is progressing favorably. At shaft No. 1 the depth is 165 feet, leaving 41 feet further to be driven. Shaft No. 2 is down 185 feet, leaving 9 feet to the line of the

The old project of building a tunnel under the Niagara river from Buffalo o Fort Erie in Canada is again revived. Among the names mentioned in connection with the enterprise are such solid capitalists as Daniel O'Day and Mr. George Sandrock. The Michigan Central and other roads are compelled to go around the Niagara falls to get to Buffalo and it is hinted that a big Canadian road is deeply interested in the scheme. There is ample financial backing if the two names mentioned are in it.

The boys on 'change are deeply inerested in a mysterious compound which was brought from Chicago by Mr. C. A. Warfield. It is a new system or cold storage and the way the brine sent the thermometer down brought out the most conservative "money bags" in the grain trade. A large amount of stock was subscribed.
Leonard Dodge, the North Buffalo miller, has been advising the boys to ake on a jag of wheat from the time May was down to 97 c . "I tell you boys, buy this wheat," was the oft repeated advice, and when it reached $105 \frac{3}{4}$ the other day he was in great spirits. "Len" does not touch the board himself but is a good authority on markets as well as other good things.
Clint. Newman has not shown any marked sapience within the past month or even two, which, to say the least, is remarkable. Occasionally he is consulted by President Scatcherd on some important "inside" movement contemplated by the trustees of the exchange but outside of giving his consent to the change or proposed innovation he is an ordinary mortal.

Mr. C. A. Pillsbury stopped in Buf falo on his way east a few weeks ago and had a long chat with his friend Conway W. Ball, chief inspector of grain
Charles Jones has taken the position of head miller at Peck \& Co.'s mill, Horseheads, N. Y.
Mr. Charles J. Bork, proprietor of the Attica mills, is now a member of the Merchants' Exchange.
Jones Brothers \& Co., of Belle Flower, Ill, have opened an office here. Mr. C. H. Gibson, of Whitney \& Gibson, has gone west on an extended asiness trip.
An additional story has been put on Earl \& Friend's mill, Angola, this county.

Mr. George B. Matthews and wife have returned from a southern pleasure trip.
J. W. Little \& Co.'s barrel factory at Rockport burned March 25th. The loss, beside the building, which was small, included about 40,000 staves and as many squares of heading. The fire started in the dry kiln.

A stock company to build a mill at Oakfield, Genesee county, was organized with a capital of $\$ 30,000$.
William C. Urban and head miller Ortner will represent the Urban mill in the millers' excursion to Europe.

The English syndicate is after the Buffalo elevators again according to the Buffalo papers. Secretary Cook, of the association, says it is all bosh.
The officers of the Western Elevating Company elected last week were: President, George F. Sowerby; vice-president, Spencer Clinton; secretary and treasurer, P. G. Cook.
The grass is growing luxuriantly and in spite of the scarcity of millfeed the price of bran is steadily dropping. The latest quotation is $\$ 22.50$ for coarse winter and $\$ 22$ for spring.
The hay market is getting in position to give Messrs. Heinold \& Rhodebough a profit in their heavy holdings. Timothy is going at $\$ 13.50 @ 14.00$ in this market.
Faxon, Williams \& Faxon, grocers, are still selling their flour at $\$ 4.85 @$ 4.95 per bbl., and it is a taking card. It's good flour, too, for the money-but a poor business principle. The object in this cut in prices is to get a run and save on newspaper advertising.

As soon as navigation opens the stock of wheat will disappear so fast that the price of spot will not stop short of $\$ 1.50$ per bushel.
The sharpest millers in Buffalo, C. A. Warfield and C. Sternberg are reported to be filled up to the mouth with Chicago wheat for May shipment by canal.
The Lackawanna has started its 150 ,000 barrel storehouse. It will be finished in July.
Will Mr. Alexander Mann, of Boston, please communicate with Mr. F. J. Henry, of the firm of Harvey \& Henry, millers. He may hear of something to his advantage.
The contract for building the Duluth Imperial mill warehouse has been given to a Duluth party.
Rye flour is selling at $\$ 5$ per bbl. The last sales of No. 2 rye on track were at 96 c .
Some very choice red wheat is coming in from Michigan and Indiana. Sales are easily made at $\$ 1.12 @ 1.13$. Country millers are bidding \$1.05@ 1.07 at the mill but getting nothing worthy of mention. This has created an unusually heavy demand in this market.

Buffalo.
Buffalo, April 15, 1891.

## our london letter.

Crop Conditions-Annual Statements of Some
English Mills-Mill Notes-Colonial Reports,

THE month of March opened with an animated trade, but the weather that set in on the 9th of the month put back the season so much that the English average price soon passed $33 \mid$ per quarter. The immense snowfall which interrupted even railway traffic, blocked up roads and wrecked ships, followed as it was by over two weeks of frost, made havoc not only with the farm work and stock, but intensified the excitement which has prevailed in the corn markets dur-
ing the month. The excitement has resulted in an advance of fully five shillings per quarter in the price of
wheat, and at the end of March we find ourselves doing a steady trade at the advanced prices, even though the reports on the growing crops in France and some other European countries are slightly less favorable than they were three weeks ago. On the other hand the telegrams noticing drought in India and the estimate of the New Zealand wheat crop as 25 per cent below an average yield have to be considered. Prices in England are sure to remain at their present level for two months to come on account of the damage done to the root crops and green food which not only makes cattle food dearer, and consequently meat, but it means a larger consumption of bread among the poorer classes, who cannot afford to buy so much potatoes and green food at present prices. The prices of potatoes for this year, according to the Kentish Observer, in comparison with those made twelve months ago, are as follows: Beauties of Hebron are selling wholesale in Ashford at 110 to 130 a ton, as compared with 55 | to 80 |current a year ago. Early Rose at 110 | to 120 against 40 | to 90 , and Magnum Bonums at 120 to 140 a against 40 and 90 . The average yield of potatoes in Kent last harvest is put in the Agricultural Produce Statistics at 5.68 tons per acre or three-quarters of a ton less than the yield of the previous crop; but as prices are more than 80 per cent higher than they were last year the returns of the smaller crop are much greater than were those of the larger one. According to the annual produce statistics of the Board of Agriculture the United Kingdom and Ireland's total potato crop was about $2,000,000$ tons short and with a large proportion of inferior quality, this means that now the year's supply is being exhausted there must be a larger demand than usual in the spring for wheat, maize and other substitutes for potatoes which will counterbalance the more favorable reports of the French crops that are now coming to hand. The average price of British corn as received from the Inspectors and Officers of Excise in the week ending March 28th was 353 for wheat and on Friday last Duluth wheat was offered and sold at 48 per quarter of 496 lbs . Some idea of the milling trade of England can be obtained from the following facts which were placed before the shareholders of four different milling firms recently. At the second ordinary general meeting of the shareholders of Messrs. Appleton, French and Scrafton, Limited, the profits for the year ending December 31st, 1890, was stated to be $£ 28,59910$ s. 6 d . which was applied as follows: (1) In providing interest on purchase money to the vendors from 1st January, 1890, to 14th June, 1890, £4,094 6s. 9d.. (2) In providing interest on debentures to 31st December, $1890, £ 2,64515 \mathrm{~s}$. 7d. (3) In payment of directors fees, including managing director, $£ 1,800$. (4) In writing off the preliminary expenses, $£ 1,952 \quad 14 \mathrm{~s} .4 \mathrm{~d}$. (5) In writing off depreciation for the year, $£ 3,500$. (6) In providing the interim dividend $£ 3,052$ 4s. 9 d . (7) In paying a dividend at the rate of 10 per cent per annum, free of income tax, for the half-year to 31st December, $1890, £ 8,000-£ 11,052 \cdot 4 \mathrm{~s}$. 9 d . (This makes a total dividend for the year at the rate of 10 per cent,
calculated according to the dates when the share capital was payable.)
(8) To
be carried to next year $£ 3,554$
9 s. 1d.
$-£ 28,59910$ s. 6d. The profit for the year is thus more than the cerlified average profit shown in the prospectus when the company was formed last year. At the second ordinary general meeting of Messrs. James Tucker, Limited, of Cardiff, who are now building new mills, which is the talk among the milling engineers here, it was shown that after payment of ordinary expenses there was a balance of $£ 23,141$ and after various sums had been written off, the net available balance was left at $£ 10,0153 \mathrm{~s}$. 3d. Of that amount $£ 3,0617 \mathrm{~s}$. 1 d . had been' applied in payment of preferential dividend, 6 per cent, upon the preference shares and a dividend at the rate of 5 per cent per annum upon the ordinary shares for the first half-year. These payments left a balance in hand on the 31st of December, 1890, of $£ 6,953$ 16s. 2 d . The question arose at the second ordinary general meeting as to the dis posal of that balance. The articles of
association of the company had a novel feature in which the workmen shared in the profits. There were five shares of $£ 10$ each, under the denomination of "workmen's shares" and 5 per cent, or one-twentieth part, of all funds from ime to time appropriated for payment of dividend was allocated to them. The 5 per cent for the year 1890 amounted $£ 4654 \mathrm{~s}$. 8 d. which would be distributable among the employees in ratable portion to wages earned. The half-year at the rate of 15 per cent per annum, making 10 per cent for the entire year.
The report for the half-year, ending December 31st, 1890, of the Barnsley British Co-operation Society gives the profit (with interest added), for that period as $£ 3,25918 \mathrm{~s}$. 11 d . To the mill which with its plant and stock, such as horses, wagons, etc., there is debited a sum of $£ 33,7197 \mathrm{~s} .11 \mathrm{~d}$. and allowing a depreciation of $£ 13,707 \mathrm{1s}$. 4 d ., the present value of this establishment is written down at $£ 20,0126 \mathrm{~s}$. 7d. The grand total profit made by the mill (adding interest and profit) is returned at $£ 142,073$ 3s. 11d. In 1888 a roller plant was put in at the cost of $£ 5,659$ 13 s .4 d . and has apparently rendered excellent service, as the profit on the hree half-years preceding this installation was $\$ 1,39911 \mathrm{~s}$. 2d., whereas the
profit earned in the three following half-years has been $£ 5,93615 \mathrm{~s}$. 6 d .
The 95th annual report of the Hull Anti-Mill Society laid before the shareholders showed that in the year ending December 31st, 1890, the sales of flour were $£ 33,19711 \mathrm{~s}$. 2d., being an increase of $£ 373$ 12s. 1d. over the returns of the year before. The quantity of net profit, after paying expenses and $£ 112$ 1d. on loan capital, was $£ 4124.7$. On the fourth of March Mr. J. Harison Carter read a paper before the Society of Arts on "Flour Milling" and in his paper in a general way touched on the various stages of roller milling as well as the various machines recently invented and placed on the British market. Mr. Carter in his paper did not go into the full technicalities of roller flour milling as carried on in this ountry, so that those millers who went especially to hear a good discussion on the paper were disappointed, although there were a number of milling experts

## sent.

During April the new co-operative mill at Dunston-on-Tyne, near Newcastle, will be started up and will greatly effect the trade in that distriet as it has a large capacity.

The Easter holidays bave as usual with all holidays put business out of gear for some little time which this year is unfortunate, as there was such a good trade being done both in corn and flour.
It is estimated that the wheat crop of South Australia is seven bushels an acre on $1,850,000$ acres or $12,950,000$ bushels in all. This is much less than was expected before harvest, and not nearly equal to the produce of last year, when $14,577,358$ bushels were grown on $1,842,961$ acres. Allowing 2,000,000 bushels for seed, and 52 bushels a head for a population of 330,000 , the surplus for export is $9,135,000$ bushels; adding this to the outside estimate of the Victorian surplus, $10,000,000$ bushels, the total surplus of the two wheatexporting colonies of Australia will be a tittle over $19,000,000$ bushels. A good deal of it will be required in the other Australian colonies, South Africa and Mauritias. Australasia will not therefore sent to Europe much, if any more wheat than was shipped last year. From South Russia comes a report to the effect that the wheat crop is much damaged, this report, however, has not been confirmed
L. Maygrove.

London, March 31, '91.

## PAPER BELTS.

The most unlimited use to which paper pulp is put proves this to be one of the most valuable, and at the same time cheapest and easily worked, of American products.
In one form or another it has been adapted to the manufacture of a variety of utensils for household use, and applied to mechanical and industrial products with equally good results.
As a substitute for iron, metal and wood it has proved a success, and in many cases superior to either to these, being lighter, equally strong and durable.
It has been found an excellent substitute for iron in the manufacture of car wheels, and for the driving wheels of locomotives. Pulleys are made of it that are pronounced superior to those of either wood or iron. In the manufacture of pails, tubs and other house hold utensils it is extensively used. But there is one use to which it has been put that is more surprising than any of the others. We refer to its use for belting.
For some time one of the largest paper manufacturing etablishments in this country has been turning out paper belts that are declared superior in many respects to either leather or gum.-Manufacturers Gazette.
$\mathrm{T}_{\mathrm{B}}^{\mathrm{H}}$
HE Lockwood Press of New York City is issuing a work of great value o the printing and book trade. They publish regularly, and have done so for years, a magazine called the American Bookmaker, which has had no small influence on the modern improvements in book printing. Now they have issued the first number of The $A$ merican Dictionary of Printing and Book making, which will be a permanent work of reference for the trade as well as all interested in books. The work deserves success. Full information concerning it can be obtained by addressing Howard Lockwood \& Co., 126 Duane st., New York City. It will be remembered by the milling trade that Mr. Lockwood was for many years the publisher of the Millers' Joirnal, which was in its time one of the handsomest trade papers one of
extant.

## MILWAUKEE ITEMS.

Messrs. Edw. P. Allis \& Co. secured the contract for the Eagle Mill at New Ulm, Minn., for $\$ 15,000$. There was very strong competition for the job.
Hoffan \& Schimmel, of Two Rivers, Wis., have awarded their contract for a 100 barrel water power mill to The Edw. P. Allis Co., of Milwaukee, Wis.
Mr. J. Donaldson, formerly of Donaldson Bros. of this city, has returned after nearly four months absence spent in visiting the flour dealers of the Eastern States.

Cor.. C. A. Winn started last week for Texas on his initiative trip for The Edw. P. Allis Co., of Milwaukee, Wis., and has secured the contract for the new 100 bbl . mill for the Bollinger, (Tex.) Mill Co.

Charles Ross, engineer at Duluth Roller Mills, has invented an attachment which closes any kind of an elevator door whenever the elevator starts for another floor. It is a perfect automatic contrivance.

Jamison Bros. \& Co., of Janesville, Minn., are remodeling and enlarging their flour mill with machinery furnished by The Edw. P. Allis Co., of Milwaukee, Wis.
The Edw. P. Allis Co., of Milwaukee, Wis., has shipped out 125 cars of machinery each month since Jan. 1. This is an average of 40 cars more per month than for the corresponding time in 1890.

A new distillery, said to be the largest in the world, is in course of erection at St. Louis, Mo., and will be equipped with 9 double $9 \times 30$ Gray roller mills, made by the Edw. P. Allis Co., of Milwaukee, Wis.

The Superlative Purifier Mfg. Co., of Milwaukee, have lately shipped New Era Scalpers to Goold Bros. \& Co., Howard, S. Dak.; Wise \& Tuckey, Paw Paw, Mich., Patterson \& Sisson, Camillus, N Y. (2 machines); Wm. Smith, Ida Grove, Ia.; Chas. S. Smith, Canandaigua, N.Y.; Clark Mercer \& Co., Baldwinsville, N.Y.; George Tomlinson \& Son, Perry, N. Y.; Phelps \& Sibley, Cuba, N. Y.

The Edw. P. Allis Co., of Milwaukee, Wis., are furnishing 5 double $9 \times 24$ Gray roller mills to W. E. Caldwell \& Co., of Louisville, Ky., for a 100 barrel roller mill which they are building in Oklahoma Terr.

The Milwaukee Bridge and Iron Works made an assignment March 23d, Hamilton Townsend being appointed assignee. It is said that the liabilties are about $\$ 200,000$, while the assets are nearly double that amount, but require a little time to realize on them. Much of the work done is for various municipal corporations and railroad companies. We do not doubt but that the Company's affairs will be adjusted satisfactorily to all concerned.

The Pillsbury Washburn Flour Mill Co., of Minneapolis are taking out the middlings buhrs in their mill B , and putting in ten double Gray's roller mills, furnished by The Edw. P. Allis Co., of Milwaukee, Wis., and the Sidle-FletcherHolmes Co., are adopting the same improvement in their Anchor mill.
The Superlative Purifier Mfg. Co., of this city, have recent orders for New Era Scalpers from Jacob Amos, Baldwinsville, N. Y. (2 machines); Theiss, Kuegle \& Co., Columbiana, O., (double machine); Bradford Mill Co., Cincinnati, O.; Fred Starz \& Son, Delavan, Ill.; Neal Bros., Portland, Ind., (2 machines); Barnard \& Leas Mfg. Co., Moline, Ill.; A. F. Ordway, Beaver Dam, Wis.

Church \& Co., the large baking powder manufacturers of New York, have contracted with The Edw. P. Allis Co., of Milwaukee, Wis., for a full line of rolls, bolts, purifiers, and other machinery with which to fully equip their establishment.
Among the gentlemen connected with the trade that have called on the United States Miller during the past month were R. D. Aitchison, of The Robert Aitchison Perf. Metal Co., Chicago, Ill.; B. H. Sanford, of B. H. \& J. Sanford of Sheboygan Falls, Wis.; and B. F. Ryer of Chicago, Ill., representative of a prominent eastern firm of mill furnishers; also Mr. John Munro, representative of Aug. Heine, manufacturer of milling machinery at Silver Creek, N. Y.
W. D. Gray of The Edw. P. Allis Co., of Milwaukee, Wis., was called to New York last week on business connected with Jones \& Co., the owners of the 2500 barrel mill, who, having recently put in 45 Gray's flour dressers and centrifugals, were so pleased with the results obtained that they decided to put in 28 more making a total of 73. This action will necessitate the throwing out of an equal number of comparatively new bolts of another make.
The election of officers in the Chamber of Commerce is over. The "boys" of the organization were the winners on the question of who should be the weigher, and the regular caucus nominees were elected from the top to the bottom of the list. They are as follows:
President-E. P. Bacon.
First Vice-Pres't-F. H. Magdeburg. Second Vice-President-Alex. Berger. Secretary-W. J. Langson.
Directors--F.G.Bigelow, Robert Krull, Robert Elliot.
Board of Arbitration-C. M. Payne, John Foley, jr., C. M. Cottrill, A. C. Zinn, A. G. Bodden.

Board of Appeals-C. F. Ilsley, E. Hotchkiss, L. R. Hurd, Oscar Mohr, C. E. Lewis.

Grain Inspector-F. D. Hinkley. Weigher-F. F. Clapp.
The highest number of votes cast for a candidate was 203, and with the excep. tion of weigher and second vice-president there was only a slight variation in the number received by each. Mr Bacon had the entire vote for the pres idency, and there were only one to three scattering votes in any instance except the two noted.

## MINNEAPOLIS NOTES.

The Diamond Elevator was destroyed by fire April 9th. It was well insured. The respective riparian rights of the Minneapolis mill company and the Minneapolis Union Railway company must e settled in court.
James Pye of Minneapolis, has secured the contract for erecting a $400-\mathrm{bbl}$. mill for Messrs. Everett, Aughenbaugh \& Co. at Waseca, Minn.
During the latter part of March the packers and nailers in the Minneapolis flour mills had some trouble over hours of labor, wages, non-union employes, etc., but at last reports matters were amicably adjusted.
The Inter-State Grain Co., is about to erect another elevator on the east side at Minneapolis, to have the capacity of one million bushels. The total elevator capacity is now $16,700,000$ bushels. The new elevator and smaller ones projected are expected to swell the capacity to about $18,000,000$ bushels this year.
The farmers and elevator men doing business in North Dakota recently met
the railroad commissioners of that State lent to me for your inspection, and simiin Minneapolis to hold a conference in relation to the new law which, the elevator men claimed, would force them or business. A plan was finally sug gested which will allow business to go
on practically as heretofore, and without violating the law.
The Minnesota Grain and Feed Co., whose plant was destroyed by fire April 18th announce that they will rebuild at once on the old site. The new mill and elevator will be larger, with the latest improved machinery and better facilities for handling grain. They have made arrangements to have all orders filled promptly until they get things running again.
The Lake Superior Transit company's fleet of eleven passenger and freight vessels will this season engage in the flour and package freight business be tween West Superior and Buffalo. The total tonnage of the fleet is something over 30,000 tons, and it is surmised that a deal has been made with Minneapolis flour shippers to bring about the change. The fleet will handle a great part of the immense stock of flour in Eastern Minnesota railway sheds.
A recent despatch from Minneapolis says:
"Ten Minneapolis mills, with a daily out-put of nearly 20,000 barrels, have formed a combination against the great Pillsbury-Washburn English syndicate. The owners of the mills claim that they were compelled either to go into a combine of their own or go under the wing of the great institution managed by C. A. Pillsbury. It is understood that the opposition mills will in a few months be placed under one management, with one set of grain-men and all the other economies of concerted ction."
Just how much truth there is in this rumor we do not know. Something of the kind has been periodically talked of during the past year.

## MODERN FLOUR MILLING.*

## By J. harrison Carter.

令HE difficulty I have experienced in the preparation of a paper on "Modern Milling", has been to make it interesting to the general members of our Society, and, at pecially time, satisfying to those consequently, more or less conversant with its technicalities. I have, therefore, been obliged to intersperse my critical examination and exposition of the various details of flour manufacture with some brief explanations which will, I hope, make my paper an educational one to members who have not previously tudied the manufacture treated of.
And first, it appears to me I must explain to the uninitiated what was the general system of millstone milling in use just prior to the introduction of roller milling, and inform them of some of the leading points in roller milling, in order that they may appreciate the advantages of the latter.
The wheat-cleaning plant was similar to that at present in use, with a few exceptions, but was being gradually improved. The grinding was universally done by millstones, the object being to make all the flour-containing portions of the wheat into actual flour in one operation, leaving the branny or offal portions, after deing dressed, free from flour.
The millstones were usually 4 ft . to 4 ft. 6 in . in diameter, resembling, in quality, the small one which has been
ar in style of "dress," that is, in the arrangements of the lands and furrows. An exhaust fan was used to draw air through the stones when at work, to keep the meal cool.
The dressing was done in the best English mills, and practically in all the Irish and Scotch mills, by long slowly revolving hexagonal reels, covered with a tightly stretched silk dressing cloth. In some English mills-generally in the southern country district - "bolting reels" were used, or "wire machines;" the former consisting of a cleverly made seamless woollerr sleeve or cylinder fastened loosely at both ends, and out. side of a skeleton reel. When running at its full speed-from 150 to 200 revolutions per minute-and with the feed on, the worsted cylinder expanded, and rubbed against the outside fixed rail of close-grained hard wood, which action induced the flour to come through. When worn into holes the cloth was darned like a stocking. Cloths made in the same form, but of flax, hemp, and ilk, have been tried, but are not ufficiently durable.
I describe this machine somewhat in detail, because it is still used in some small country mills; whilst in many districts in England it has never been seen even by millers.

Wire machines" are slowly revolving cylinders covered with wire, and having inside a set of brushes revolving rapidly, brushing the flour through the wire over. Circular brushes outside the cylinder slowly revolve against it, keepng the wire meshes clear. The best nade of these machines are excellent xamples of mechanical construction, but their action is severe on the material they are operating. The silk reels produce considerably better flour.
The offal in the stone mills was divided by a simple machine into various grades.

This is a brief description of the English millstone system of flour manufacture prior to the roller mill era.

To demonstrate to you concisely, but conclusively, why the millstones give inferior results to roller mills, I shall quote first from my first paper on millng, read before the National Association of British and Irish Millers in 1879; next, from a paper read before the Society of Engineers in 1883; and, thirdly, from another read before the Amalgamated Society of London Operative Millers in 1882.
1879:-"If you forget everything else I have said to you to day, please remember this, that with your heavy millstones, with their large surface, operating by friction, you reduce the wheat in one violent, tearing, rubbing, fretting action into a mixed mass of flour offal and offal-flour, which can never afterwards be entirely separated the one from the other."
1883:-"It has never been conclusively proved over what surface of stone the wheat has been caused to traverse before it escapes; but it is believed to be at least three or four feet. Those of you who know what a French burr stone is-so porous, so rasping in its action, and, when made into a millstone, oflat on the surface-will understand that this ordeal of grinding, this exreme of frictional treatment over so large a surface (and a smaller surface with the flat face of a millstone is not sufficient) is enough to rasp off the bran an excessive quantity of bran flour; and so it is spoiling the flour, and spoiling the loaf."
1882: -"The shape of the corruga-
tions of rolls, as well as the material, is more scientifically correct than millstones. If you are using a five-break system, for instance, it amounts to little more than the wheat passing five points, as compared with the three or four feet on the millstone."
The present century is often called an "Iron Age," and iron has entered into the very midst of the milling industry. It has been the privilege of Englishmen to be leadersin many of the triumphs of iron, but in the one we are discussing to night the laurels belong to another nation, Hungary occupying the position of honor. She had for years sent us some splendid flour; and because the quality of her best brands was not materially improved on the adoption of rollers, those of our millers, who would have welcomed their failure jumped at the conclusion that they had failed, entirely overlooking the fact that arrivals from Hungary of the old spendid qualities increased rapidly in quantity with the substitution of rollers for stones; and they did not know that a larger percentage of this good flour could be produced from the same quantity of wheat. I will explain this circumstance by the following.
At the present time the very highest priced semolina (a very small proportion), sold as such in Southern Europe, or for making into the finest macaroni, is manufactured by millstones, which completely eliminate all traces of bran from the semolina particles, but in doing it so greatly reduce the value of the remaining product that millstones for this purpose are also being gradually replaced by rollers.
Having now, with this reminiscence, given the uninitiated some opportunity of appreciating the superior merits of recent innovations, I at once gladly deal with the direct title-subject of my paper namely, "Modern Flour Milling."
I propose referring, in such detail as the time at my disposal will admit of to the following portions of the paper:-
I. The buildings.
II. Grain storage.
III. Wheat cleaning.
IV. The flour mill.

In the first place, the buildings must not only be suitable for the milling business, but must be designed to meet the exacting requirements of fire insurance companies, and even to anticipate precautions which they, at present, do not demand.
The engine and boiler-house must be separate from each other, and, by preference, outside the other buildings. When of necessity they must be within the mill walls, they do not add to the insurance rate if proper party walls are built, but usually interfere in some way with storage arrangements, or elevating, conveying, etc.
The wheat and manufactured products must be stored in buildings preferably separated by a space of ten feet from the mill (in order that the advantage of the lowest warehouse insurance rates may be derived), and only connected with it by a spout or a light, open gangway. When the latter is used there must be double iron doors at each end.
Only one of the buildings bordering this ten-foot way may have windows. If there is no choice but to have these storage buildings contiguous to the mill, the dividing walls must be carried through and above the roof, which preferably should be flat, and of fire-proof materials, the ordinary old type of mill roof being the point from which most fires spread to the adjacent buildinge

Spouting only, as a rule, is allowed but on other occasions very much in through the partition wall between mill and warehouse, or mill and wheatcleaning building; and this must be inspected and approved of by the insurance company. Any spout hole should be as near the basement as possible.
Communication may be by open gangways outside the mills, as in the case previously referred to, if the usual insurance requirements are complied with.

The flour mill building should, above all things, be of ample dimensions, having five floors, each about 12 feet high, except the top floor, which should be about double this height; at all events in that portion of it where the elevator heads are placed.

The floor should be of 3 in . planks, resting on beams or girders of ample strength, and 8 ft . or 8 ft .6 in . apart from center to center. Above the planks a diagonal flooring of 1 in . boards should be laid, certainly for the roller and purifier floors, if not for the others. This construction is infinitely preferable to board and joist floors, if for no other advantage than in the case of fire, it resists the latter much longer, giving a better opportunity for its extinction.

The mill should be designed of sufficient strength to admit of high and wide windows between each abutment, on all sides of the building, if possible. Above and before all, there should be sufficient area to secure such an arrangement of machines as will provide ample room for the men in charge to examine and attend to all working parts, and the manufactured products of each machine, without any inconvenience or risk.

The electric light is a modern adjunct of the highest advantage to the manufacturer, and, if properly installed, diminishes the risk of fire as compared with gas. Every mill should be fitted with sprinklers and other fire-extinguishing appliances.
Insurance companies are said to have lost heavily on flour mills; if they have, it is their own fault. They have imposed, from time to time, a higher and still higher rate, so much for this class of new machine, and so much for that, but never any tariff charge for overcrowded machines and stock; no extra charge named for uncleanliness, and nothing imposed for want of light by day, and naked lights by night ; and yet it is my firm opinion that more fires are attributable to these three causes than to all others put together.
I make no apology for dealing at what may appear inordinate length on this subject. It is not a question which can be settled by the factory inspector, but it materially affects the health and comfort of the operative and the bal-ance-sheet of the master miller.

## grain storage.

Grain is now stored, by preference, in silos, and I know of nothing that can be said against this system. It is probably of Scotch origin, high circular hoppers having long been used in that country ; but it is to America we owe their scientific development.
In this country the first large installation was completed for the Liverpool Grain Storage Company. The design was well considered, and has been a
very great success, though when first put to commercial test it was found by the purchasers of grain most unsatisfactory, the wheat purchased by sample coming from the silos of very unequal naturally, it was not complained of
ferior, entailing a serious loss. This irregularity was caused by the tendency of the heavier-that is, the bet ter-portion of the wheat to separate itself from the inferior, or lighter, portion, whilst being drawn from the silo, the heavier displacing the lighter and escaping first, the consequence of which can be easily understood.
Sprague's and Henderson's methods for overcoming this are somewhat similar; the former I can describe as consisting of drawing off the wheat from the top by means of some wooden slotted trunks fixed to the sides of the bin, at the same time that it is drawn in the ordinary way through a spout at the
bottom. This results in a perfectly bottom. This results in a perfectly he Grain Storage Company, and now from it and all other silo granaries wheat can be relied upon as being true o sample.
Only one serious accident has oc curred in England after the completion of silos. The weight they carry being frequently enormous, great care has to be exercised in their design and construction.
The cost of storing in silo is very small, and I would strongly recommend the system to millers who freely use English wheats. The conveying and elevating arrangement for filling and emptying is seldom required continuously for this purpose; and it can therefore be employed without any great personal attention being required in frequently drawing out of one silo and emptying into another any wheats which may be at all out of condition, the moving, especially if, as ther should be, there is an aspirator under the main elevator, greatly improving condition of the wheat.
For procuring the necessary mixtures of wheat for grinding, various automatic mixers have been used, most of them being measuring appliances I do not consider them sufficiently accurate and much prefer automatic weighers.
The usual system of drawing off the mixture for wheat cleaning is to fill hese weighers from three, four, five, or more silos, elevating each kind direct into the same number of smaller silos situated close together, and called the mixing silos. The automatic machine under each of these smaller silos takes out of each the required proportion, and it is then consigned to the wheat cleaning bins. But this use of the nest of mixing silos necessitates double elevating and conveying.
In some extensive silos which I have just designed, a method has been adopted dispensing with the mixing silos and substituting the use of weighers, made portable for placing under any of the main silos, in number corresponding with the varieties of wheat forming the mixture at any particular time.
The system of automatic weighers which has commended itself to me, secures a simultaneous discharge of all he weighers, each with its varying proequal blending of the mixture.

## wheat cleaning.

This is a very important part of the manufacturing portion of the process, and one which is deservedly receiving an increased amount of attention. Some of the neeessity for an elaborate plant is caused by careless husbandry in foreign countries, and much more from roguery, the chief offenders being India, Egypt, the Argentine, and Russia, the ratio of offense being, I
think, chargeable in the order named. It is a cause of pride to Englishmen to be able to state that wheat is sent to us by English colonists and our American cousins in a much cleaner and more rustworthy condition; but it is with deep regret that I feel obliged to strongly condemn the action of the London Corn Trade Association, at a conference on Indian wheat impurities held in May, 1889. It was convened at the India Office by Lord North, and presided over by him. His lordship, in advocating the importation of clean wheats, said: "Some parcels had more than the allowable 5 per cent. "of dirt, and that our annual importation of dirt in Indian wheat reached the 'astounding quantity of $3,000,000$ ewts.' " Corn trade associations from other ports, Chambers of Commerce, the Millers' National Association, independent millers by the hundred, testified in writing or by their presence, to the fault in the present system, but it remained virtually for the London Corn Trade Association to uphold it, doing so in a long eport, in which I have failed to find one single sentence showing a disposiion to co-operate for a reformation.
I have been informed that Messrs. Rall Bros. ship seven-tenths of the Indian wheat; and I believe they are members of the London Corn Trade Association Their representative at the conference, Mr. Manuell, said: "When cleaner wheats are offered by us, we do not get the value." I appeal to every miller present-Is not this an absurdity? Does not a miller, every time he makes ever so small a purchase, judge by his practiced eye and hand, and sense of mell, what the sample is worth, and bid accordingly? Why, therefore, should he make an exception in the case of Indian wheat? Granted for a moment that he does make an excep. tion, why is it? Simply, I believe, because of his helplessness under the "Fair average quality" shipping conract, by which stones and dirt are act ually admitted up to 5 per cent.
This has an important bearing on competitive modern milling, which our society has recognized in papers read by Mr. John McDougall, which attracted a vast amount of attention at the time, but which have so far resulted in but very slight improvement. The importance of this matter has induced me to make these remarks on the subject.
In Indian, as I have said, and some other wheat there is a great quantity of stone and dirt, which is a source of great trouble necessitating a complete preliminary wheat-cleaning plant, composed of the following machines :
First, a warehouse separator, of which several designs are made. It consists of a set of sieves of perforated iron or steel of various meshes. Extraneous matter, also beans, maize, \&c., pass over the top coarse sieve, the outsiftings passing to another sieve of finer mesh, through which fine dust sand and seeds fall, the over-tails being the cleaned wheat, which passes through an air-current produced by a fan forming part of the machine, and which exhausts a large quantity of light dust and chaff, \&c., \&c. The wheat then falls to a second machine, which is a grader or sizer, dividing it into three, four or more sizes. Some engineers use sifters for graders, others cylindrical machines.
Each size of wheat passes into a separate cylinder of thick metal, having drilled or indented cavities close together.
What are known as "Victoria" cylindershave the indentations on the inside. The purpose for which these machines
are used is to separate from the wheat the oats, barley, cockle, and other seeds, stones, dirt-balls, \&c., and generally all bodies of different shape from wheat grains. They are usually arranged in two rows, one above the other, the top row extracting oats, barley and all grains larger than wheat; the bottom row removing cockle and all round seed smaller than wheat. The indentations in the top row lift the wheat, depositing it into a trough suspended from the axis of the cylinder, the oat and barley escaping at the end. With the lower cylinders the operation isexactly reversed, the indentations carrying up the cockle and allowing the wheat to escape at the end. Each cylinder is drilled to suit the mesh of that part of the grader from which it receives its supply.
The next part of the process is that of washing. Washing has long been considerably practiced in France, especially in the south, where they wash all the wheats, whether native or foreign. To a lesser extent it has been practiced in England; and though with us there is still a lingering prejudice against it, our leading firms are gradually adopting it as a recognized portion of the wheat cleaning department, most of them, very rightly, using washing machines for hard wheat, even if it does not containany perceptible amount of dirt.
An ordinary type of washer consists of a tank partly filled with water, which is being constantly changed. The wheat is delivered on to the water, when the stones and heavy particles sink to a receptacle in the tank, and the wheat is carried on by the water to an inclined worm, partly in and partly out of the water. That part of the worm in the water is enclosed in a wire cylinder, whilst the other part revolves in an open trough. The turning of the worm breaks up the dirt balls, etc., which are separated from the wheat by the water, and settle in the tank. The wheat, as it is carried up by the worm, is partially separated from the water in that portion of the worm outside the tank, and is delivered at the upper end of the worm into a whizzer, or centrifugal.

From the centrifugal machine the wheat passes into sacks, in which it remains for periods of from 24 to 36 hours, during which time some of the moisture passes away by evaporation, and some by absorption into the kernel of the wheat.
It is important that there should be no breaking or grinding action by the machines which precede the washer, or by the washer itself, or water permeates unduly to the flour portion of the berry and is injurious to it; at the same time there must be sufficient action to break the dirt balls, but without abrading the bran.
Wheat washing is an operation which will repay further experiments. I am favored with letters from French millers strongly recommending its use for all wheats.
We have now left the washed wheat in sacks and still very humid. In the case of very hard wheats the absorption of the water toughens them, and enable the break rolls to produce larger bran, but it is a question whether this is the true method of toughening. Even the driest of wheat contains a certain percentage of moisture, and bakers do not wish to purchase water at 2 d per pound whilst they can procure it almost for nothing.
I have never tested, in actual work, the method of wheat-heating, originated, I believe, in America; and am
not aware whether the system is or is not extensively used in that country now. It was tried by a few British m
lers, but never largely persisted in. The effect of heating is to draw the moisture from the flour, or kernel por tion of the berry, to the skin or bran and this should, apparently, benefit both. The heater, when used, is placed precede the first break roll.
Instead of leaving the washed wheat in sacks, as previously referred to, it is now frequently taken at once into kilns. There are several kilns in the market. It is my firm opinion that those will ultimately be found the best which are large or roomy; that is, which, instead of holding a small quantity of wheat, and drying it under a high temperature in a short time, will hold a large quantity, drying it under lower temperature in a longer time.
In my first paper on milling, read before the National Association of British and Irish millers in 1879, I expressed myself as follows:
"Our native wheats I would strongly recommend being dried, when in the condition in which they came to the mills this year. Drying does not inure the grain in any way; and if it is wheat which has been properly matured and merely became wet after cutting, it gives back a great part of its intrinsic excellence. If the wheat is not matured, as in the case with most of this year's crop, drying does, to a certain extent, mature it. Old native wheat is more valuable than new, simply because it has in the stack been subject to a slight warmth or sweating-has, in fact, been drying.
"Wheat, on the ordinary kilns, is subject to a heat of from 70 to 100 degrees Fahrenheit. The waste varies from $2 \frac{1}{2}$ to $7 \frac{1}{2}$ per cent; but this year from 5 to 10 per cent; and, in the ex perience of some. Irish millers, from 10 per cent to 15 per cent.
"Do not think that kilns are only useful for drying native wheat. They can be used with advantage for drying washed Egyptian wheat, and, by a slight modification, for fumigating heated wheats. If a cargo of the latter be gonly slightly heated, the smell may be entirely removed by putting a certain quantity of sulphur and sal ammonic on a clear fire, and allowing the fumes to pass through the wheat."
Applying the advice I gave in 1879 to the present time, I should say wash all your foreign wheat which would not be injured by the water.
Experts will be thinking that I have overlooked the practice of conditioning hard and soft wheats by mixing them. This is a very easy system to adopt, but is imperfect.
Years ago I advocated the separate rolling and dressing of wheats of diverse conditions, and I have not changed my opinion, because it is impossible to alter the natural peculiarities of various wheats sufficiently to make the grinding, and more especially the dressing process, uniformly suitable for both. This system necessitates mixing the flour.
Having completed the preliminary cleaning of wheat containing large quantities of dirt and stones, we come now to the ordinary mixing of wheat. This is drawn off in the required proportion from the various silos, and passes off into the final wheat-cleaning plant.
I should mention that this mixture is partially made up of the wheat which has been through the preliminary wheat-cleaning plant. This is an elab-
orate process, and rightly so ; at the present time it would pay for greater
elaboration. For example, the roller mills, scalpers, purifiers and dressing machines in a mill of large capacity are of the same size, speaking generally, as in a plant of medium capacity; whereas in a wheat cleaning plant of large capacity the machines, excepting only the indented cylinders, are usually of much larger size individually, but not proportionately so numerous as they should be. I believe the same advantage would be derived from additional sifters, separators and scourers, as certainly is obtained by the additional indented cylinders; that is, a more perfect operation would be performed.
Again, it is almost a universal practice to run the roller plant night and day (though there is an extra insurance charge for night work); but it is almost as universal a practice to run the wheatcleaning plant during the daytime only Millers would undoubtedly benefit by running the latter continuously.
The modus operandi of a wheat-cleaning plant might be as follows :-
The wheat should first be passed through an automatic weigher; then over a magnetic separator; then to a grain seperator, consisting, of sieves and air currents, which extract light and inferior grains, chaff, seeds, sand, etc., which escape the warehouse separator. From thence the wheat passes on to grading machines to be graded for the oat, barley, rye and cockle eylinders, described in the preliminary plant. This operation is succeeded by a wheatscourer, with a fan and exhaust trunks attached, by which means weevil-eaten and inferior grains which have broken up or opened out by the beaters, or branny particles or chaff released from the wheat berries, are all separated from the wheat. A second scourer and aspirator is then used ; then the only remaining operation is that of polishing through brush machines, and weighing through another automatic weigher to ascertain what has been lost by cleaning.

## the roller mill.

I now come to what is looked upon is the flour mill proper. In olden days it was a combined warehouse, or mill. In the present day of scientific milling, rule which should always be, and is observed in a few cases, is that there
should be no sack in the mill, should be no sack in the mill, and no The firt gre warehouse.
The first great principle I would lay down for successful flour milling is exactness, cleanliness, and neatness. It is not only good of itself, but the training of young master and operative millers in the observance of cleanliness and order, means the cultivation of the habits of exactuess of all things which will conduce to making them successful millers The cleanest mills, as a rule, belong to carlessly kept mill is a bad one for baker to purchase from; bad for an insurance company to insure; and, generally, an unprofitable one to the wner.
The usual depreciation for the wear and tear of flour-mill machinery should be considerably increased in the case of mills where cleanliness and general attention to the machines are not carried
.
The processes in an ordinary roller ill plant are :-
1st. The break roller process.
2nd. Scalping.
3rd. Purifying (which, however, is receded by some dressing and grading). 4th. The smooth roller plant.
5th. The dressing process.

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## break rollers.

A French miller, after a recent tour of English roller mill inspection, told me that he thought our weak point was the overcrowding of our machines. And there is much truth in this statement.
Recent controversy in the department under discussion has foreshadowed advantages to be gained by decreasing the number of breaks. My first mill was erected on the four-break system; a fifth break was then added with apparentadvantage, and then a sixth with like esults. The modern four-break advo. cate will acknowledge this, but will no doubt say he also would have added the wo machines, but divided their work between the second, third and fourth breaks. But I always found that with only four breaks, the steps of reduction had to be so decided that the thick portion of the roller corrugation had to enter the wheat deeply, causing an undue amount of break flour to be made ; and this I found in a less degree with five breaks. I erected two mills with seven breaks, but found no advantage over six. The estimated gain in four breaks, if made at all, certainly accrues from lessening the number of elevatings, scalpings, and spoutings, and the consequent reduction of the general pulverization of the material, while pulverization of the material, while branny particles are present. It is
probable that the conversion of the first break roller into a machine which is to do work nearly approximating to the old second break, may be sanctioned. In our English eariy days of roller milling, the miller at once appreciated the advantages, as he thought, of the first break process, and frequently added the machine to precede his millstones, and immediately thought he saw a great improvement of his flour. But how could there be a great improvement when all he had succeeded in doing was removing, say, $\frac{1}{2}$ per cent of inferior removing, say, $\frac{1}{2}$ per cent of inferio
flour?
Replying, in 1883, to an able milltone advocate (since become an ardent roller convert, but, at the time, only shaken in his faith to the extent of the first break), I said, "My opinion is, that this first break question, which is receiving so much attention, is very much exaggerated by those who have looked at the first break flour. A great part of the inferior colored flour is made in the last break; but every $\frac{1}{2}$ per cent of low grade flour which can be separated from the good, should be so separated."
The constructive features of roller mills would repay careful examination but as other departments are, in my opinion, more important, and time is pressing, I pass them by.

## how some plants are run.

SOME time ago I was informed by an engineering company that a certain electric light station was greatly in need of a capable engineer, and if I wanted to take the position they would recommend me. They told me what the wages would be and the hours that I would have to put in, and after sizing it up in my own mind I thought I would try it, for although I saw lots of hard work ahead, I also saw a good opportunity to learn something. I agreed to take the place and they telegraphed accordingly. The reply soon came to send on the man, and I went, taking with me a young
man whom I proposed to use as my assistant. As soon as I arrived at the place, I asked for the location of the station and it was pointed out to me; a cloud of exhaust steam nearly hid the place, but the irregular barking of the exhaust enabled me to readily find the place. I stepped in through the boilerroom door, asked for the engineer and was informed that they had none, that the superintendent was looking after the engines and dynamos that night. I started in to find the superintendent, but what I saw before I reached him made me almost sorry that I came. I ducked my head under a belt I received a couple of drops of hot water on the back of my neck from a flanged union in the exhaust pipe above, which ran directly over the door; this was leaking at the rate of about ninety-five drops a minute. I had got all of that I wanted, so I went ahead looking for the snperintendent. I found him at the other end of the engine room with a troubled look on his face and an unusual quantity of oil and dirt on his white sleeves, for he had pulled off his coat and gone to work like a man, but his success so far had not been of such a nature as to relieve his worriment of mind. could not blame him for being troubled for the engines, of which there were four, were working like trip-hammers, and frequent flashes from the dynamos were sufficient to bring consternation to the soul of any person who had not "been there" before.
I did not propose to back out after having come that far, so I walked up to the superintendent and gave him my letter of introduction. While he was reading it I sized up things hastily and came to the conclusion that at least two engines were working steam mostly on one end, as they were jumping so that there was a great possibility that the steam pipes would be either broken down or parted. The superintendent, having finished my letter, said he was glad to see me and would like to have me take hold as soon as possible. We had had no supper yet, but I thought I could help things some by doing a little adjusting on one or two of the engines before attending to the inner man, as it went against my pride as an engineer to see machinery working in such a terrible manner. I sent my assistant outside to listen to the barking of the engines and make motions to me through the window. I took a monkey wrench and went for the valve-stem of the largest engine; there was a right and left coupling on this and I commenced turning the coupling and watching the signals from my assistant until by a nod of his head he indicated that the exhaust was about balanced. I then went out and satisfied myself that things were in a fair condition, then we went for another engine in the same way. This soon began to work
better and the steam pipes stopped their shaking. I then investigated a flashing dynamo and by changing the brushes a trifle I soon put an end to that trouble. About this time the fire man came in to see what was the matter as he had been compelled to close the dampers to keep the steam down, thing which said had never occurred before since he had been there. I asked him if the boilers were blowing off and he answered: "Oh no." I told him not to let the steam get any higher, for, as I had not examined the boilers yet, I did not want any of them to go off and leave me until I had had an opportunity them.
About this time I thought I had done nough to have earned my supper, so my assistant and I were making preparation to go to the hotel when our nostrils were assailed by a strong smell of burning grease. The words "hot ox" were simultaneously ejaculated by the three of us at about the same time and for a few moments there was some lively hustling around feeling of bearings, until we located the trouble on the shaft, which appeared to be out of line, so we slacked the boxes, gave it plenty of oil and trusted to luck to carry us through until the next day, but then I was told that it did not matter much as
they frequently had to shut down to they frequently had to shut down to
splice a belt, cool a hot pin or do some such work. I thought if they could stand a shut-down I could, so we went to the hotel, got some lunch and retired $r$ the night.
The next morning I went over to the works and waited for an hour or more till some one came to unlock the door An examination of the place by day light did not impress me very favorably with the manner in which it had been run. The fire room floor was covered with broken coal, dirty waste, pieces of broken brick and various other material to a depth of several inches, fire tools and broken scoop shovels were scattered around promiscuously in front of the boilers and dirt was present in abundance. I noticed several cracks in the boiler walls, and a pile of fire bricks which laid in a corner, I was informed, was a part of the furnace linings. look on top of the boilers revealed reprehensible state of affairs, - bricks, boards, broken shovels, dirty waste, old overalls and several wheel-barrow loads of like material covered the top of the boilers, while all around the safety valves was a dense coating of whitewash, showing that a portion of the sediment had been worked out of the boilers through the top blow-off
After taking from the first safety valve lever an extra weight of 40 or 50 pounds, Itried with my fingers to move
the valve-stem but failed. The fireman then informed me that the safety valves had not blown off for a long time past because he could not keep steam enough until last night. After ordering the rubbish removed from the tops of the boilers, I examined the fire boxes closely, finding about a dozen warped grate bars, furnace linings and bridge walls down and boiler sheets, badly coated with sediment from the water which had leaked though some of the seams. About this time I began to be anxious to know how the interior of the boilers were, but as they had been running for some time without accident, and as I had more than I could get through with in one day's time, I concluded to do as they had been doing be-fore-trust in luck for the next twenty-
of the boilers. nen at work With a couple of extr rifle so that by startings cleared up a less will not prevent recovery.-Webb re they v. Laird, Supreme Court of Vermont, ted a little better appearance and 20 At . Rep. 598
isible. That night everything started
Roller-mill Patents.-Patent No. up very nicely considering there had William D, Gray December 23,1879 , to not been much overhauling of the machinery.
It took about two weeks to get that plant in what I called reasonably good shape, but after that length of time things worked very nicely and we all fireman included, had some leisure in which to get acquainted. For a wonder good shape, although containing a thicker coating of scale than I desired to see, but with the leaky parts caulked tight and a surface blow-off put in and the use of a reasonable amount of kerosene oil and sal-soda we soon had clean boilers. It is not necessary to mention all the little details that were gone hrough to improve the condition of things, but there is one thing that I wish to mention. There were two steam pumps in the engine room, one of which I was informed had been "out of fix" or several months. On examining i I found that new packing and a little il was all that was required to put i in serviceable condition.
hink it is necessary to say any thing more about this plant or you might think I was blowing my own horn too strongly, but the above facts have been
given merely to show how some plants given merely to show how some plants
are allowed to run down. After getting this plant in shape I put in several months' time in charge of it in a very satisfactory manner to myself, as ther was but very little trouble with engines oilers or dynamos, and everything went on very smoothly.

## our legal department.

A Declaration on Trusts.-Judge Pryor, of New York, in a decision sustaining the demurrer of a combination recited a few legal principles which are amiliar to lawyers. After describing the combination entered into by five

## mpanies, he said :

Here there is an agreement, of which the inevitable effect is in conformity with its proclaimed design to restric competition in trade, and arbitrarily to enhance the price of a commodity of commerce. That such a contract is re pugnant to public policy and so unlawful is a settled principle in the jurisprudence of this country. The people have a right to the necessaries and the conveniences of life at a price determined by the selection of supply and demand and the law forbids any agreement or consolidation whereby the price is re moved beyond the solitary influence of legitimate competition.'
Damage for Rebuilding Mill Dam -Where a mill dam is maintained under a contract by which one party is, under certain conditions, bound to conribute upon demand of another, a specified share of the cost of rebuilding it, pon the happening of the conditions, and after a demand, the other party may, upon failure to comply with his demand, proceed to rebuild the dam and recover rom the party in default his share of he cost. Nor is it any defense to the action for such recovery that the work might have been done at a less expense, unless it is shown that it was wilfully and maliciously built at a greater cost than need have been. If rebuilt to the best advantage under the circumstances, the fact that another man under other

William D. Gray for "an improvement in roller grinding machines," and patent No. 238,677, granted March 8, 1881, to said Gray for "a roller-mill for grinding grain," are anticipated by the Nemelka Austrian and French patents of 1875, and the Nemelka Lake English patent of 1877; the adjustment of the rolls provided for by the Gray patents being accomplished by the Nemelka patents, though somewhat differently placed or: modified. Reissued patent No. 10,139, granted to W. H. Odell, for a " rollermill," (original granted December 13, 1881,) is void for want of invention, the device being but the connection of the two shafts in a double roller mill, so as to obtain a simultaneous operation of the two. Patent No. 169,623, granted December 26, 1882, to Hans Birkholz, for a "roller grinding-mill," is but a modified form of the first Gray patent, there being no patentable difference in the devices.-Consolidated Roller-mill Co. v. Banard \& Leas Manuf'g Co., Circuit Court of the United States, Northern District of Illinois, 43 Fed. Rep., 527.

Recovery of Goods Purchased in Fraud.-Where a merchant made purchases in May and June on credit secured upon untrue statements made either to the creditors themselves, or to the mercantile agencies upon which the creditors relied, when he was in fact insolvent, and where he testifies that in the latter part of June he knew he was insolvent, such purchases are fraudulent, and upon discovery of the fraud the sellers have the right to rescind the contract and recover the goods. If the goods have been sold to others, they can be recovered from them, so far as it can be shown that subsequent purchasers are not purchasers in good faith for value. That is, any one purchasing them with knowledge of the facts, and with knowiedge that they had not been paid for, participated in the fraud, and has no rights to be protected.-Grossman $\mathbf{v}$. Waters, Supreme Court of New York, 11 N. Y. Supp. 471.

## Validity of Assignment for Bene-

 fit of Creditors.-A firm engaged in the mercantile business, being indebted in about the sum of $\$ 18,000$, for which A. B. \& C. were separately liable as sureties for about equal portions of said debt, sold their stock of goods, including real estate and other property, to said sureties, who jointly assumed all the debts for which they were severally liable. This was a sale and not an assignment, and if made in good faith would be sustained. The sureties so far as appears, did not take the property for the benefit of one or more creditors of the debtor other than themselves, but they became absolutely liable for the debts which they had assumed, whether the property received was of sufficient value to pay said debts or not.-Bonns v. Carter, 20 Neb. 566 ; 31 N. W. Rep. 381, distinguished; Kaufman v. Coburn, Supreme Court of Nebraska, 46 N. W. Rep. 1010.The Canadian Government has passed an order in council reducing to 2 cents a ton the tolls on wheat and other cereals passing through the Welland and St. Lawrence canals to Montreal or ports east. The order covers the coming season of navigation only and the concession applies to United States as well as
Canadian bottoms.

OUR BARGAIN WITH THE INVEMTOR.

AUNITED STATES patent is a contract. The parties to it are the inventor on the one hand and the people of the United States on the other. The inventor, by a public record, informs the people concerning a useful discovery which he has made, which must be original with him and new in the United States. In return, the people, by their letters patent, secure to him the exclusive right to make, to use, and to sell his invention for a limited number of years. At the end of that period the contract terminates, and the discovery belongs to all the people forever. A patent, therefore, does not flow from the bounty of the community, a pension, or a subsidy, or a medal. It belongs to the inventor by right. It comes into existence in consequence of the legal establishment of a certain state of facts, namely, that the invention is new, useful and original with the claimant. This disclosure is the consideration on the part of the inventor, who, therefore, gives the community something value which it did not before possess. The community gives to the inventor, not something of value which it already had, as where a part of the public domain is patented to a settler, but simply protection. If the invention is valuable, so is the protection; if the invention is worthless, the protection is without benefit; thus the contract is reciprocal and evenly balanced. The validity of a patent depends upon the maintenance of the facts established. To determine issues of validity is function of the United States courts; to determine whether the consideration probably exists, and to make the contract itself, is the function of the United States patent office. "He who receives an idea from me," wrote himself without lessening mine; as he who lights his taper at mine receives light without darkening mine." idea once made known is subject to human control only when incorporate, and therefore it can become the subject of patent only when it is tangible and existent. In the beginning it may be regarded as a marvel ; in time it be comes a necessity of life, a manufac ture, perhaps the basis of a great industry. In a certain sense the invention then detaches itself from the inventor; for the patent no longer protects only one man, but through him many men in their rights. The patent system of the United States has now completed its one hundredth year. The experience of the century shows that the advantages incident to the patent contract constitute a sufficient incentive, not merely to lead people to publish their inventions, but to make them invent The number of patents granted yearly has steadily augmented; it is now more than 26,000 , and is increasing. Under the fostering protection of pat ents we have developed, and are devel oping, inventors as a distinctive Na tional product ; and because of this we are enabled to exhibit to the world a growth and prosperity as a manufac turing people unexampled in the history of mankind. The patent contract secures to the inventor his right for fixed period of time, absolutely and without limitation, save by the obligations which every man owes to society It assumes that self-interest will best conduce to the development of the invention, and therefore it imposes on the patentee no recurring taxes, nor does it compel him practically to operate his
device. A patent grant is not made in payment for an invention, in the sense that one is a measure of value for the other, but in return for its disclosure. No one can assess the value of a new discovery to the human race for all time. The more important it is, however, the more incommensurate become the returns obtainable during the latent period. The millions made from the patents on the sewing machine, or the reaper and mower, or the telegraph, or the telephone, are utterly inconsiderable beside the enormous bene fits which the public acquires through all futurity from these inventions Whether the thing contrived is to underlie a great industry or whether it is merely an improved pin, the inventor to be entitled to his patent, must dis close it fully, and without restriction or reservation; so that when the paten term shall be finished, the public may be able to make and use the thing as well as he himself can make and use it. He is entitled in return to equally full, unreserved and unrestricted pro tection. To lessen the enjoyment of that protection, or to limit it by harrassing requirements, such as taxes or obligations to work the invention, as the opponents of the system have pro posed, would amount simply to failure on the part of the people to comply with their side of the contract.- [Park Benjamin, in the Forum for March.]

(2)EWS.-P.J. Schapps, the Albany Minn., miller, has again been ad mitted to the asyium at St. Peers. It is claimed by some parties that his defraud him of property and there is muey defraud him or property, and here is muc exciteme
hood.

## Hou

00 -bbl. roller mill.
A mill is to be erected at Union Hill N. Y Hessrs. Baker \& Co., at a cost of $\$ 12,000$. H. S. Gilbert's elevator at Ottawa, Il burned $A$
surance.
Dayton, Tenn.; Madison, Tenn.; Majors ville, W. Va.; and Waits, O.; are all to have ew roller mills this year.

Firm in Centralia, Wis., recently purchased the flouring mills at Grand Rapids, Wis., from Nash Bros., of Milwaukee.
The Stilwell \& Bierce MIg.Co., of Dayton, O., have the contract for building a 1,000 -bbl. mill for Messrs. Marshall, Kennedy \& Co., at Pittsburgh, Pa.
The farmers in various parts of the country are negotiating with mill-builders for the erection of mills. This is good for the millbuilders, but
Wm. Hillyer, a representative of an Eng lish syndicate, and G. J. Russell, of the Rus sell, Miller Milling Co., are in West Superior, with a proposition to build a great flouring nill on the water front to be operated in conjunctiou with an elevator system in North Dakota. The proposition involves the building of a mill of $\dot{j}, 000$ bariels daily capacity. Joseph Perkien, of Detroit, Mich., the wealthy filler who was kiduapped in so misterious a manner March 18, returned home the following evening safe and well, but somewhat unnerved. He says that upon entering the coupe his suspicions were not aroused until he noticed the velicle curn in the opposite direction to his friend's house. He then threw open the door and attempted to jump out. He was met by two masked men, who held revolvers to his head and forced him back iuto the cab, they following. They then bound gagred and blindfolded lim, the cab keeping on what seemed its interminable course the while, under which circumstances Mr. Perrien was unable to keep any idea of locality in his mind. Finally he was removed from the cab to a room where his captors released him from his bonds, and covering him promissory note and letters. The latter were promissory note and wrters. Wies in ther were of his captors, who remained masked and dis guised. Mr Perrien was not further and disguised. Mr Perrien was not further disturbed till late that afternoon, when his captors informed him that "their "game was up," but that they would "get him next time." He was then rebound, gagged and blindfolded and conducted from the room. Their course seemeḍto lay over a ploughed field, after pass-
ing which they entered a cab and anotherlong,
rough drive was commenced. At last Mr Perrien was unloosed and thrust from the cab in a dazed condition and before he reco ered himself the cab had departed. He boarded a Myrtle street car and went home, where he related the above story. His person was not harmed in any way. The valuables he had with him not being touched. He was furnished with good food and treated with consideration during his captivity. His story is considered as absolutely reliable and the police are making every effort to locate the perpe trators of the deed.

## thade notes.

The J. B. Allfree Manufacturing Co of Indianapolis, Ind., has just issued their new catalogue for 1891. It is very completeand all mill-owners should send for a copy for ready reference.
C. Holch, Wilton, Wis., will increase the capacity of his mill by placing a new water wheel of the improved Walsh Double Turbine Pattern, manufactured by B. H. \& J. Sanford, Sheboygan Falls, Wis.
Messrs. J. R. Sechler \& Son, Hixton, Wis., will soon improve their mill, by putting in a 48 -inch improved Walsh Double Turbine Water Wheel and other machinery recently purchased from B. H. \& J. Sanford, Sheboygan Falls, Wis.
The Robert Aitchison Perforated Metal Co., have removed their Chicago office from 76 Van Buren st. to 510 Boylston Building, Nos. 265-269 Dearborn st. This Company are doing a large amount of work for Milwaukee parties.
The Milwaukee Bag Co. report business good for this season of the year. Competition has cut margins very materially in the bag line, but the Milwaukee Company are not only able to hold their old customers, but have added materially to their list of old ones.
The East Lea Paper Co., East Lea, Mass., alter searching the country over for a high grade water wheel with a tight-fitting gate, to use their limited supply of water with the best possible economy, and after several unsuccessful tests of the leading wheels of eastern mproved Whave finally purchased a improved Walsh Double Turbine, of B.
H. \& J. Sanford, Sheboygan Falls, Wis., to meet their requirements.

## FOREIGN ITEMS.

Advices from Brazil report that the purchase of the entire plant of the Amazon steam navigation company by the Brazilian corporation, Empreza de Obias Publias, has been completed. The purchase price is $\$ 44,250,000$, the first installment of which, $\$ 500,000$ has already been paid in Europe. This transfer from British to Brazilian hands of beween 80 and 100 river steamers of all sizes, together with all offices, landings, etc., covers the entire basin of the Amazon river and its tributaries on more than 40,000 miles of navigation.
We hear a dolorous tale from Constantinople! In the local milling industry ten years ago 24 mills were in full swing, now there are only 7, and the industry is still declining. The cause is simple. Import duties of flour are the same as on wheat, thus causing flour rather than wheat to be imported. Great discontent is naturally arising, and changes are likely to result from a recent agitation, which may lead to dif ferential duties in favor of the miller. Liverpool Corn Irade News.
An English journal is authority for the following: "A Belgian bas recently invented, and had patented in this coun try, a curious idea in lucifer matches.

The invention consists in placing on different parts of the same match the two compositions which, used in ordinary safety matches, are commonly placed the one on the box and theother on one end of the match. When you want to "strike a light" with this new match you break it across the middle, and then rub the two ends together."

The latest official returnsshow a gratifying increase in the volume of trade between the United States and Mexico. A summary of the exhibits for the fiscal years ending June 30, 1890 and 1889, is as follows:
$1890 .$.
$1889 .$.

Constl Baker, while looking for an ultimate clearing up of the clouds that lower upon the Argentine Republic, yet regarded the immediate future with misgiving when he wrote, and said that the more careful of our merchants and manufacturers could be in filling orders, and the more emphatic they might be in refusing credits, the fewer losses they would incur, and the fewer bad debts they would have to transfer to the account of profit and loss. The merchants of the republic, he said, even the best of them were struggling under the weight of the bad business methods which they had been following. The only safe course for all parties, he continued, was to restrict orders to the sheerest necessities of trade, and instead of contracting additional obligations to liquidate in every possible manner those they might have outstanding.
Values of Foreign Coins.-The Director of the mint has estimated, and the Secretary of the Treasury has proclaimed, the values of foreign coins to be followed in estimating the value of all foreign merchandise imported into the United States on and after April 1 1891. The value of the following silver coins are changed from the value given them in the circular of January 1, 1891:



## milling and mechanical notes.

A thorovgh application of red lead to iron and steel surfaces exposed to the weather, is said to be the best means of preventing rust
There is nothing which will squelch an oil fed fire in its incipiency more quickly and effectually than sand-and there are no afterclaps in the way of water damage, either.
An engineer asks the following pertinent question: "Who should be the most competent to decide as to the condition of the boiler, the man who owns the boiler, or the man who cleans and cares for it?"
There is a natural law relating to belt. ing which is not generally known, but which is nevertheless of value in practice. The hug or adhesion of a belt is as the square of the number of degrees which it covers on the pulley. For example, a belt that covers two-thirds of the circumference of a pulley requires four times the power to make it slip as it does when it covers only one-third of does when
the same pulley.


## "PRill"

PATEITT IMPROTED COCKLE MACHINES
Immense increase of trade without traveling agents. OUR COMPETTTORS GROSSLY ADVERTISING and imitating our STEEL REELS, we have decided to reduce our prices still more. Our Machines working satisfactorily in the following BIC MILLS IN MINNEAPOLIS
Christian Bros. Mill Co.; Minneapolis Flour Mfg. Co.-Standard; Washburn Crosby Co.
 western Mills; Stamwitz \& Schober-Phonic; Hinkle, Greenleaf \& Co.-Humbolat; D. R.
Barber \& Son; Pillsbury-Washburn Flour Mills Co.-Anoka Mill; Mineapolis Mill; Holly Barber \& Son; Pillsbury-Washburn Flour Mills Co.-
Mill; Zenith Mill; Pettit Mill.

The Phonix Mill; the Jupiter Mill; the Gem Mill; the Daisy mill and the Duluth Mill.
to be sure of getting the best machine buy the genuine
"PRINZ" IMPROVED STEEL COCKLE REEL.
THE PRINZ \& RAU MFG. CO., MILWAUKEE, WIS.

## MANUFACTURING SITES FOR SALE!

The undersigned owns a few of the best manufacturing sites in the city of Milwaukee, adjoining those now occupied by the Milwaukee Car Wheel and Foundry Co. and the magnificent plant of the Fuller-Warren Stove Works which cover nearly ten acres of ground. Best of railroad facilities. Parties desiring a suitable location should investigate this. Address,

## E. HARRISON CAWKER,

36 \& 37 Loan \& Trust Building.

MILWAUKEE. WIS.

## ORQANIZATION OF MILLERS IN THE UNITED STATES.

## THE MILLERS' NATIONAL ASSOCIATION

 OARD of DIRECTORS. ${ }^{\circ}$ C. B. Cole, Chester..
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P. H. Macgill, Baltimore.
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${ }^{*}$ A. C. Loring (chairman), Minneapolis
Geo. H. Plant, St. Louis
c. c. White, Crete..
-Geo. Urban, Buffalo.
Jno. M. Turner, Mandan.
Homer Baldwin, Youngstow
W. Latimer Small, York
W. H. Stokes, Watertown
${ }^{-} \mathrm{Wm}$. Sanderson, Milwaukee.
Members of Executive Committee.

Omens in a Loaf of Bread.-Among was supposed to have fallen in, which beliefs current with sailors is the belief steered its way down the river upwards that it is unlucky to turn a loaf up- of half a mile, when the body happening side down after helping one's self from to lie on the contrary side of the river it; the idea being that for every loaf the loaf suddenly tacked about and so turned a ship will be wrecked. It is swam across the river, and gradually also said that if a loaf parts in the hand sank near the child, and both the child while being cut it bodes dissension in and the loaf were brought up with the he family-the separation of husband grapplers ready for the purpose.
and wife. Again it has been a wide- A correspondent of Notes and Queries spread belief that the whereabouts of a maintains it is a scientific fact that a drowned body may be ascertained by loaf and quicksilver indicate the posifloating of a loaf of bread down the tion of the body, as the weighted loaf is stream, when it will stop over the spot carried by the current just as the body where the body is.
A curious account of a body thus Continent, and in Germany the name discovered near Hull appeared some of the drowned person is inscribed on years back. After diligent search had the piece of bread; while in France been made in the river for a child, to loaves consecrated to St. Nicholas, with no purpose, a twopenny loaf, with a ligthed wax tapers in them, have genquantity of quicksilver in it, was set erally been employed for that purfloating from the place where the child $\begin{aligned} & \text { pose. }\end{aligned}$

## VLANTED.

Position as traveling flour salesman in the Eastern states or cities. Applicant is a thoroughly well informed flour salesman and acquainted with the dealers and wants of the east.

Address " D ,"
Care of UNITED STATES MILLER, Milwaukee, Wis.

## FOR SALE.

A roller-process flouring mill; 80 miles west of Baltimore; neverfailing water power ; capacity 300 bbls. a day; railroad at door, with shops, store-houses and dwellings.
R. D. MUSSEY, Lawyer,

WASHINGTON CITY, D. C.

## ENGINE AND BOILER FOR SALE.

A 25 horse-power Reynolds Corliss engine, with 40 horse-power boiler and heater and connections, all in frst class condition and in use at present. To be delivered in May, 1891. A bargain for anyone in need of same. Reason for selling, more power required. For further information address,

RIVERSIDE PRINTING \& ENG. CO.,
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124 Grand Avenue, MILWAUKEE, WIS.

## FOIE ESATRJーIn WVisoonsin.

125-bbl. roller flour mill, 4 stories, frame with stone basement, including plenty water and office close by, and long sheds for farmers' team 4 . The whole property in fult operation 16 hours daily, doing profitable business. Has big grist business. City of 2,000 population; two railroads. Good trade with citizens, farmers and lumbermen, for
flour, feed nud rye. Grod local grain, and plenty of it. Guod flour, feed and rye, Grood local grain, and plenty of it. Guod place to live, has, kood
schools and churches, and close to other large citie.. Owner non-resident, which is the reason for selling. Address,
4-tf MENASHA WOOD-SPLIT PULLEY CO., Menasha, Wis.

## FLOUR MILL FOR SALE.

a rare bargain
A FOUR-STORY BUILDING SITUATED ON GROUND SOXISO
 Mldoling Stones; three Garden Bits and five Shith; Puriflers; one Three Break Scalper and sixteen Flour
Reels: the


 Rock, slowing location of mill, will be sent on application. For further, partioulars address,
the april mabazines．

AN article in Harper＇s on＂The Behring Sea Controversy，＂by the Hon．E．J．Phelps， ex－minister to the Court of St．James，is one of the most important journalistic achieve ments of the day．Gen．Lewal，ex－minister of war for France，writes for the same num ber a picturesque and entertaining accoun of the development of＂The French Army， which is made still more attractive by a serie of illustrations drawn by Thulstrup．T．Mitch ell Prudden，M．D．，in a paper amply illus－ trated by H．D．Nichols，gives some interest ing＂Glimpses of the Bacteria，＂and describes upon the life and health of other organisms The popular series of South American papers by Theodore Child is continued in a timely illustrated article entitled＂Argentine Pro－ vincial Sketches．＂A historical and descrip－ tive paper on＂The State Wisconsin，＂accom－ panied by numerous portraits of public men， is contributed by the Hon．William F．Vilas． Dr．Charles Waldstein writes a description of the famous Court Theater of Meiningen，＂and the duke of Saxe－Meiningen contributes to the illustration of the article some of hisown pen－and－ink sketches．The fiction in this number includes the continuation of the seri－ als by Charles Egbert Craddock and Thomas Hardy，and short stories by Margaret Crosby and Angeline Teal．

SCRIBNER＇s commences a richly illustrated series on＂Ocean Steamships＂which，it is believed，will be as successful as the＂Rail－ way＂and＂Electric＂series．The most com－ petent authorities have been chosen to write of＂Ocean Passenger Travel，＂＂The Ship＇s
Company，＂＂Safety at Sea，＂＂Speed，＂and Company，＂＂Safety at Sea，＂＂Speed，＂and the＂Lines of the World．＂Articles of travel
and adventure are represented in this issue by Mr．Jephson＇s second paper on his perilous journey to relieve Capt．Nelson at Starvation Camp；Robert Gordon Butler＇s acconnt of the the of Unted states steamer Thetis escription of and and Birge Harrison＇s port which is now almost as rare in Austra－ lia as a buffalo hunt on the plains．The recent Sioux outbreak and the causes which produced it are clearly and dispassionately set forth by Herbert Welsh；and the Rev．Willard Parsons， its founder，tells the story of＂The Fresh－A ir Fund，＂which is entering on its fifteenth year． Other articles on practical charity are prom ised．The first of living Spanish poets is the and＂What is Right－Handedness？＂is discuss－ ed by Prof．Thomas Dwight of the Harvard Medical school．
Dr．Albert Shaw may well be congratu ated on his first American edition of The Review of Reviews．It shows a marked de－ gree of improvement on any of the Eng lish editions both in the nature and arrange－ ment of its matter and in the clearness of its text．It remains the busy man＇s mag azine in every respect，reviewing in con－
densed form the progress of the world in politics，social reforms，the arts and sciences， giving to its readers information concerniug the leading events of the day，and following with intelligent interest the movement of contemporary history．Its aim is to make the best thoughts of the best writers in con－ temporary periodicals of all nations univer sally accessible；to enable the busiest and poorest in the community to know the best thoughts of the wisest，and to understand something of the real character of the men and women who rant among the forces of the time．The office is at 52 Lafayette place， New York City

The country has for export without reducing its stocks lower than July 1 1882，more than $47,000,000$ bushels of wheat．During the month of March the movement has again been slow and scanty from Atlantic ports，and unless there is a marked change in that re－ spect the available surplus for export will not be taken．These facts not only fail to sustain the extravagant preten－ sions of speculators，but fairly subject them to the criticisms which Mr．Dodge applies so freely．The so－called statis tics manufactured for speculative con sumption are generally of little value but have been somewhat wilder and more foolish than usual this year． N．Y．Commercial Bulletin．

All persons desiring to reach the entire milling and grain trade of America，by cir－ cular or otherwise，should obtain a copy of Grain Elevator inirectory for 1890－91．

Clorasad，Cincimati，Minage \＆Sh Lovis玉AエIオAエ．
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The Only Line running the Popular Buffet CHICAGO and CINCINNATI

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## Through Tickets via the Big Four Route can procured at all Ticket Offices in the Northwest．

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the fact that the WiSCONSIN CENTRAL LINE the fact that the WISCONSIN OENTRAL LINES
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Wrukee and the points named aboe Through Fast
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Fur tickets，Sleeping Car reservations，time tailes
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This railionad．with its min and branch lines，has
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In addition to this service the Northern Pacific run
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$\qquad$ For Maps，Time Tables，and illustrated Pamphlets，
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The Winter Resorts of Florida and the Sunny South．
At no time in the history of southern travel haver
he indications pointed to so brilliant a season at sed for 1890－91．At Jacksonville，St．Augustine，and been made for the entertainment of northern guests，
and all visitors can rest assured of the old－time ho
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$\qquad$ equipped with private compartment buffet sleeping as and heated by steam，making direct connectio n Central Cnion Depot at Cincinnati with through
rains for all points in the South．Ask for tickets via the Big Four Route．

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General Passenger Agent
General Passenger Agent，
Cincinnati， O
THE FINEST ON EARTH．＂
The Cincinnati，Hamilton \＆Dayton R．R is the only line running Pullman＇s perfected safety vestibuled trains，with chair，parlor， sleeping and dining car service between Cin－ cinnati，Indianapolis and Ćhicago，and is the only line running through reclining chair cars between Cincinnati，Keokuk and Spring－ field，Ill．，and combination chair and sleeping car Cincinnati to Peoria，Ill．，and the only di－ rect line between Cincinnati，Dayton，Lima Toledo，Detroit，the lake regions and Canada． The road is one of the oldest in the State of Ohio and the only one entering Cincinnati over twenty－five miles of double track，and from its past record can more than assure its patrons speed，comfort and safety．Tickets on sale everywhere，and see that they read ．H．\＆D．，either in or out of Cincinnati， Indianapolis，or Toledo．E．O．McCORMICK General Passenger and Ticket Agent，Cin－ cinnati，Ohio．

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THE SHORT，CHRAP AND EVER POPULAA
Michigan，Canada and the East
The Company＇s splendid iron steamers City of
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IRON AND MINERAL RANGES． Huriey，Ironwood，Bessemer and Wakefield The Manufacturing Centers and Lumbering
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Entire Trains，Baggage Car，Day Coaches
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Direct Connections at New Orleans，and Sh
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Trains leave Central Union Depot，Cincinnati，
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slate and renewable account book, $\$ 1.00$. Address, E. HARRISON CAWKER, Publisher United States Miller, Milvaukee, Wis.

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In use in many of the representative milis in the country and being rapidly adopted in all sections by all classes and sizes of mills.

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Gents-On receipt of this, please send me another Jonathan Mills Air Belt Purifier, same as the ones heretofore sent. The more I use these machines, the better I like them. Our mill is so much oleaner than it ever was before, because we have no dust
floating in the air, no waste whatever caused in the purifying process. Our middlings are absolutely perfect, and made so without waste and almost without power, the amount required to run the machines being so small. Respeotfully yours,

HE JONATHAN MILLS MFG. CO., Columbus, 0 . HOMER BALDWIN
HE JONATHAN MILLS MFG. CO., Columbus, O.: ight or day until he gets the rest of them. Thinks he will want six more. So please send them ald Purifiers that he cannot rest know how soon we can except them. Yours Very Truly ACME MILLING CO., by S. F. Robinson, Pres.
THE JONATHAN MILLS MFG. CO.
Write us for particulars and references. *
golumbus, ohio, u. s. A.
$+$

#  

 (®) (®) (@ © (®) MLAS CHOSEN.wITNESSETH:
THE BRADFORD MILL CO., Cincinnati Ohio:
AKRON, OHIO, September 23, 1890
Gentlemen-Mr. Clark has just given me his order for the Dunlap Bolt, and wants it shipped as soon as possible. Make up and ship with the Bolt a Con-
veyor as per enclosed sketch. Respectfully,

FRANK E. NEAR.

THE BRADFORD MILL CO., Cincinnati, Ohio:
OFFIGE OF THE SEIBERLING TNILLING CO
Gentlemen-Yours of yesterday received, and I wired you this morning "yes," as per your instructions. The sketch is all right. Make the Conveyor good and strong

I told Mr. Near that he need not have cloth sent with the Dunlap Bolt, as I have the one here that was used in the test. I will use same numbers on the new machine.


THE LAII \& BodLey CO., cor. John \& Water Sts., cilicininafl, 0 .

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B. H. \& J. SANFORD sheboygan falls, wis.
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MILWAUKEE, WIS.
J. B. A. KERN \& SON, Merchant Millers
Capacity 2,000 Barrels Per Day.
MILW AGKEE, WIS.
Manufacturers of Cholee Minnesota and Dakota Hard Wheat Flour

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Takes up but little room, runs at low rate of speed, requires no attention. It is in
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# THE EDW. P. ALLIS COMPANY 

* Flour Mill Builders and Fürnishers, * RELIANCE WORKS,

MILWAUKEE, WIS.

# The llnited States 

AND THE TVILLING ENGINEER. Sixteenth Year.-No. 5.

MILWAUKEE, MAY, 1891.
Subscription Picte, Sl. 00 Per Year.

## milleas in convention.

THE Fifteenth Annual Convention of the Millers' National Association began its three days' session in the Call Room of the New York Produce Exchange, Monday, May 11. The President of the Association, Mr. A. R. James, occupied the Chair, and the Secratary, Mr. Frank Barry, recorded.

President Evan Thomas, of the Produce Exchange, made a short address at the opening of the Convention. In part, he said: "Millers from the North, millers from the South, millers from the East and millers from the West, the New York Produce Exchange extends you the right hand of fellowship, and though you did not bring your flours with you, you are as welcome as the flowers of May. We have appointed a committee to look after your welfare, and if, gentlemen, they don't treat you right while here, there are 3,000 business men of New York who will want to know why. I feel quite at home among millers. I have hired mills, I have built mills, and, as a commission merchant, I have tired millers. Gentlemen, yours is a very ancient and honorable profession. If you go back to the mythological ages you will find that the 'mills of the gods grind slowly.' Thus you see far back yours has been a high-toned company, and the present Association shows that the race has not deteriorated. You are men of business, and I will not detain you further. We are very glad to see you. Please order things as though the room belonged to you." (Applause).

The President of the Association responded on behalf of the Millers National Association, and thanked the members of the New York Produce Exchange for the cordial welcome. He appreciated the kindness and accepted the hospitality in the spirit in which it was given. President James then read his annual address, the features of which follow
"In calling to order this, the Fifteenth Annual Convention of the Millers' National Association, I am not unmindful of the fairly prosperous year through which you have passed, despite the many annoyances that have beset you, and against which protests loud and deep have been uttered, though without avail ; nor am I blind to the possibilities, and, with your concerted action, I would say to the certainty of the good future in store for you for the coming year."
In refering to the question of the evils of transportation and the export trade, Mr. James said:
"It is not necessary for me to enlarge upon the enormity of this almost crime. It is a subject familiar to you all, that has been discussed in every convention for years and with a surprising unanimity of opinion, and never a dissenting voice. It has for as many years
filled the columns of every milling warrant, shall attach where merited or journal, and with a like similarity of views. From such a concensus of opinion your Executive Committee was imbued with the idea that here at least was one question on which the membership would unite and enthuse, and promptly set to work to evolve some plan to eradicate these evils. The result of their deliberations was a well conceived plan, now known to you all as the Millers' League. The plan in all its detail, together with necessary blanks and stamped envelope for return, was presented to every member, with the request that he should endorse the same and subscribe to a guarantee fund of $\$ 25,000$, equal to less than $\$ 20$ per unit of capacity to be drawn against in placing the League upon a firm foundation until it should become selfsupporting. The probabilities were that ever dollar of the guarantee fund would be returned to subscribers, and in the event of complete failure of the scheme, it was difficult to see how more than 50 per cent of the fund could be lost in the venture.
"As a result of this effort, out of a membership of 360 , not over 175 made any reply, and of these 150 either flatly declined or evinced little interest in the plan proposed. After many months delay, and most earnest effort on the part of a few active spirits, and the energetic support and persistent appeals of the Milling Press, whose indefatigable efforts in behalf of the Millers League cannot be too highly commended, this number has been increased, and the guarantee fund has reached the sum of less than $\$ 14,000$, or but little more than one-half the amount called for, a part of this even having been subscribed by friends outside of the Association.
"Here, again, we witness the hearty desire for co-operation on the part of our millers in this dragging success of the Millers' League.
"What a commentary on one of the wealthjest trade guilds in America strong in numbers and influence, endowed with brains and intelligence, and and yet frittering away its golden opportunities and inviting disaster and dissolution from sheer, clear apathy.
"Perhaps it is not to be wondered at since selfishness, ease and opulence seemingly rule the hour. Proud and ancient Rome at the zenith of her glory had a similar attack and nought could shake her from the belief that she was omnipotent until her downfall. Is this feeling of individual selfishness, ease and omnipotence pervading our membership to the extent of overshadowing all other considerations? 'To' what else can this indifference to the general good be attributed?
"Think you I speak with fervor on this subject, certainly it is my intention, as I conceive it my duty so to do, and to place squarely before you the record that 'he who runs may read' and that

## deserved.

"The early history of the Millers' National Association is one of courage, daring and united action, and it is a history of success, overcoming all obstacles in spite of the strongest combinations arrayed against it ; a bitter, deadly opposition well calculated to make the stoutest heart quail. The millers of those days recognized the enemy with whom they had to contend, or to whom they must succumb. Luckily the omnipotent miller was not of that day. In united and concerted action was their only safety, and this they possessed the brains to see, the judgment to adopt, and the courage and pertinacity to maintain, until victory crowned their efforts, and left them masters of the situation. Shall we ever revert to this piece of history-now as familiar to you all as household words -simply as a matter of pride in our ancestry, and with folded hands rest complacently on their laurels? Or shall we rather at this fresh recital of their virtues and their victories, resolve to emulate their example, and inspire by the memory of their wisdom, judgment and courage, arouse ourselves for
action and prepare with united front and one accord to give battle to every opposition that threatens the milling interest, and beat down the long line of unjust and unhealthy practices incident to present commercial methods, which like so many leeches are sucking the very life-blood from the milling business.
"I sincerely hope the coming year will mark an epoch in the history of the Association. Never was there greater opportunity. The proposed Millers' League should receive your prompt attention and the sum necessary to complete the guaranty fund should be subscribed, every dollar of it, before the final adjournment of this Convention, and your Executive Committee thus empowered, instructed to put it into operation at the earliest possible moment.
"Let the 'Pilgrims' that are to be, carry the welcome news to your patrons across the ocean, that the Millers' League is an accomplished fact, and no greater impetus could be given the foreign trade, resulting in benefits, alike to all millers, whether export or domestic, as has been so clearly demonstrated by able arguments before former meetings of this Association and in the columns of our milling journals, as to need no words of mine in its support.
"That the business methods of today are not what they should be, that they are growing worse day by day, and that they are a source of constant annoy ance and great loss to the miller, will, I think, be admitted by all, hence immediate and effective steps should be taken to eliminate these evils and restore the trade to a sound, healthy and prosperous condition. This, I am aware, is an
ever been a difficult one to put in practice, but only because of man's foolish fears, distorted judgment and unalloyed selfishness.
"If every miller would resolve and adhere to his resolution to conduct his business on strictly business principles, with a due consideration for the rights and interests of his brother miller, every evil complained of under this head would disappear as if by magic. Why then cannot the resolution be adopted and adhered to by every member of the Association. A happy scheme, but wholly impracticable say you? Not so; let me cite the agreement of the spring wheat millers on the question of differentials in prices of sacks and barrels. For many years sack packages were sold at an actual loss, and I can assure you the loss aggregated very many thousands of dollars, but it was submitfed to with that meek and lowly spirit so proverbial in the miller, and that marks his career from the cradle to the grave. Because one did it all must, was the argument. Some two years ago a table of differentials was carefully compiled, obviating this unnecessary loss, and was agreed to by practically all the spring wheat, as well as many of the winter wheat millers. It is to-day in force, and for the two years of its existence I have never known it to be violated. This simple agreement, requiring no cost or expense, merely united action on the part of millers, has been the saving to them of more than $\$ 50,000$ per year.
" Doos this look as though co-operation was impracticable?
"If a success in this instance, then why not as applied to all just and reasonable measures affecting the interests of our members? This is the overshadowing question to ask yourselves and to carefully consider, and satisfied of its practicability, as I think you must be, its efficacy cannot be questioned, and you cannot too quickly begin the application of this principle; in eliminating the many vexations and unjust practices that have for so many years made the millers' life a burden. I will not tresspass upon your time and patience to particularize upon these injurious and unworthy methods. That the business is weighted down with them is only too plainly apparent. Yours is the duty to afford relief. Aroused to a realizing sense of the demands of the business, the danger of present practices, and a just appreciation of the immeasurable benefits of cooperation, with a determination that the matchless powers of this organization shall no longer remain dormant, with opportunities for its exercise on every hand, and with duties clearly defined, you stand at the portals of a bright and prosperous future, and my earnest hope is that, imbued with wisdom, judgment and courage of the fathers of this Association, you will, shoulder to shoulder, ever mindful of (continued on page 70.

## "We are only sorry we did not place one in a year ago"

Don't put off buying the machine referred to. Every day will add to your regret that you also have not put in a

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PRICES LOW.
results guaranteed.
trial allowed.
NEW PHILADELPHIA, O., March 9, 1891.
SUPERLATIVE PURIFIER MFG. CO., Milwaukee, Wis.
Gentlemen-We started the Scalper the 7th, and it is giving good satisfaction. We
can see quite a difference in the color of our flour, and are making more middlings than
we did with our old reels. We are only Yours truly,
J. \& O. C. JUNKIN\&. FOR CATALOGUE, PRICES, ETC., ADDRESS
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## Tre Superlative Purifier


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Guaranteed to do as good work as any Purifier on the market,
WELL EUILT AND FINISHED.
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IF you want a Cockle Separator, write us. We can satisfy you both as to style and price. We build machines with reel or shaking graders, and with steel or zinc cylinders, as desired. Also in connection with Richardson's Dustless Oat Separator Attachment.

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E. HARRISON CAWKER, Editor.

## PUBLISHED MONTHLY

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## MILWAUKEE, MAY, 1891

We respectfully request our readers when
they write t? persons or firms advertising in this paper, to mention that their advertisement Wan seen in the UNITED STATES MILLER
AND THE MIILING ENGINEER. You will thereby oblige not only this paper, but the advertisers.

## MILWAUKEE AMUSEMENTS.

DA VIDSON OPERA HOUSE-Every evening, Satur-
dav and Sunday Matinees. BIJOU THEATER-Every even
day and Sunday mainees.
ACADEMY OF MUSIC-Every evening and satur-
STANDARD. THEATER-Every evening and usual
matinees.
PEOPLES THEATER - Every evening and usual
matinees.
GERMANNSTADT THEATER-Regular perfor
Wednesday, Friday and sunduy evenings.
LA YTON ARTGALLER Y-Free Tuesdays, Thursd days and Fridiays.
PUBLIC AI USEVMA-Open daily. Exposition building.
Visitors to Visitors to Milwaukee in either summer or winter
cannot fail to flod amusements suited to their taste.

T'HE Millers' League has so far failed to raise the necessary $\$ 20,000$ with which to go into active business.

TH
 ional Association at its New York meeting, was the lightest ever yet held

THE mill furnishing houses in Mil waukee all report business good; most of them being compelled to run overtime to keep up with orders
 readers our new Baltimore corres-
pondent, "Don". Many will wonder who he is. We are not at liberty to tell, but he is well posted and is "right among 'em"

$W^{\text {E }}$E had hoped that our fellow citizen, Mr. Sanderson, would have been elected president of the Millers' National Association this year, but the honor was again conferred upon our Buffalo friend, A. R. James. He is well qualified for the position.

THE United States Miller and new technical writers and articles from each of them may be expected next month. It is universally admitted by all excepting its contemporaries that The United States Miller and Mill ing Engineer publishes the ablest technical articles to be found in the milling press.

A NUMBER of Milwaukee millers They will, however, go and come when they please. In speaking of this subject recently, a miller said: "Yes, I shall go soon, and be gone two or three months, and hope I shan't see a miller till I get back. Don't know but I will even cover up the mirror in my state room".

WE acknowledge the receipt of The Cincinnati Price Current's Statistical Annual for 1891 ; it being the 42 d annual report of Pork Packing in the West and elsewhere in the United States and Canada, also Provision and Grain rade statistics, live stock and beef ex hibits, and a variety of other commercial
1891. It is in pamphlet form, 64 pages,
and contains a large amount of in and contains a large amount of information compactly compiled by Mr . Chas. B. Murray, Editor of The Cincinnati I'rice Current.

Whave received a uniquely designed calender, with the compliments of the well-known firm of Arkell \& Smiths, Canajoharie, N.Y. It is a veritable flour suck of the white corduroy style, beautifully branded in colors, representing a circle of daisies and pansies, in the center of which, on a bright red ground, in gilt letters, is the name adopted for this style of flour sack. The calender commences with March, 1891 and extends to the same month 1892 Thanks.
THE Mechants' and Manufacturers Association of Baltimore have appointed an agent to Brazil to represen all the manufacturing interests of tha city. He will carry a full line of samples and photographs of Baltimore man ufactures, and will exhibit them to Rio dealers and will also observe and note the style of goods most desired by the residents of that country. He will not however take orders for any goods but refer them to the proper parties direct

This movement is suggestive to the mill ing trade. As it is now the West Indian and South American trade is almos monopolized by a few exporters and im porters. It is said that Havana, Cuba has practically but one firm of import ers. We believe that it would be to the interest of the trade to send representatives to these countries to stimulate the rade in American flour, especially now hat reciprocity arrangements have been effected.

T"
The following is a list of names of parties in attendance at the New York meeting of the Millers' National Association:
C. G. Moller, Brooklyn; Mr. Ogden, F. H.
Shuttleworth, A. R. James, Mr. Henry Shuttleworth, A. R. James, Mr. Henry, Mr. Smith, Buffalo, N. Y.; F. O. Clark, Oswego,
N. Y.; G. T. Vought, Pittsford, N. Y. Mr N. Y.; G. T. Vought, Pittsford, N. Y.; Mr.
Chase, Mr. Bartell, W. D. Stone, W. H. Chase, Mr. Bartell, W. D. Stone, W. H.
Duffett, Mr. Moseley, Mr. Angel Rochester, N. Y.; Mr. McDonald, Tonawanda, N. Y.; A. H. Herrick, Watertown, N. Y.; J. M. Turner, Mandan. N. D.; Geo F. Honey, Park River, N. D.; J. P. Fornlenison, Perry, N. Y.; S. A. Seeley, Spencer, N. Y.; W. II. Mc-
Pheeley, Philadelphia, Pa.; Jos. Colton, Bellfontaine, Ohio; E. S. Lee, Roscoe, Ohio; Mr.
Barnette, Springfield, Ohio; J. W. Scouller Barnette, Springfield, Ohio; J. W. Scouller, North East, Pa.; B. F. Isenberg, Huntington, Pa.; W. L. Small, York, Pa.; L. Levan, Lancaster, Pa.; Judge Hoffe, Huntington, Pa. Stokes Bros., Watertown. S. D.: Wm.
Sanderson, H. B. Sanderson, Dr. Wm. Fox, Sanderson, H. B. Sanderson, Dr. Wm. Fox,
S. W. Bates, S. H. Yeamans, Frank Barry, S. W. Bates, S. H. Seamans, Frank Barry,
Milwaukee; C. H. Cooley, Hartford, Coun. Milwaukee; C. H. Cooley, Hartford, Coun.;
L. T. Lemon, Richmond, Ind ; G. May, Watertown, Wis.; Preston E. Lee, Wilming ton, Del.; D. R. Sparks, Alton, III.; C. B Cole, Chester, Ill.; Jos. Reichert, Freeburg IIl.; Geo. Postel, Mascoutah, Ill.; L. Koenigs Princeton Ind, W B. W. Moore and wife N. J. J. G. Patton, Cattelson, Jersey City, N. J., J. G. Patton, Cattelsburg, Ky,; C. V McCoy, Cateisburg, Ky.; P. H. Macgill, Bal T. Schober, Mr. Schwan, C. G. Ther, Minn.; Mr Bell, Sr., R. -V. Ford, C. G. Thornton, S Edgar, W. R. Gregory, C. J. Martin, W. C Barclay, Moorhead, Minn.; W. B. Knicker Barclay, Moorhead, Minn.; W. B. Knicker-
bocker, Albion, Mich.; W. A. Coombs, Coldwater, Mich.; F. W. Stock, Hillsdale, Mich. C. A. Voight, Grand Rapids, Mich.; C. J Me Roo, Holland, Mich.; Mr. Rice, Yortland Mich.; J. Jenks, Sand Beach, Mich.; D. B
Merrill, C. S. Knickerbocker, Jackson, Mich Oscar Pindell, Hannibal, Mo.; R. T, Davis St. Joseph, Mo.; Geo. Bain. St. Louis, Mo W. H. Stanley, St. Louis, Mo. J, F. John on, Milford, Neb.; W. C. Newman Arkon N. Y.; J. Amos, Syracuse, N. Y.; and G. Q. Moon, Binghampton, N. $\mathbf{Y}$.
$W^{\text {E }}$ have received a copy of the Grocery Trade Press List, a month $y$ journal devoted to the interest of grocery trade publications. It contains
journalists and a classified list of withstanding the firm appearance of grocery and allied trade papers. The the winter wheat and the near approach Grocery Trade Press List, is valuable to of the winter wheat harvest, there seem publishers of trade papers as well as to to be reasonably good grounds for the advertisers therein. Published by Ro- present price of wheat. This will apbert M. Floyd, 56 Clark Street, Jersey pear from a careful study of the follow City, N. J

## J. ing facts:

## INOIAMA MILLERS' CONVENTION.

$T$ HE Indiana Millers' Association held the Business Men's Association Hall Evansville, April 28th. The morning ession was called to order by the presi dent, A. C. Hawks, of Goshen. Mr. A. C. Williams, of Indianapolis, was made secretary pro tem. There were about 100 delegates present, many others arriving in the afternoon. Mayor N. M Goodlet welcomed the delegates, after which President Hawks delivered th annual address, which was replete with suggestions and information for the good of the association. The meeting then adjourned until 2 o'clock
The afternoon session was occupied by the reading and discussion of vari ous papers, which were full of interest o not only the millers, but to the farm ers, shippers and consumers. J. C. Cor bin, of New Harmony, read a paper on "Southern Trade," in which he said hat the immense trade in the Southern States, which was formerly held by Indiana, has been seriously affected by the lack of transportation facilities, and that he trade was rapidly going to Ohio and Pennsylvania
Mr. Williams, of Indianapolis, read a paper giving some valuable suggestions on the subject of organization. J. L. Knauss, of Evansville, followed with a valuable address on district organization. Mr. Robert Preston entertained the delegates with a paper, discussing the importance of a more thorough organization of the millers of the State
Mr. Levi Iglehart, of Evansville, on of the oldest millers of the State read the most interesting paper of the session, being on the subject, "Interstate Commerce Law," which was fully dis cussed by the delegates.
The visitors were tendered a reception and banquet at the St. George Hotel in the evening.

## MIL WAUKEE REVIEW

THE output of the mills here was only moderate the past month. The high and fluctuating price of wheat interfered with profitable milling. Millstuffs, which have been exceedingly high, have now declined fully 33 per cent., and the denand is not very brisk at the decline. Patent flours have dragged heavily, because millers have been compelled to hold them firmly at about $\$ 5.75$ to $\$ 6.00$ for best spring and $\$ 5.25$ to $\$ 5.50$ for winter straights. Offerings at present are on a basis of about 25 c under those figures. Rye flour is offered at $\$ 4.75$ to $\$ 4.85$, Export offers are lower by about 25 c per bbl. Clears, bakers and low grades are in demand, but scarce, because patents are not selling freely, hence not milled freely
Good sacked bran to-day, $\$ 1375$ to $\$ 14.50$; good sacked middlings, $\$ 17.00$ to $\$ 18.00$.
There is undoubtedly a short interest in the May wheat, as shown by the following table:
 wheat now will doubtless make the 65 members of the Millers' ex about wheat now will doubtless make the
shorts pay for their fun, and yet, not-

When the City of New York sailed
Receipts and shipments at the seven primary markets for to-day and the


Whert, $1890 \ldots \ldots . . . . \quad 85,926$
Total visible supply:-

| W | $\begin{gathered} 1891 . \\ .20,833,205 \end{gathered}$ | $\begin{gathered} 1890 . \\ 22.802 .25 \end{gathered}$ |
| :---: | :---: | :---: |
| Corn | 3,717,704 |  |
| Oa | 2,629,781 |  |
| Ry | 414, |  | Of the $20,750,000 \quad 414,671 \quad 1,018,712$ Minneapolis holds $5,750,000$ bushels, Duluth 3,750,000 bushels, and Chicago $4,500,000$ bushels. The other $6,750,000$ bushels are distributed among about 20 cities.

Gold is being taken from New York for export by the million, and we hear that French and other European fields do not promise an average crop.
New York, with only 350,000 bushels of wheat, trades in that article to the extent of about $17,000,000$ bushels daily. Surely if the cereal is in strong hands the price may be low, for men will take advantage of such conditions.

The Phoenix mill is shut down for a few days and Messrs. William and Harry Sanderson are in attendance at the Millers' National Convention at New York in the mean time. Mr. Harry Sanderson is booked for passage to London after the Convention adjourns.
Mr. A. A. Freeman, who has always been a prominent figure in the Millers' National Conventions, is in this city negotiating with the E. P. Allis Co. for machinery for his new flouring mill.
Mr. Chas. Manegold has just returned from a trip to the Pacific coast and reports the crop prospects along his route as splendid. He declares that Califor nia with its climate is a perfect paradise.
Quite a lively discussion took place in the Exchange room to-day between a local miller and freight agent as to the relative cost of transporting wheat and flour from Milwaukee to New York. Wheat is being delivered in New York City for 5c per bush. The miller wants a relatively low rate on flour, otherwise he cannot compete with the New York miller. The problem was not solved, but the miller was informed he could buy as many steamers as he liked and run them himself, as here were many idle. Donaldson,
Milwaukee, May 15, 1891.
The Superlative Purifier Mfg. Co., of Milwaukee, has lately shipped New Era scalpers to Goold Bros. \& Co., Howard, S. Dak.; Wise \& Tuckey, Paw Paw, Mich.; Patterson \& Sisson, Camillus, N. Y., two machines; Wm. Smith, Ida Grove, Ia.; Chas. S. Smith, Canandaigua, N. Y.; Clark, Mercer \& Co., Baldwinsville, N. Y.; George Tomlinson \& Son, Perry, N. Y., Phelps \& Sibley, Cuba, N. Y.
Mr. J. Donaldson, formerly of Donaldson Bros., of this city, has returned after nearly four months absence spent in visiting the flour dealers of the Eastern states.
When the City of New York sailed
the 13th inst. she carried about 65 members of the Millers' excursion
your neighbor's rights and interests, press on and on, overcoming all obstacles, till at length the portals are passed and you enter into the enjoyment of that peace and prosperity so long denied and yet ever deserved by the honest miller of America.
"In conclusion, gentlemen, I trust you will pardon any unseemly ardor I may have manifested in addressing you. My earnestness in the work that I believe can and should be accomplished by the Millers' National Association, and my interest in its welfare and that of its members must be my excuse. 'Naught have I set down in malice, naught extenuated,' but as it has appeared to me, so have I spoken to you. Not in the words of wisdom and eloquence as I could wish, but solely in the interests of our Association, and to the best of my ability of head and heart.

In his report, Secretary Barry said: "There will probably be brought to your attention during this convention a legislative measure by a National Transportation Association, of which organization the Millers' National Association is a member. The measure looks toward the establishment of a uniform bill of lading to be used by the railways of the United States through a National law to regulate such matters. If it is thought best that this Association shall advocate such a measure, it is hoped that our members will give the subject the same hearty support that they did the jute question and that when call is made on them to communicate with their Congressional representatives to support their inter ests, unanimous and earnest response will promptly follow.
The proposed uniform export bill of lading has not yet been published, but I have seen a copy of it, and found it an improvement in many respects over the old form. It is a receipt for goods and contains an agreement to carry them with reasonable despatch to the seaport and proffer them to the steamship lines there under about the same provisions as contained in the domestic
bill of lading. The provisions of the bill are divided under two heads. First, as to the inland transportation, and second, as to the transatlantic trade. This simplifies matters for us and lo cates the responsibility for any obnox ious provision that the bill may contain. If they be on the inland transportation portion, we can strive to correct these with the American railways, and if on the other portion and the steamship lines refuse all concessions to us we have some evidence to substantiate our assertions made to our foreign customers that their steamship companies are responsible for the hardships suffered, and when we appeal to the through transportation lines issuing the bill of lading the railroad companies and steamship lines cannot stand with thumbs pointed towards each other and remark as did the old Tweed ring, "He did it," at the same time expressing sympathy for us and a desire to assist us."
The report of the Committee on West India Islands Flour Trade follows:
Gentlemen:-The Committee on West India Islands Flour Trade at your last National Convention held at Minneapolis, to which was entrusted the charge of presenting the wish of your Association as specially favoring and recommending such reciprocity between our Government and those of the West India Islands, whereby our American flour may again be admitted to these
markets, having accordingly conveyed your request to the State Department at Washington; and now beg leave to report that the Hon. Secretary of State was pleased to receive your suggestion, and he directs us to assure the Miller's National Association that the efforts of the State Department will be aimed in securing such concession in the treaties of reciprocity now pending, as will place flour made in the United States on a fair and equitable basis with that of other countries.
Your Committee begs herewith to express its profound sense of gratitude to the Hon. Secretary of State, Mr. Blaine, for his prompt courteous consideration shown them in behalf of your Association.
A number of other detail reports were read and the meeting then adjourned until Tuesday morning.
Monday evening the millers, as guests of the Produce Exchange, attended the New York Casino and heard and evidently enjoyed the new comic opera "Apollo." The theater was decorated in honor of the occasion. After the performance dinner was served in tre Casino Cafe.
Although on Monday afternoon the National Millers' Association adjourned to meet at 10 o'clock Tuesday morning, it was fully 11 before President James called the members to order, and then only 36 of the members of the Association were present, the other members of the party evidently preferring to see the features of interest in New York rather than attend to dry business details.
The chief business accomplished yesterday was the passage of a resolution providing for the formation of a Tracing Bureau. The object of the Bureau will be to keep track of flour of members of the Association from the time it is put on board the cars until it is delivered to the steamship companies. One great cause of complaint on the part of the miilers is the control that the steamship companies are alleged to have over the railroads in the direction of having flour delayed if necessary in order that it may not rrive at an inopportune time and interfere with the loading of the steamer At 'Tuesday's meeting some of the millers alleged that flour was delayed at times all the way from two weeks o a month. The text of the resolution providing for the Bureau, and which was offered by Mr. D. R. Sparks, follows Resolved, That the formulation of a Millers' Tracing Bureau be referred to he Executive Committee with powes put same in operation as early as practicable; it being unterstood that the expense of conducting the said Bureau shall be borne by its patrons. There was considerable discussion on the question. The mover of the resolution explained the workings of the proposed Bureau. He said that agencies would be established at different points, and the patrons of the Bureau would notify the nearest agency of all shipments, giving the name or date of the steamer for which such shipments were intended. When the agency had been notified, its officers would look after the flour until it was finally delivered to the steamship line. If not promptly delivered it would "trace" it and "hustle" it up. Mr Sparks further said that if the Committee did not get the money to star the Bureau it would not be started.
After Mr. Sparks' explanation, free and excited discussion was indulged in
not so much against the Bureau itself
as against the matter being placed in the hands of the Executive Committee. It was argued that a special committee should be appointed to organize the Bureau and obtain subscription. Another point that received special discussion was where the funds wer coming from with which to establish the Bureau. It was finally decided that the Bureau should be practically an independent organization run by independent subscribers.
The following resolution was adopted in regard to a uniform bill of lading:
Resolved, That the Senate and House of Representatives take such means as may compel the carriers of the United States to
furnish all shippers with a uniform bill ladiug, in which the common law liability only of said carriers shall be expressed, and the early establishment of a uniform classification, the rules and conditions whereof shall be just and reasonable.
The Nominating Committee then reported the following-named gentlemen for officers for the ensuing year
President-A. R. James, of Bufialo.
First Vice-President-Henry L. Halladay, of Cairo, Ill.
Second Vice-President-L. C. Porter, of Winona, Minn.
Treasurer-S. H. Seamans, of Milwaukee
Secretary—Frank Barry, of Milwaukee.
On one ballot the above-named gentlemen were elected. On resuming the chair, President James thanked the members not only for the honor to himself, but also for the section of the country he represented, and he urged upon the members the importance of supporting their officers, and showed how futile all the efforts of the officers must be if they did not receive membership support.
The meeting then adjourned until 1
o'clock P. M., when a business session was held on the steamer Grand Republic, which had been engaged by the Produce Exchange Committee of Arrangements to give the party an excursion to the Navy Yard and other points of interest in New York bay and harbor. The last session of the Convention was held on board the steamer while sailing up the Hudson. The matter of establishing a transportation tracing bureau was brought up, and the bureau will be established at an expense of $\$ 14,000$.

There was a meeting of the Board of Directors after the regular meeting, and the following-named gentlemen were chosen as Executive Committee for the ensuing year: Wm. Sanderson, of Milwaukee ; C. B. Cole, of Chester, Ill.; W. B. Knickerbocker, of Albion, Mich.; A. C. Loring, of Minneapolis, and George Urban, of Buffalo. The committee immediately organized and elected Mr. Sanderson chairman, and also appointed the following sub-commitlees: Patents, Mr. Cole ; Transportation, Mr. Urban; Domestic Trade, Mr. Knickerbocker, and Export Trade, Mr. Loring.

The Nebraska Millers' State Association held its annual Spring meeting at the Paxton Hotel, Omaha, April 30 and May 1. Among matters brought up for discussion were the best varieties of wheat for Nebraska farmers to raise with a view as to quality, yield and manufacture; the Warehouse bill as passed by the legislature; domestic trade and its improvement; the eight-hour law and its provisions as to employes of millers. The following resolution was unanimously adopted:
Resolved, That we, the Nebraska MillResolved, That we, the Nebraska Mill
ers in convention assembled, favor the
selling of flour on 30 days upon accept ance bearing 10 per cent. from expiration of 30 days from shipment, and that we ask all millers not members of the
association to adhere to the same rule, association to adhere to the same rule,
with a view to getting flour to a cash with a
basis.
C. C. White, of Crete, and F. S. Johnson, of Milford, were elected as representatives to the National Association meeting in New York. A committee, consisting of C. R. Glover, Long Pine, F. S. Johnson, Milford, and D. H. Harris, Bennet, was appointed to look into the matter of establishing a Central Ware house for the purpose of handling the surplus product of Nebraska mills.

## TRADE MOTES.

The Richmond Manufacturing Co. of Lockport, N. Y., has sent us its catalogue for 1891. It is very neat and contains engravings, descriptions and prices of grain-cleaning machinery manufactured by the company. The catalogue proper is enclosed in a tastefully gotten-up portfolio, having pockets on either side, handy receptacles for cards, memoranda, etc.
The Menasha Wood Split PulleyCo. of Menasha, Wis., have lately received orders for their Hickory Split Pulleys from Plymouth Milling Co., Plymouth, Wis.; Hagar\&Johnson, Marquette, Mich.; Marinette Flour Mill Co., Marinette, Wis.; MarquetteValley Milling Co., Marquette, Mich.; C. C. Thompson Lbr. Co., Washburne, Wis.; Dwyer Hudson Milling Co., Harrisburg, Ill.; Eau Claire Mill Supply Co., Eau Claire, Wis.; Upham Mfg. Co., Marshfield, Wis.; Higginsville, Milling Co., Higginsville, Mo.; G. W. Jones \& Co., Buckbee, Wis.; Oshkosh Steam Laundry, Osh kosh, Wis.
Mr. J. Murray Case, at one time senior member of the Case Manufacturing Co., of Columbus, Ohio, writes us that he has gone into the newspaper publishing business, having purchased City and Country, a semi-monthly publication, 16 pages, issued at Columbus, and devoted to agricultural and family reading. Mr. Case states that he will introduce in his paper a branch exclusively devoted to milling, that he is entirely independent of any manufacturing concern, so that his paper cannot be regarded as an organ, and that he will make it a monthly publication. We wish him success.

Amosg late shipments of the Jonathan Mills Mfg. Co., of Columbus, Ohio, are Purifiers, from one machine to a complete outtit, to the following parties: Melrose Milling Co., Evansville,, Ind.; Chico Mill Co., Chico, Cal.; H. C. Kimble \& Son, Brookville, Ind.; St. Louis Victoria Flour Mill, St. Louis, Mo.; Geo. P. Plant Milling Co., St. Louis, Mo.; Wisner Bros. Lowell,Mich.; Kratochwill Milling Co., Dayton, O.; Richardson \& Evans, Indianapolis, Ind.; Geo. T. Chester, Lockport, N. Y.; Gate City Milling Co., Rapid City, So. Dak.; F. Schumacher Milling Co., Akron, O.; Hirsch \& Schoening, Millstadt, Ill.; A. Beyer, New Philadelphia, O.; Jacob Amos, Syracuse, N. Y.; Owensboro Milling Co., Owensboro, Ky.; Schoellkopf \& Mathews, Niagara Falls, N. Y.; The Seiberling Milling Co.; Akron, O.; Perrien \& Bro., Detroit, Mich.; Brand \& Harden, Saginaw, Mich.; F. C. Trebein \& Co., Trebeins, O.; Keller, Uhl \& Snider, Connersville, Ind.; Haniel Clark \& Co., Union City, Pa.; Crites Bros., Circleville, Ohio.
ALL persons desiring to reach the entire
milling and grain trade of America, by oir-



## CORRESPONDENCE.

[The following letters are all from our own special correspondents, and reflect their views and the vlews
of the trade in the location from which they write.]

## our buffalo letter.

The Canal
Current M
(c), ings the procession which started out of Buffalo on the 5th of May was the most funereal have witnessed in my 40 years of connection with the grain trade of this port. How times have changed since then! What a woeful change! Instead of boat captains falling over each other in their endeavors to procure "water tickets," "clearance papers," and get out first with a broom on the bow, as of old, I found that functionary on the sidewalk, his office deserted, and the dust thick upon the desks at 12 o'clock at noon, just 12 hours after the opening of this great water way, and not a single clearance recorded upon the books. Oh, what a damnable change! How the words of that staunch, long-headed democrat, John Ganson-may his shadow never grow less-rang in my ears as I wended my way to the new Board of Trade, which is about as much like the old "central wharf" as the canal was 40 years ago.
Freights on the canal were then 12 and 13 cents, today wheat is being taken to New York at $2 \frac{5}{8}$ cts. per bushel and there is not enough of it to go around. Does it not look as if "grass will grow in the bed of the canal?" Is it not high time that something was done to save this great freight regulator from the tentacles of the tenacious railroad octopus, and with some truth it might be added, from the greed of the Buffalo elevator ring? The canal was built by the state, is maintained by the state, and if it is to be saved, the state must protect the boatmen from the exorbitant charges of the ring by building transfer elevators. This is the only remedy at present and it must be done before the season opens next year.

Buffalo at present has more elevators than needed but they are all in the combination and it is necessary therefore to close some of them. Among those on the list to lay idle are the Niagara B and C, Richmond, Watson Exchange, Marine, Ontario, Brown and several of the smaller transfers and al the "floaters." Will the state and grain trade of Buffalo tolerate this abuse much longer?

Millfeed started on its downward career with the first arrival of sacked stuff by lake. The price of bran fell from $\$ 23$ per ton for coarse to $\$ 19$ and $\$ 20$, and one lot forced upon the market was sold at considerably less. Dealers here are trying to hold prices as most of them have losses in purchases made some time ago.
The oat bull contingent on 'change is gaining new recruits daily, and there are those who predict 75 e for this grain before the new crop comes in. In their opinion nothing can take the place of oats.
Buffalo has been stricken with the banking fever. Three new banks were organized a month ago, one of which has already opened for business, another will be in a month's time and the third is promised in six weeks. Does Buffalo need this additional capital? Yes, more than any city in the country of her size and importance. Grain men are tired of being almost asked to leave their wives and children as security for loans, besides being compelled
to beg for a few thousand when wanted. There is room for more too. The first bank to start up is the Queen City with Wm. H. Johnson, president, F. C. M. Lautz, vice-president, Walter H. Johnson, cashier.
The second is the Metropolitan Bank with William Meadows at its head. Mr. Meadows is one of the heaviest grain traders on 'change, and the standing of this institution is further fortified by such men as J. N. Scatcherd, E. N. Cook, Daniel O'Day and George Mathews, the miller. President Meadows is regarded as a well-balanced financier among the grain trade and the best man in the city for the posi tion. Some lively times are expected between the new bank and the GermenAmerican, of which Mr. George Sand rock, the great Duluth wheat dealer, is president, for the exchange business. The Union Bank is an off-shoot of the netropolitan sort of a peanut bank but may make a good showing.
Buffalo's Clearing House reports con tinue to show rapid advances, the lates figures for the week being Buffalo $\$ 6$, $900,0(0)$, Cleveland $\$ 4,900,000$, Detroit $\$ 6,600,000$ and Milwaukee $\$ 4,700,000$.
The first vessels to arrive this season were the schooners Barnes, Montblanc and Comanche from Toledo with wheat on April 13th. The first from Duluth was the T. W. Palmer, May 8th, fol lowed by half a dozen cargoes but unfortunately only one for Buffalo millers, the balance being destined for New York for export.
The last sale of No. 1 hard, which cleared up all outside of that held by Urban, was made on April 28th at $\$ 1.25$ per bus. Millers had a notion that the first arrival would cheapen this grade $20 @ 25$ cents, but such was not the case, and it is very doubtful whether Duluth wheat will be here in sufficient quantities to lessen this price materially for a month to come, as $\$ 1.15$ was freely bid for No. 1 hard and $\$ .112$ for No. 1 Northern today. Holders at Duluth refused many days to offer wheat at any fair price and several of our largest traders were out of the market entirely for a week at the time.
The demand for Spring wheat flour is only beginning. In a few weeks many families who have been baking their own bread will be buying from bakers, and bakers' bread is nearly all spring wheat flour. The same may be said of the big watering places. It is safe to say that the demand for this flour will increase 50 per cent. in the next four months. No, we will not have much cheaper wheat.
The Buffalo Lumber Exchange, which organization has started and carried through more reforms than any other trade body in the city, has managed to induce the aldermen to give them another fire tug. If the Buffalo Merchants Exchange had half the "git up and git" of the lumbermen what a wonderful amount of good would come from it to our city's weal. The only reform worthy of the name, passed under the auspices of the Merchants' Ex-
change, was the Buffalo charter, and that is the biggest botch job undertaken in a century.
Buffalo bakers advanced the price of bread on May 2d one cent per loaf. Bakers claimed that owing to the continued improvement in the quality of bread by the use of spring wheat patents, fully three-fourths of the bakers are now using this flour, and as
millers had advanced its price it was necessary to increase the cost of bread
the consumer or suffer a loss until wheat declined. A few days later, however, for some cause not necessury to state, the price of bread was put back the old figures again.
At the annual meeting of the stockholders of the Board of Trade, Mr. M. L. Crittenden, who in the future is to be a resident of Milwaukee, was the recipient of the following testimonial of his sterling worth from its members :
"Mr. M. M. Crittenden, treasurer of the
Board of Trade, and manager of its building. being about to sever these relations to take up his residence in another city, this board of
trustees of said corporation having a high appreciation of his services as superintendent ot construction and manager of its interests,
as well as of himself as a business man as well as of himself as a business man, a
citizen and a friend. desires to place upon record its estimate of him in th record its
therefore
Resolved, In parting with Mr. Crittenden
we 1 ose a merchant of We lose a merchant of frankness and strict
probity, of ability and high character, a superintendent and manager whose actions have commended him to stockholders, tenants and employes, a citizen who has always sought the true and lasting good of the com-
unity and a frend whose gentleness and
 in his new home all that is needed to win him a kind welcome and high standing is a thor-
ough acauaintance on the part of those ough acquaintance on the part of those he
meets. Our heartfelt wishes for his welfare go with him.
Resolved, That this expression be placed on
our minutes and that a copy be engrossed and minutes and that
After the reading, Mr. Schoellkopf
in a few touching remarks, presented Mr. Crittenden with a handsome silver tea service. Mr. Crittenden was overcome with this evidence of apprecia tion but managed to thank the Board in a neat speech.
The Duluth "wheat steal," with which all the readers of The United States Miller and Milling Engineer are no doubt conversant, created quite sensation, particularly, as it seemed o implicate one of our most prominent
grain firms, Messrs. S. S. Guthrie \& Son. Now, Buffalo's good name has been unnecessarily tarnished too frequently of late to allow this to go unwere therefore explained, the grain trade came together and signed the following strong endorsement of Messrs. Guthrie :
Wr fellow citizens and the public at large We, the undersigned members of the Mer-
chants' Exchange of Buffalo, having faith in che honor and high purpose of our organiza
the fant in tion, and believing that it has for its object
not alone the inculcation of just and equit able principles, the continuance and main tenance of uniform commercial usages, but the protection of the character of honored
members, when unjustly assailed by the members, when unjustly assailed by the censure, auspend or expel a, member when
found guilty of offensive conduct or dishonorable act, take this opportunity not alone o prot confirming our faith in them, in the sup port and conffience we liave in the long honored and much respected members, S.S. Guth
rie \& Son, who have been unjustly and falserie \& son, who have been unustiy and false-
ly misepresented in relation the the grain
operations of Duluth. in which they were in operations of Duluth, in which they were in
no way concerned, nor had any knowledge of, no way concerned, nor had any knowledge of untill their attention was called to it it in a
newspaper. Our esteem and confidence in newspaper. Our esteem and confidence in
the inter rity and good faith of said firm and respect for each member is not shaken by
these false reports, and in the future as in these false reports, and in the future as
the past we shall hold them in our highest and confidence.
C. P. Flatley, the new agent of the Duluth Imperial Mill Company, who is to take the place of Mr. D. B. Strickler, was on 'change today. Mr. Strickler will show the ropes to Mr. Flatley, after which he will go on the road to represent this lively Duluth mill.

The Genesee roller mill, Pembroke, has been sold to Lee \& Garrett.
When Mr. Hutchinson's career came to an end two weeks ago, there were many to say they "were glad of it," but Mr. A. P. Wright, who, it is said, has probably less reason to regret his downfall than anyone in Buffalo, would not allow a word to be said in his presence against the old man. In an interview Mr. Wright said, "it was not fair to judge him by his actions for the past three years. Hutchinson was a great, honest man; I have the greatest regard for him and have known him for 25
years in business." It is pleasant to hear a man talk like this, and the merchants of Buffalo no doubt respect such loyalty in business.
An electric road from Buffalo to Rochester is now proposed. Tonawanda, the Falls and Lockport will be taken in. The road will, if built, be equipped with rolling stock capable of handling, not only passengers, but freight, mail and express.
The Cataract Construction Company of Niagara Falls is making good progress with their tunnel. Contracts have been made with eastern manufacturers for large blocks of land and power for paper-making plants. The power company has given a mortgage to the Central Trust Company of New York for $\$ 10,000,000$.

A syndicate of five traders, including a North Buffalo miller and a gentleman who first saw the light of day in Boston, bought 250 barrels of July pork at $\$ 12.77 \frac{1}{2}$, expecting to reap a harvest, which it was agreed should aid towards defraying the expenses of a wine supper when Grover Cleveland came to town. Since the decline in pork, the Boston syndicator has been suggesting a bean lunch at the favorite Exchange lunch room.
Five general bull agents came here from Chicago to mulvather the Buffalo insurance companies but went home wiser men. Many broken promises have cured the Buffalo agents, of which Mr. Townsend Davis is the able representative, from placing any confidence in the tricky western gentlemen. As George Urban would remark
"There are no flies on us;
There may be one or two on you,
The United States Senate Committee on Trade relations with Canada held a ew sessions in the committee rooms of the Merchants Exchange. The only member of the Exchange interested in grain asked to give testimony was Mr John B. Manning, the maltster. Naturally John B. was "agin" the government, being a democrat, and against the McKinley bill in particular, because it interfered with his profits as a maltster. He succeeded in giving the commission some fine switches with which to beat the free traders in the coming cam paign. If the maltsters and barley dealers wanted to reduce the duty on barley, why in heaven's name did they not put a republican like Wm . W Sloan on the stand. That solid, sensible, dignified gentleman would have given the Senators, and the country at large, something worth the while to consider. But John B. Manning-
Mr. P. A. Rosseel returned May 8th from a trip around the world bringing many fine trinkets and pictures. "Pier" will take off his coat and join the hard wheat traders again for a long pull.
Allen \& Co., the "bucket shop" firm, has departed for pastures green. This is the last but one of Buffalo's trade barnacles in that business.
Thomas Ryan, who recently bought the Clinton mill, promises to give the Western Elevating Association of Buffalo one of his old-fashioned whirls. Considering he has broken several tug rings and any amount of canal deals, his looming up bodes no good to that grasping monopoly. Tom knows what he is about.
Mr, W. C. Jacus has been confined to his bed for several weeks. "Jak" likes to be in the swim and it must be a terrible strain on his busy brain to be cooped up. Trout fishing-


A survey will be made for the purpose of furnishing Lockport with water from the Niagara river for mill power etc.

The reason why Buffalo millers prefer Duluth wheat to Minneapolis is that it is better, cleaner and cheaper. There is no mystery about that as some milling journal correspondents seem to think. As to prices these same quidnuncs are all at sea as usual.

Mr. Issac Long, of Hamburg, has removed to Versailles where he has leased a mill.

Buffalo millers have purchased so little wheat to arrive that it looks as if they were about to continue the hand to mouth policy. All but three millers regret having followed this plan last fall, but it is evident they will try that plan again. Rochester millers have all the experience they want which is evident from the heavy purchases of c. i.f. made some time ago.

Through the medium of The United States Miller and Milling Engineer, Mr. Alexander Mann, formerly of Buffalo, now of 103 State Street, Boston, Mass., has been heard from. It appears from my informant that Alex. has been sojourning at the New Eagle Hotel, Concord N. H., suffering at the same time from Boston "Culchaw," which is La Grippe in an aggravated O. G. form. Buffalo millers will be pleased to hear he is up and around again, also that he intends visiting this city later on, as per agreement with High. Nold and Joe Henry.

Wheat was never so scarce in country mills as it is to-day. A general closing up of small mills is anticipated before the new crop can be ground.

There is a rye flour combination here and prices have been fixed at $\$ 5.00$ per bbl.

Nearly 300,000 bushels of Duluth wheat were received here in the first
fleet and 200,000 of this, all No. 1 fleet and 200,000 of this, all No. 1
Northern, was shipped out in the last three days, all going to New York. Not a bushel was offered for sale here.
The Propeller Myles yesterday brought from Fort William, 39,495
bushels of Manitoba wheat, in bond for New York, and two vessels were loading cargoes when the Myles left that port. It all goes out by the Erie, which, so far, has shown the quickest dispatch in sending cargoes forward.
Mr. C. F. Crichton, representing a
arge milling firm of Glasgow, Scotland large milling firm of Glasgow, Scotland,
was introduced on change by Messrs. Harvey \& Henry. This is not that gentleman's first visit. He seems to take in all the milling centers of this country annually. From Buffalo he went to Montreal where his house has business connections.
Mr. Wallace, of the Cataract Milling Company, Niagara Falls, has adorned his office with the latest style of rag carpet. While the representative of this firm is anxious everybody should know that this carpet cost upwards of $\$ 3.00$ per yard, he cannot get a single man on change to believe it is not a "rag". Cigars are no inducement and glib talk availeth naught. Wallace is too high toned for "our set".
Flour is dull and there appears to be a general understanding that mills will shut down during May to a large extent. The board was almost without a miller on the floor to-day, the crowd having gone with their Rochester brethren to New York. What a glorious time the Buffalo contingent will have! Patent spring is quoted at $\$ 6.10$ @ 6.25 and winters at $\$ 5.75$ @ 5.90 in car load lots.

## OUR ST. LOUIS LETTER.

Merchants' Exehange It
Doings Wheat
-Flour Output, Ete.

Tthe matter of milling news St. Louis is very dull and furnishes but poor subject matter for my May letter. Owing to the high wheat market, many of the mills have shut down and most of their owners have gone to New York to attend the Millers' Convention. At present the members of the Merchants Exchange are somewhat excited over a recent action of the Board of Directors. For the past twenty-five years the Exchange has been accustomed to make its deposits at the State Bank, and until recently, no one thought of a change. Of late however, the officers of the American Exchange Bank have been trying to secure the Exchange's deposits, and as several members of the Board of Directors are depositors in the institution, the propositions of the American Exchange Bank have been received with favor. The fact that a change was contemplated was kept very quiet until the Monday (May 11) meeting, when a motion that the deposits of the Exchange be transfered from the State Bank to the American Exchange was made and carried. The only provision made was that the American Exchange should pay interest on the daily balances. As the deposits of the Exchange are very large at this time, this interest would amount to no small sum. When the American Exchange Bank was notified of theaction of the Board of Directors, they informed the Board that they would not pay the interest. This, added to the fact, that the State Bank offers to give the interest asked, has caused the Board to rescind its former action and to decide to let all the banks make bids on the Exchange's business. Answers are to be filed on May 16th when some definite action will be taken. At the same meeting of the Board a communication was received from the Traffic Association asking for a subscription to the Traffic Association fund. This Traffic Association is now an assured thing, and is meeting with much favor from business firms. The Association has decided to place the annual dues for commercial and industrial bodies at from $\$ 400$ to $\$ 2,000$; while the dues on firm or individual memberships are divided up into four classes; the first $\$ 200$ a year, the second $\$ 100$, the third $\$ 50$, and the fourth, $\$ 25$. Payments are to be made quarterly in advance, beginning on May 1, 1891. It is decided that if a sufficient membership is not obtained so as to pay all expenses that the neccessary amount due, over and above the yearly dues, shall be paid by the members pro rata. On May 23d, a vote will be taken on whether a committee be chosen to
select a site for the new Exchange building or not. The committee, if chosen, will have the power to select a lot, suitably located and at a certain price, not to exceed a certain part of the reserve fund, and the remaining amount will go towards putting up the new building. In view of the fact that the reserve fund is placed in government bonds, which are daily decreasing in value as they approach their maturity, which is very near, and as the lease on the present building expires in a few years it seems very necessary that some decided steps be taken in the way of getting a new building. From all appearances it looks as though the Exchange members will act favorably on the matter. Of course in this case, as in every other, there are a few kickers, but the time for kicking seems past.

With the moving of the Western $\mid$ trades in July and August wheat, Union from 2 d St., to 4 th St. and Pine, together with the rapidly fluctuating two large pneumatic tubes were laid market, has caused no small exciteunder the street connecting the tele- ment on 'Change. graph building with the Exchange floor. Engines, etc., to work them have been placed in the building and it will now take but a few seconds to send messages from the grain pit to the telegraph office. Yet with all this the Exchange is still seeking to get the Western Union to again place its private wires on the floor. R. C. Clowry, Gen Supt. of the Western Union, was in the city recently, and while here was spoken to on the matter. Seeing what inconveniences had arisen, he said he would consider the matter and let them have an answer soon.
Winter wheat both in Illinois and Missouri seems to be in first-class condition, judging from recent reports. In a late report from Illinois, it is claimed that only 3 per cent. of the entire area seeded has been destroyed and that the harvest will be more abundant than it has been for ten years. In the northern part of the state the crops are not as good as in the central and southern divisions. Fly is working to a limited extent in Monroe, Moultrie, Bond, Pike, Tazewell, and Fulton counties, and the oat louse in Monroe, while Bond and Livingstone report some chinch bugs. Wheat is already beginning to head in Marshall county. In spring wheat the area devoted to it is 7 per cent. less than last year. Central Illinois reports give the May 1st condition as 99 per cent., while 96 per cent. is reported from Southern Illinois.
The Kauffmann Milling Co. has dropped its suit against the city for the loss of their Park Mills. Several years ago, when Cleveland visited St. Louis, a display of fire works was made in his honor. On the same night the Park Mills burned down, and as the mills were situated but a block from the pyrotechnic display, the Kauffmann Milling Co. believed that the mill fire was caused by falling rocket sticks. In the testimony in the case, however, the watchman admitted having found a crowd of toughs smoking and drinking in the mill. This naturally broke up the whole case.

The flour men held a meeting recently to see about giving their annual excursion on the river. At the meeting Mr. George Bain was re-chosen General Chairman, and Mr. Alex. H. Smith, Vice-General Chairman, with Mr. Henry Craft, Secretary. The excursion is to take place on June 4th and will consist of a trip down the river.

## wheat.

Receipts of wheat for the week ending May 9 th were 89,382 bush. and 187,451 bush. were shipped. Last week's receipts were 93,738 bush. and shipments 40,566 bush. Wheat in elevators amounted to 419,007 bush, as compared with 606,709 bush. on Saturday, May 2d. For export 160,438 bush. went out on Monday, and for the week, 191,624 bush., while rail shipments amounted to 59,265 bush. with 42,526 bush. drawn out for city consumption.

Ah grades were very dull and prices on the whole depressing. No. 2 red was especially noted for its rapid decline. No. 3 red was also on the decline, while No. 4 red was not on the market. No. 2 red opened at $\$ 1.03 \frac{3}{4}$ @ 1.04 , dropped to 99 c , and closed at \$1.02. Wednesday, May 13th, No. 2 red is quoted at $\$ 1.04 \frac{3}{4}$. No. 3 red opened at $\$ 1.01 \frac{1}{4}$, fell to 96 c , and is quoted to-day at 98e. The main excitement has been in futures, and the big.

Feciour.
Receipts for the week amounted to 24,147 bbls. with 23,079 bbls. for the week. Shipments were 44,612 bbls. this week and 46,868 bbls. last week. Owing to the temporary depression in wheat, the flour market was very badly off, and the business done was very poor. High prices on wheat have caused the mills to run very little and many mills promise to shut down. The Camp Spring has run only on half time of late, while the Regina, United States and St. George have shut down. Stanard's Eagle has stopped, and his Alton City is on half time. The Yaeger is running only 15 hours, while Plant and Sessinghaus threaten to stop. The Victoria and Saxony are also shut down. The out-put for last week amounted to 47,500 bbls. divided as follows:


Walter Howard Bain
St. Louis, May 14, 1891.

## OUR BALTIMORE LETTER.

(9)making my bow to the readers of the United States Miller, I would claim their kindly indulgence for the unavoidable shortcomings in what is to follow, by pleading an almost total lack of interesting matter to discuss at present, when trade is in a transition state between crops, and a lack of stocks and supplies compels a certain amount of masterly inactivity, among the members of the cereal trade generally. My greatest drawback however, is the inborn conviction of how inadequate I am to fill the place of your recent accomplished correspondent "Oriole," whose practiced pen seemed never at a loss for the "right word in the right place," and who apparently found interesting matter alnost by intuition. I cannot hope to equal him, and it would therefore be useless to imitate him. In closing my allusion to him however, I would take occasion to commend the excellent advice to millers given by him in his letter of October last, in regard to keeping up the standard of their flour under all circumstances. Nothing should be allowed to prevent this, and if a want of material renders it impossible, it would be better to start a new brand, than to allow the reputation of an old one to suffer. Make something else until circumstances permit the old brand to be made as good or better than ever it was. Improve it if possible, but never allow it to deteriorate. The importance of this advice is mpressed upon my mind more than asual just now, by the great difficulty our local millers are finding in obtaining suitable wheat for their purposes.
Wheat of any kind is scarce enough, but good milling wheat particularly o. Receipts have dwindled down to almost nothing, and on every side comes the complaint that supplies are nadequate to meet the current wants. From Virginia and Pennsylvania mills,
orders are being constantly received for wheat which cannot be filled, while our own millers are scouring the country to obtain supplies. During the recent dvance, we are informed that some of them had orders out in the country bidding as high as $\$ 1.27$ per bushel for good milling wheat. This will give you an idea of the efforts they are making to keep up the quality of their goods.
This dearth of supplies has greatly affected business generally, and trade on the floor of the Exchange has ruled comparatively dull. Of course, there is an active class that will do something, if it is only selling the contents of one breeches pocket to the other, and consequently there is always an appearance of business going on that keeps the boys in trim and ready for work when it comes, but with it all the actual fact remains that but little actual stuff is being received, and almost as little is going out of the market. There has been a pretty good European demand for some time, both for wheat and corn. The United Kingdom, Germany, France and Belgium, all want it and are ready to buy it, but it is not here to buy, and consequently our shippers have had to let orders go back, that under ordinary circumstances would have kept them busy. In times like the present, the writer's regret grows keener that ours is not a spring wheat market. If we could only supplement the winter wheat with the spring wheat crop, as New York does, for instance, how much better off we would be. It is useless however, to discuss the reasons for it, we can only lament the fact. But while prompt business has been very dull, our shippers are credited with having already done considerable forward business. Four or five large steamers are known to be under charter for July, August and September loading, all the cargoes for which are said to be sold, and how many more may be sold, but not reported, cannot be guessed. I can only say in this connection that a prominent Exchange buyer recently remarked to me that our shippers appeared to be quite active with forward business, and that he had been buying some pretty large blocks of Exchange both English and Continental. It is well known also that our shippers have had to act cautiously, and to use considerable discrimination in selling, as the unsettled condition of Europe renders it by no means desirable to sell to every one who may wish to buy. Many large dealers who under ordinary circumstances, would have no difficulty in buying all they want, now have their orders turned down, as neither shippers or Exchange buyers care to take the risk of a distant contract with them. However, everybody is looking hopefully forward to the new crop, to pull us out of the present stateof semi-stagnation, and certainly the signs are promising. From all appearances, Europe will need more this season than she has in several past years, and the United States has seldom been in better shape than she apparently will be, to supply those wants; and if things only work right, a good trade is bound to result. Meanwhile the trade is simply waiting and are rather put to it how to pass the intervening time. Not even the delights of base-ball and gudgeonfishing serving to kill all the monotony in their souls, and we have many enthusiastic followers of both pastimes in our midst.
Usually, in busy times, we have any amount of fun going on, with personal items without number, that serve to keep every one amused, but the dull-
ness of trade seems to have affected the spirits of the most lively, and all joking as a rule has been abandoned. Many of the members are away either on pleasure or business trips. Among them Mr. F. W. Lahnsen, of the flour and grain firm of Tate, Hinrich \& Co., has just sailed for Europe, to be gone some months on a mixed business and pleasure trip. Mr. J. Colin Vincent, recently returned from a trip abroad, in the interest of Messrs. Harvey, Lucy \& Co., brought back with him samples of wheat and corn, representing the various kinds that this country has to come in competiton with, in the various markets of Europe. These samples were shown on the floor of the Exchange and excited a good deal of interest among the members. Apart from the natural curiosity to see the products of distant lands, such exhibits are educational, letting the dealers in our own products see the character of the goods they have to compete with. There is a widespread and often outspoken opinion among our people that our wheat, etc., is the best in the world, and ought to command the highest price, whenever offered for sale in competition with others, but a dispassionate comparison with authentic average samples from other countries may and often does, prove a heavy shock to that opinion, particularly when ques tions of cleanliness, freedom from mixture, and the presence of objectionable foreign stuff, weeds \&c., are considered.
The sooner our farmers recognize the The sooner our farmers recognize the of seed and preparing grain for market the better.
Speaking of foreign competition, and foreign business generally, there never was in the history of the trade such a rush of small dealers in Europe, who wish to act as agents for responsible American houses. They come over in droves, flitting from market to market,
trying to make connections, and the mails are full of their soliciting letters, etc. Some of the latter are literary curiosities. A genial member of a prominent milling firm, who does not wish his name mentioned in the connection, recently handed me a letter from an Italian firm, soliciting his agency, in which occurred the following sentence:
"In order to well succeed to this; I have secured the services of a well posted, clever
and intelligenteducated Manager, Mr. Joseph and intelligent educated Manager, Mr. Soseph
Di Miceli; who, through his long experience of Business; baving he for a long period been esident and employed in various and most resident and employed in various and most
honorable Firms, both in America and Italy; will undoubtly furnish to you many proofs o his accuracy, whence you will decide yourhis accuracy, whence you will decide
selves to commit to me your Agency."
If the recent correspondence between Secretary Blaine and Premier Rudini, was translated and served up in such a hash as the above, it is not surprising that apprehensions of serious international complications should arise. It might account also for many other diarisen from time to time.
I expect you are wondering all this time why I have had nothing to say about flour, and I may answer in all seriousness, because there is so little to say. In trying to get at the state of the market the other day, I asked one of a crowd of flour dealers: "What can I say about the flour trade ?" and the re ply was: "There is no trade." Which padded out, as the printers say, means that "Buyers and sellers are apart," with all that the phrase implies. Holders point to prices and say that they are below the cost of production, and therefore are not and should not be influenced by the recent decline in wheat
retired until scarcely any movement at all remains. Exporters are so quiet that one would be justified in saying that there was no shipping demand at all, only these gentlemen have a quiet way of working sometimes, that keeps the trade in ignorance of their movements until the goods are actually shipped. Stocks are very small comparatively speaking, and there seems but smal chance of any decline, though business may drag until another upward turn in the raw material may bring buyers to the front again.
In local milling news proper, there is very little to give you, at least your correspondent, eitber through stupidity or a devotion to other matters, (call it the latter, please) has failed to come up with much. The principal item he has met with is the sale of J. Olney Norris \& Co.'s brands \&c. to the Castilla Mills of Harrisburg, Pa., who have also bought theSteelton mills of that city and merged them under one management, as a stock company, which will probably be of decided benefit to all concerned, as such consolidations usually are. By the way how this tendency to combine is growing, and how the feeling against it in certain minds is intensifying. It is not he place, or my province just now, to discuss the subject, but I cannot help thinking that it will occupy a good deal of the world's attention before long, paricularly in America. A great many enterprises in and around Baltimore have been consolidated lately, the principal one being the purchase of Marburg Bros. and Gail \& Axe's factories, by the American Tobacco Co., with which the daily papers have doubtless made you familiar.
There appears to be a decided lack of interesting gossip about town of late. Probably la grippe has something to do with it. While not epidemic in Baltimore, there is a good deal of it around, and several recent deaths have been attributed to it. Speaking of death, the BaltimoreCorn and Flour Exchange has suffered from the loss of several valuable members lately, and indeed its death rate has been remarkable this year nearly two per cent. of its membership having died since the 1st of January Some of those who have left us were ripe in years, having reached the biblica allotment of three-score years and ten,
but others were in the prime of life, and but others were in the prime of life, and
some were young and just beginning their careers. Let us hope that never again may death be so busy among our membership.
Baltimore, May 6th, 1891.

## inventors' national association.

 HE principal benefit resulting from the Patent Centennial Celebration just held at Washington, D. C., was the formation of a National Association of Inventors and Manufacturers. This will, without doubt, prove one of the most important events of the nineteenth century, and of vital interest to the inventors and manufacturers of this country. The most perfect harmony and good feeling pervaded all the business sessions, and the National Association was formed without class or sectional jealousy.The election of officers and directors for the ensuing year resulted as follows: For President, Dr. R. J. Gatling, of Hartford, Conn., the inventor of the celebrated gun which bears his name, and which has brought him large remuneration and great fame, as well as distinction to our country as the producer of the most powerful projecting

Presidents are Dr. Gardner G. Hubbard, of Washington, D. C., an inventor, and father-in-law of Hon. Alexander Graham Bell, inventor of the telephone; Prof. William A. Anthony, President of the American Institute of Electrical Engineers; Thomas Shaw, Esq., of Philadelphia, inventor and extensive manufacturer, and patentee of 110 inventions ; and Hon. Benjamin Butterworth, Ohio, former Commissioner of Patents, exChairman of the House Committee on Patents, and now Secretary of the Columbian Exposition. The selection of Prof. J. Elfreth Watkins, Curator at the National Museum, as Secretary, met with unanimous approval, and was a most excellent choice, as is attested by the success of his untiring efforts during the last four months as Secretary of the Patent Centennial. Mr. M. C. Stone, of Washington, an inventur and enterprising manufacturer, was eqlected Treasurer The Board of Directors is composed of the following gentlemen: John Wise Smith, Esq., engineer, Pennsylvania David G. Weems, Esq., electrical rail way engineer, Maryland; Prof. R. H. Thurston, of Cornell University, New York; Chas. F. Brush, Esq., inventor and manufacturer of electric lighting apparatus, Ohio; Prof. Otis T. Mason, Curator National Museum, Washington, D. C.; Hon. David M. Smith, manufacturer of sewing machines, New Hampshire; F. E. Sickels, inventor of the first steam steering machinery, Kansas City, Missouri ; Oberlin Smith, Esq., manufacturer, New Jersey ; and R. S. Munger, Esq., manufacturer of cotton machinery, Alabama. In addition to the regular officers and board of directors, there will be representatives in every State, some of which have already been appointed. At an informal meeting it was suggested that there be a committee of seven on legislation to advance the interests of the Patent System before Congress and guard against any encroachment upon the rights of inventors and manufac-
urers.
The constitution and by-laws, with particulars as to eligibility to membership, will be ready for distribution in a very short time. The annual dues for active membership will probably be fixed at $\$ 5$, and life membership $\$ 100$. Provision is also made for associate and honorary members. There will be an annual meeting of all the members, at such place as may be determined upon. It is believed that the results secured by the formation of this National Association for the mutual benefit and protection of inventors and manufacturers and the perfecting of the A merican Patent System will be far-reaching. Every inventor and manufacturer of this country ought to be a member of the assocition.

Lack of space prevents an account of the eloquent and magnificent addresses, but as they are to be printed and bound in book form, those who could not attend the Centennial celebration will have the privilege of reading them. The highest tribute was paid to the inventor as the greatest and noblest benefactor of mankind. He needs no monument, for his works are a living monument of histoil and ingenuity. Edward T. Fenwick.
Washington, D. C.

## BENT AND BENDING WOOD.

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ENT wood for all kinds of industrial and mechanical use, has had a steady growth, absorbing one after another of the great mass of manufactured articles made at the present time. About thirty years ago the writer's father, after months of hard

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study, invented a dished saw and an by any means. They think they have eccentric attachment for swinging the done badly if they break more than plank, so as to take off the strip on one single piece in a week. Now and back of sawed wagon-wheel felloes and then the steel straps used with castto saw felloes. By this means he could make sawed felloes very rapidly; but soon after, he began the manufacture of bent felloes for all classes of vehicles, and the order for bent rims gradually and in a few years, entirely absorbed the rim business, and sawed felloes went out of use entirely. Nearly all of the millions of wheels on vehicles o every description, including agricultural implements, are to-day made of bent rims.

Formerly all chair backs were sawed rounding, by all conceivable means, and much money and capital was expended in devising saw machines to do the work. Some one happily thought of the idea of bending them; it did not take long to bring it into general use. To-day it would be a great novelty to see a sawed chair back. From a bent chair back, it was an easy step to a bent frame for chair seats, especially for cane and perforated seats. It then became a common feature of chair and seat making to bend backs, legs and seats, and now perforated seats, used in school depot, lawn and church furniture, are made of bent wood.

Wagon and buggy seats are made o bent bows; cutter and buggy bodies are made of bent wood; children's toys of all kinds are made in the same way, and hundreds of kinds of tools and handles for agricultural use, and garden tools are all bent to shape. It saves lumber and time, and cheapens production; besides the steam acts as a preservative and hardener of the woods, cooks the sap and allows it to dry evenly and better without checking. A piece of rock elm, or white oak, steamed and dried, be comes as hard as glass, and a steel nail cannot be driven into it without oiling.
Sleigh and cutter runners, and stone boat planks, were always, in an early day, sawed out of heavy timber, but now the beautiful runners seen on all sleighs, as well as the knees, are universally made of bent wood. Sway bars, the fifth wheel on wagons, carts and hacks, and plow-beams and handles are all bent wood.

Of course bending wood is a science; the wood must be steamed just right, with the right kind of steam, or it will be brashy and soft. Nearly all kinds of wood will bend, if treated right. The writer bent a carload of block birch, double, not long since

The latest use to which the bent wood has been successfully adopted, is for the rims or faces of wooden pulleys. It was a difficult work at first to master the rims. They had to be bent for large pulleys from great heavy plank, 14 feet long, 4 inches thick, and 13 inches wide, and for all the pulleys as wide as the lumber would run.

The largest, strongest and latest improved machinery was constructed by the Menasha Wood Split Pulley Co., of Menasha, Wis., who had determined to make bent wood rims for pulleys. They have the largest bending machine in the world. It will bend a rim for a 12 inch diameter pulley, one minute, and the next minute will bend up a great, strong, heavy, hard-wood plank for a 96 -inch diameter pulley. It will bend a stock of rims as high as the highest church steeple in one day. The men who operate the steam-boxes and the machine, have bent stock for wagons, sleighs and plows for twenty years, and the rims are as square and true and perfect as it is possible to make any rim
be no better proof of the value of an invention than to have it imitated, no matter how cheap and poor the imitation may be; so far in doing so, they have utterly failed to equal my machines in mechanical construction or in actual working. I now have invented and perfected the finest and best line of special milling machinery in the world. My Universal Flour Dressers are, as everybody knows, the standard bolters in America, and cannot be equalled by anything in the market, and they wil remain the standard and at the head when everything else of the kind that is on the market to-day, has been rele gated to the scrap pile. My Universa Air Belt Purifiers are now in use in over one hundred mills, and many of the very best winter wheat mills have replaced all of their sieve purifiers with my Air Belt Purifiers. We have so far made no move toward introducing them except in a few spring wheat mills, but I am now ready to do more. Our Ai Belt Sieve Wheat Break Scalper is an other wonderful advance made in scalp ing wheat break chops direct from the wheat break rolls. We now have also a Wheat Scourer, Smutter and Separator combined that handles its own dust and makes perfect separations using the continuous "air-belt" prinei ple. It has taken about a year to perfect this wonderful invention. It is now the greatest separator, scourer and smutter ever invented, and will at onc command the approval and respect of
every first-class miller in the land. These are my special line of machines that I am prepared to offer the millers Write me for full particulars regarding these machines, or any subject of mill ing you want my advice on; I am a your service ; address all letters to me Jonathan Mills,

Buffalo, N. Y. milling machines and inventions to them for the United States. I greatly regretted to have to do this, but I could not find time to look after my Canadian or Foreign and European interests, which I consider of much greater value to me than the one-third interest I held in the Company here. In selling out I do not lose my identity with the selling hintroduction of my various ma chines. Thave arranged with my Com-
pany to actively enter into their sale and introduction by promptly filling my orders. I have concluded to locate and open my offices in the beautiful and lively city of Buffalo, N. Y., where I shall be pleased to hereafter have my milling friends address me, and I shall take pleasure in entertaining to the kest of my ability, all who may honor me with a visit. I ask all who wish to adopt full lines or single machines of mine to favor me with their orders, as my arrangements are such that I can give as low prices and as good terms as can be had at the factory. I surely understand how to advise, programme, and arrange my own inventions in mills to a better advantage to the millers than any other man or milling engineer or expert miller, and trust the millers will appreciate this fact and send their orders to me. I pledge honorable and fair treatment to all my customers. Having devoted the best years of my life to improvement in manufacturing higher grades of flour and in inventing machines embodying valuable fundamental principles at an enormous outlay of money, all of which the pirate manufacturers of milling machinery are infringing to a greater or less degree, and in every case they have failed to produce as good or perfect machines or results as my own make of machines. There can

## OUR LEGAL DEPARTMENT.

peetally prepared for The United states miller
und Mulling Engineer, from the latest
Implied Warranty of Quality of Goods.-Where a broker is authorized to offer certain goods for sale in the market, and is authorized by another customer to buy the same kind of goods of a certain grade, the fact that he consumates the sale in full knowledge that the buyer only wants a specified grade, will not amount to an implied warranty by the seller that they are of such grade unless such knowledge is actually communicated to the seller, and in such a case, without such notice, there is a sale of just what the seller offered for sale and not what the buyer ordered bought. Ulmer v. Ryan, Supreme Court of Penn sylvania, 20 At. Rep. 705.
Construction of Contract.-Where defendant, after contracting to buy from plaintiff as much coal as he should "re quire" for his mill, substitutes natural gas for part of the fuel used in the mill, he is bound to take from plaintiff all the coal he still uses in his mill, but not the amount he would have used without gas. In an action on such a contract, where there is evidence that nut coal took the place of slack coal, mentioned in the agreement, it is proper to instruct the jury that nut coal not being men ioned in the agreement, defendant had he right to purchase such coal from other parties only in case the jury find that nut coal was not included in the kinds of coal contracted for, and was used for a different purpose.-McKeever v Duncan, Supreme Court of Pennsylva nia, 30 At. Rep. 938.
Liability of Connecting Carrier.Where a contract for the transportation of goods over connecting lines of railway is made with one railway company as the agent of the other, and the latter company transports the goods, collects the freight thereon, it cannot, when sued for injury done to the goods by its servants, deny the authority of the other company to make the contract for it. A. right of action against a common carrier for injury to goods while in transit is assignable. Where such right of action has been assigned, the fact that the suit is thereafter prosecuted in the name of he assignor, a married woman, for the benefit of the assignee, does not disqualify the husband of the assignor from testifying in the case, as the latter parted with all her interest in the action by he assignment.-Norfolk \& W. Ry. Co Read, Supreme Court of Appeals of Virginia, 12 S. E. Rep., 395.
Liability for Unguarded Elevator Well in Factory.-The liability of the owner of a factory for the safety of his premises, extends only to those who have a right to be on the premises, and where a person not an employe, goes into a portion of the factory from which all persons but employes were excluded, and while there falls through an elevator well, he cannot recover damages for injuries sustained, because he was where he had no right to be. If the owner had taken pains to cause all but employes to be excluded from the factory, no person violating that regulation can have any standing in court on a case which could not have arisen had the regulation been obeyed. A statute for the protection of employes, which requires elevator wells to be guarded, cannot be invoked in favor of persons who go on such premises without invitation or authority, and as to such persons the law imposes no liability on the owner, except for wilful or malicious negligence. -Flannigan v. American Glucose Co. Superior Court of Buffalo, 11 N.Y. Supp.

## MODERN FLOUR MILLIMG.

## By J. Harrison Cahter.

(Concluded).
This is, of itself an important part of the manfacture, frequently overlooked in the early days because of the ease with which the machines do their work, and the comparatively little attention they require. The great object to be kept in view is to procure flour of the best obtainable quality; to make as little of it as possible, and to send none of it to the succeeding break roller mill.

The machines for effecting this object at present may be said to be of the three following classes:

Reels of various designs, including inter-elevator reels ;
Sifters, having a rotary or reciprocating motion ; and
Spout scalpers which take the form of an inclined frame covered with perforated metal on the bottom, the amount of inclination in the spout scalper varies with each succeeding break, and is such that the natural angle of repose of the material is only slightly exceeded, thus causing very gentle action.

Scalpers are rarely used for the last reduction, most firms adopting the centrifugal dressing machine. But now I want you to consider with me the best machine for scalping all the previous breaks.

The old hexagonal-shape reel, with deep rails acting as lifters, carrying much of the broken wheat high up in the cylinders, and dropping it on to the wire was very objectionable; whereas a cylindrical reel of the same size was so gentle in its action as to cause floury overtails. I therefore from the first used hexagonal reels, with rails shaped to fill up the angles but not to act as lifters. It would have been better had I made cylindrical reels of large dimensions.

Inter-elevators claim to have a gentle action, and to occupy but a small space, but I cannot speak of them from experience.

Rotary sifter scalpers are used by se eral of the principal engineers; and sifter scalpers with the ordinary reciprocating action are used in some mills. In my opinion rotary sifter scalpers offer no advantage over reels such as those I describe, the agitation on rotaries being greater than on cylindrical reels Any one doubting this should watch the two machines at work. In both cases, o course, the heavy particles gravitate to the cover; but whilst in the cylindrical reel the product can scarcely be seen to move, except that it flows gently on to wards the tail; in the rotary there is a very considerable agitation of product against itself and against the sides of the sifter.

The "spout" scalper, inasmuch as it is not, I believe, used after the fourth break, unless with the addition of a "jumper" motion, evidently is a ma chine of very gentle action.

As a means of preventing an excess of break flour of inferior quality, nothing has been, so beneficial as the substitution of perforated metal for wire as the sifting medium.

To send no flour to the succeeding roller mill requires a certain amount of agitation; to make the least percentage of flour suggests the gentlest admissible treatment. To obtain good flour demands quick separation from contact with branny particles, and no scouring action.
Millers should watch this portion of the process more closely than they do.
Very few of them. know what percent-
age of break flour they produce; or, in $\mid$ machine. The claim made for the other words, how much of the semonila they make into flour before purifying. purifying.
In primitive times this process consisted of a few dexterousturns of a hend sieve by the miller, and then of skimming off, by the hand, the inferior products which had collected above the good semolina at the bottom of the eve.
Purifying has probably required and received more attention, and been more experimented with, than any other department of milling. Even smooth rolls will rub some inferior flour off
branny particles, therefore it is important to have the semolina and middlings as pure as possible before each rolling.
I purpose describing first four repre sentative machines, of which I have been favored with illustrations, and then revert to a general examination of purifying. Naming the machines in order of seniority, they are the "Reform", "Victoria", "Koh-i-nor", and "Omega".
The "Reform"-The features which strike me as being the best in the "Reform" are the set of cross troughs suspended above the sieve, extending from head to tail of the latter, and a woollen dust collector and air distributor. The troughs are an admirable device. The air, as it goes upwards towards the exhaust fan, laden with all inferior particles sufficiently light, passes between the troughs, and then suddenly expands, depositing the heavier partieles in the troughs, from whence they escape by means of longitudinal troughs at each side of the sifter.
The fan on this machine has sufficient power to draw up to these troughs material which otherwise might descend to the sieve (as explained in my later remarks), and mix once more with the stock, and, by overcrowding or accident, escape through the sieve with the pure middlings. I am greatly in favor of any system which will prevent the latter occurrence.

The "Victoria."-The "Victoria" is decidedly a new departure, inasmuch as it dispenses with the dust room. The fan can be seen slowly revolving and blowing the air into the open mill. Any light, flocculent, or dusty matter which might be in the middlings is deposited within the case of the machine. Another novel feature, first introduced into this machine, is the placing of a set of nozzle trays almost close to the silk, so that with a small quantity of air an inten. sified current may be produced in the nozzles themselves, sufficient to raise the impurities.
The inventor has so arranged the nozzles that no particles can traverse the silk without passing under a sufficient number of them to effect complete purification.
The proximity of the nozzles to the silk is an assurance that this intensified current is actually operating through the silk meshes. Another advantage (referred to in my general remarks on purifying) in the proximity-of the nozzles to the sieve is that no sooner is a branny particle lifted from the silk than it is safely deposited in the shelter of the nozzle tray.
The "Koh-i-nor." The "Koh-i-nor" is also of novel construction, very different in appearance to any other machine. It consists of a tapered sieve, becoming narrower at the tail end. Like the "Victoria", its fan blows direct into the mill, and yet without blowing dust into mill, and yet without blowing dust into
tapered sieve is that as the middlings or semolina continually decrease in quantity as they flow onward towards the tail, the narrowing of the silk insures a continuation of the same thickness of feed as at the head of the machine, thus securing the opportunity for the gravitation towards the silk of the heavier particles, the lighter floating on the top. As the sieve narrows, the platforms (as they are called) on each side widen, leaving ample room for the settlement of the material drawn off the sieve. have not worked this machine pra tically.
The "Omega".-This purifier has rossed troughs above the silk, somewhat after the "Reform" style, but its fan blows straight into the mill floor, like the two last machines. The troughsare gradually tapered down to a sharp edge close to the silk, so that almost immediately after the particle is raised off the silk by the air, it gets into a gradually increasing current, which ensures its being lifted into the troughs. The latter, I should say, do not vibrate
with the silk, but are stationary, and with the silk, but are stationary, and brush.
Another distinct feature of this machine is a bend upwards toward the tail end. The effect of this is to check the flow of the middlings (which, of course, ere reaching it, have become less in quantity than at the head), ensuring good covering of stock on the sieve until the tail is reached, allowing, as in the case of the "Koh-i-nor", of the gravity operation coming into action. The overtails of the machine pass through a gravity purifier, which catches any light particles that may have escaped the exhaust on the sieve

In making a few general remarks on purifying, I would say that good purification can be effected in various ways. I have seen striking illustrations of this in southern Europe, semolina and middlings of the most perfect description are procured from purifiers which, apparently, are most unscientifically, and imperfectly constructed. In some of them the only attempts at an air-current are applied by bellows puffing little jets of air under the sieve, and at some considerable distance apart. In others a fan is used, also blowing air through the sieve from below, but with no attempt to make the air-current equal throughout the entire length.
The principal care of the miller is to have a sufficiently thick feed on the sieve. The silk at the head is fine, so that very little material escapes through it, and in this way time is gained for gravitation to take place, the purest middlings getting to the bottom, the inferior or larger particles floating at the top; in fact the purification is almost entirely achieved by gravitation. This is a point we should not lose sight of, and is to a certain extent provided for in the "Koh-i-nor" and "Omega" machines.
When I made purifiers, I arranged a "cut-off" from the tail sheet to the head of the machine; which effected this purpose.
I have often heard millers say, "Purify semolina and middlings thoroughly in the early stages, and the stock will then be pure throughout." This is a fallacy. Purifying should follow each smooth roll reduction. Of course purify as well as possible at all stages; and if the break roller mills would make only two products-pure middlings and pure offal-it would be an easy matter; but the flour producing particles adhere
last smooth roll reduction, a separation is being made by the rolls, but a difficult problem left for the purifier. In fact, each purifier has to treat a product made up of a certain portion of pure middlings, a middle quality, i. e. a produet consisting of middlings adhering to offal, and finished or pure offal. The first with care, comes through the silk easily; the third should be taken away without much difficulty; but it is the medium of most diverse shapes and gravity, which, going, by overcrowding or accident, partly either with the first or third, gives imperfect results.
Millers are usually careful to have the offal clean; so the best middlings are not ; and I want to point out why. Semolina and middlings, of too wide a range of sizes, are fed on to each purifier, which is a great mistake, and, while this is persisted in, purification will not be perfect. Supposing even the various sized particles were of the same gravity, a similar air current for all sizes would not answer, a proportionately stronger draught being required for the larger than for the small particles; and when it is considered that the particles are of a very varying gravity, the difficulty is increased. To put it briefly, the products to be purified should be graded into far more sizes than at present, by grading machines placed on the floor above the purifiers. The result would then be pure middlings through the silk; medium quality, as overtails, for the next smooth roll reduction; and offal in the troughs. At present, with the products of divers sizes, the purifier is clothed as a grader. Each varying sheet of silk demands a varying air current, the latter increasing with each silk towards the tail; and then what happens is, that the medium quality which overtails from the head sheets, will, some of it, be taken up into the troughs, when it comes to be subjected to the stronger draught lower down the sieve ; and it will mix with some inferior products from these lower sheets, although the air current on the latter is frequently less than it should be for the heavy middlings, which have to be treated on its coarser meshes.
Another cause of imperfect results is that small impure particles, in a certain proportion are accidently pushed through the coarse silk, in spite of the air currents which, towards the end, become partially naked.
The overtails from most purifiers I find contain some pure offal ; and as this offal has come the whole length of the silk, it is olear that, as I said before, a certain proportion has probably passed through.
It is undeniable that it is a practice to re-purify outsiftings, or overtails, or the troughs or tray products. The practice varies in different mills, and, usually, these products from several purifiers are sent on to one, making still a wider range of sizes, and imposing a more impossible demand on the purifiers.
It would require a separate paper to discuss this matter in detail ; but if such a system as I have sketched-of grading machines preceding the purifierswere carried out in a new mill, it would not add inordinately to the cost, and would insure a more perfect result.
The advantage of the troughs and trays being close to the silk, is very great. In watching an old purifier with the valves high above the silk, particles can be constantly seen starting upwards towards the fan; when suddenly théy fall onto the silk again, and,
of course sometimes through it. This
is probably caused by a branny piece having a particle of good middlings at one end or side, which, after a time, ex ercises the power of its weight by an arrow-head kind of action and brings it down, sometimes through the silk with the best middlings. In the new machines these pieces are taken almost instantly into their place of rest in the troughs or nozzle trays.
Until grading is adopted, as I suggest, it seems to me that the modern purifier requires another chamber, which would give the following results, and obviate re-purifying:

A first quality, as pure outsiftings.
A second quality, as good overtails.
A third quality in the first troughs, nozzle trays, or platforms.
Offals, in a second range of these appliances, and
Stive in the usual chamber.
I mention these matters to prepare millers for the fact that new mills must be more and more elaborate, and the machines still more scientifically made and handled.

The advantages of the present purifiers, from an insurance point of view, are incalculable.
Explosions in mills, as far as I have been able to ascertain, never occur in air trunks leading to rooms. Any spark from a naked lamp, or other cause, does not produce an explosion until reaching the great dust cloud in the stive-room
Insurance companies fear that the puriInsurance companies fear that the purifier room, with the fans blowing direct
into it, will become a huge dust room; but the miller would not allow that. If flour were coming on to the purifiers, and the fans were blowing it into the old stive-room, no one would see it, and an explosion might take place. But the moment any flour appeared in the purifier floor, the men in charge would see immediately that something was wrong in the dressing department, and the irregularity would be rectified a once, and an explosion prevented.
Gentlemen from insurance offices who have recently consulted me about these matters, have had my opinion, as above expressed, plainly pointed out to them.

## SMOOTH ROLLER PROCESS.

I must pass over this part of the process, owing to want of time, with a very
few words. Great responsibility rests on the maker, that he shall construct absolutely true rolls, running in absolutely true bearings, which latter should be so accurately adjusted that the rolls cannot rattle in the bearings, or, as it were, hammer against the middlings being rolled. When this occurs, the ground product is a mixture of flakes and granular meal, neither of which will make flour properly.

The proportion of flour produced from good wheat is from 70 to 73 per cent. If you will examine even the
finest offals under a magnifying glass, you will see that the particles are larger than the flour particles. "As fine as flour," like "As jolly as a miller," is a recognized proverb. It is, therefore evident that the finer the meshes of the dressing cloth through which the flour can be induced to pass, the smaller the percentage of offal which would escape with it; in other words, the purer will be the flour.
I have given an indication of the various flour dressing machines in an earlier part of my paper, and time does not admit of my going into every detail of their construction. Of course, silk cloth is the dressing medium in all of them, and reels and centrifugals are
the most usual machines. In both these types, the material being dressed is impelled in the latter case, and falls in the former against the silk obliquely ; and owing to this oblique direction of the flight of the particles to wards the silk cover, they would not pass freely through unless the silk meshes were considerably coarser than would have sufficed if the flour particles had been impelled in a direct line lowards them. This is no new theory Professor Kick, with whom I passed an instructive day at the University of Prague several years ago, and to whom I am indebted for some kind communications, gives it as his opinion that no alteration in the form of centrifugal beaters will effect a cure. They can never, he says, "effect an improvement."
recently patented dressing machine, called the "Impact," has been introduced, which, so far as I have been able to see from work being done, certainly does approximate to the desired end.
The effects in the manufacture pure flour, which can be produced by securing a workable result from a dressing machine that impels the flour in a direct line towards the spaces in the ilk cloth, instead of obliquely against he strands, will be most valuable and ar reaching. In some districts coarsely dressed flour is preferred ; but it is diffi cult to procure it pure, especially in the ower grades. A machine of the description foreshadowed would make it possible to obtain an equally granular flour through silks, probably three or our numbers finer than those used on he present machines.

## summing up.

I have brought forward two incidental, but very important matters, namely, the insurance of mills and the mportation of dirty foreign wheat The technical points I have submitted and which I hope will be discussed, are principally:-
Wheat washing and drying.
Scalping.
Purifying.
Flour dressing.
In conclusion I may express delight t the position of British milling now as compared with the time prior to the introduction of the roller system. Then all was misgiving and distrust. Now millers-both employers and employeshave a knowledge of the mostadvanced namely, English milling. They study he science of it thoroughly; they work out the practice of it persistently, and determined that British milling hall equal, if not surpass, the milling of any other nation in the world.

NEWS.-The J, B. Allfree MPg. Co great rush of business, and have closed contracts forcomplete mills the following states: Illinois, Iniana, Kentucky, Nebraska, Ohio, Minnesota Maryland. Kansas,Texas, Michigan, besides a large number of special machine orders. Smith \& Lewis will build a grist mill a onah, Williamson Co., Tex.
The Alton Elevator at Ka
urned April 27 . Loss $\$ 60,000$
B. F. Turner Loss $\$ 60,000$
roller flouring mill at Corydon, Ky
The Blodgett Milling Co. of Beloit, iled articles of incorporation, A pril 24 The Alliance Milling Company, of St mane Tex., has increased its capital stock. The Freeman Milling Company, of West The Freeman Milling Company, of West
Superior, Wis, will capitalize at $\$ 250,000$. perior, Wis, will capitalize at $\$ 250,000$. Near Cohocton, N. Y., April 25 , the saw
and grist mill of John Tierney was burned. The Carlton roller mills at Mishicott, Wis, have been sold to Casco parties for 813,100 . Aт P'eterborough, Ont., May 8, H. Dennis hour mill was burned. Loss, 810,000 ; partly

ATOtranto, Iowa, March 26, Wilder, Fluen
© Co.'s mill was burned. Loss $\$ 8,000$; insut ance $\$ 6,000$.
a charter has been issued to the ton Mill \& Elevator Company of Houston Tex. Capital $\$ 25,000$
At Akron, Kan., April $\{0$, the flouring mill owned by J.B Nipps was burned. Loss $\$ 12$, Tre Dirad Mich
TIIE Durand, Mich., Cooperage Company has accepted the bonus offered by Howell for the removal of its plant.
TodD's flouring mill at Dallas, Tex., which was burned April 15 , was insured for $\$ 32,000$ nd the elevator for $\$ 4,250$.
actory at Ashley Menden's stave and hoop factory at Ashley, Mich,, was burned May 6. The Elkton Milline $\$ 12,000$.
The Elkton Milling Company, at Elkton, a., are putting in a new outfit of machinery or a 100 -bbl. roller flouring mill.
AT East Dubuque, III., April 27, Geo. Most Sons' flouring and planing mill was burned. Loss about $\$ 25,000$; insurance $\$ 7,000$.
S. L. Alley and others of Majorsville, W
Va., have organized a stock company with

Va., have organized a stock company with a
capital of $\$ 10,000$ to build a roller flouring Va., ha
capital
mill.
NEAB

Near Milford, Del., May 9, Mortington Grist Mills, owned and operated by Watts Betts, were burned. Loss, $\$ 3,500$; insurance 82,200.
Wm. Feathers, proprietor of the four mills at Little Wolf, Wis., drowned April 21, while
trying to rescu9 his boy, who had fallen into trying to rescu9 his boy, who had fallen into
the river.
At Dallas, Tex., April 23, the cooperage works of alderman K J. Kivlen were burned. Loss on building, machinery and stock, $\$ 10$, on; insured.
WHEN the two flouring mills now in course of erection are completed, Nashville, Tenn. will have a flour manufacturing capacity of ,000 barrels per day.
The Jackson County Milling Company's property at Black River Fails, Wis., has been eased by McNealy \& Woodworth, of Wau paca, who will operate it in future.
At Belle Plaine, Minn., May 5, F. H. Peavey \& Co.'s elevator burned with between 12,000 and 15,000 bushels of wheat. Nearly one hundred cords of wood was also burned At Mount Carmel, Ill., April 13, Kamp's roller mills were burned. Loss, $\$ 25,000$, only small part of which is covered by insurance incendiaries.
Charles P. Flatley. formerly General Western Agent of the D. S. S. \& A. and the Soo Lines, is, since May 1, acting as agent ters at Buffalo.
The Uvalde Iee, Gin and Milling Company, cently organized at Uvalde, Texas, to erect an ice factory, cotton gin and press and grist stock of $\$ 20,000$.
At Mapleton. Pa., May 10, the flouring mills of Elliot Robey, the general store of William Smith and the millinery store of Mattie Robey, were burned. Total loss, 811,500; insurance, $\$ 6,000$.
Tre A. A. Freeman Company will begin manuiacturing flour at Superior, Wis., by
Sept. 1. The Land and River Company he Land and aite to the millit ompany has donated a site to the milling
company which is valued at $\$ 80,000$. R. C. MANsFIELD of Cob
h. C. MansField, of Cat Creek, Ky., has changed his flouring mill to the roller process and added necessary machinery for doing all
kinds of grain mill work. The plant will be kinds of grain mill work. The plant will
known as the Maple Grove Roller Mills.
The foundation for the new roller flouring mills of Slafer, Huebner \& Co., at Menomonee Falls, Wis., was laid May 4, and the work is being pusbed as rapisiy as possible. The
milt is to be a flrst-class one in every respect.
The Columbia Elevator Company has been consolidated with the Bucks Milling Co. of Columbia, Tenn., with a present capital for the new organization of $\$ 100.000$, and a complete corn-meal equipment has been added to the plant.
The Duluth Board of Trade has voted to change its rules so at to make No. 1 northern the contract grade instead of No. 1 hard. The change will take place Sept. 1. It is made because No. 1 northern more equally compares with the grade in Minneapolisand New York,
A contract has been closed by the Basic City, (Va.), Company, whereby the Cochrane Roller-mill Co., of Escanaba, Mich., will remove its plant to the former city. General machinery and castings, chilled grain rolls, chilled iron and castings of all kinds comprise the work which will be done.
The Imperial Mill Company of Duluth, Minn., has let the contract to the E. P. Allis Co., of Milwaukee, to equip their flouring
mill, so as to increase its capacity to 5000 barrels per day. The company will also build a system of 50 elevators in that country to take care of their grain.

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SECOND MILLER WANTED. We want a good man as second miller for
general work in our roller mill. Capacity, 75 general work in our roller mill. Capacity, 75 bbls. Must be a German, and a married man preferred. Steady employment for the
right man. For further information address or apply personally to $\quad$ REDDYMANN, JAEGER \& Co.

In the case of Gilbert \& Rand Omaha Railroad, to rert \& Randall, vs. the destruction of plaintiffs' flour mill ages for the Minn My 23 plaintifs flour min, at Adrian, sparks from, 1889, the fire being caused by United States Circuit Court junk Minn returned a verdict in ato for $\$ 16,000$.
Aт Cbatham, Ont., May 2, Norwood's grain elevator and Tighe \& Stringer's produce warehouse were burned. The former contained son \& Sons of Kingstong and son \& while in the lator, and a quancity of of produce. Loss, $\$ 25,000$ to $\$ 30,000$. Partially insured.
The Edward P. Allis Company, of Milwaukee, Wis., are building a 700-barrel mill or the Eagle Min Co., of New Ulm, Minn.; 300-barrel mill for the Houston (Tex) Mill Rockford Woarrel mill for sheldon Bros., man \& Shest a barrel mill for Corle Waltors, Wis.; an 80ton, N J; a 0 bell brecht, Beemer, Neb., and a 50 -barrel mill for D. B. Reynolds, Delton, Wis.
Durine the month of April, fires involving loss of $\$ 10,000$ and upward were reporterl as follows: Flour mills; Mt. Carmel, Ill., $\$ 25,000$; ing elevator, $\$ 65,000$; Akron, Tex., includEast Dubuque, Ill inluling East Dubuque, Ill., including planing mill, Minneapolis, Minn $\$ 40,000$; Utica 000; Harro, 000; Harrodsburg, Ky., $\$ 71,000$; Pendleton, Ind., $\$ 22000 ;$
Total, $\$ 243,000$

## The annual

THE annual meeting of the stockholders of the Duluth Imperial Mill Co. was held at business aogregated $\$ 500$,000 and year's of 15 per cent, was ordered in addition to the 10 per cent puid earlier during the fiseal year, and $\$ 3,275$ was paid the employes on the profit-sharing plan.
After complimenting Mr. Church's manágement in high terms, it was voted to enlarge the mill from, 2,500 to 5,000 barrels. Mr. W. D. Gray, of the Edward P. Allis and an y, of Milwaukee, Wis., was sent for, ment, which includes 85 him for the eniarge140 sieve scalpers, flour dressers and centrifugals, 45 purifiers and other machinery as usual, approximating $\$ 150,000$ in cost. The new half will be driven by a compound Cor: liss engine independent of the existing half. The Imperial Mill was originally built by the Allis Co. for 1,500 barrels, and enlarged by them in 1889 to its present capacity.


## "DDIN7" PATENT IMPROVED COCKLE MACHINES

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Barber \& Son; Pillsbury-Washburn Flour Mills Co.-Anoka Mill; Minneapolis Mill; Holly Mill; Zenith Mill; Pettit Mill. IN MILWAUKEE:

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125-bbl. roller flour mill, 4 stories, frame with stone basement, including plenty water power for 4 water wheels. Flume, dam and mill in good condition. Frame warehouse and office close by, and long sheds for farmers' teams. The whole property in full
operation 16 hours daily, doing profitable business. Has big grist business. City of 2,000 population; two railroads. Good trade with citizens, farmers and lumbermen, for flour, feed and rye. Good local grain, and plenty of it. Good place to live, has good schools and churches, and close to other large cities. Owner non-resident, which is the reason for selling. Adaress,
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A RARE BARGAIN. A FOUR-Story building situated on ground soxiso, Following is a list of the machinery: One Schwartzwalder Scourer: one Vietor Brush Machine: one
Cockle Machine and Steam Wheat Heater; one 9x18 Double (hain Odell Roll; one 9x30 Double Odell Roll; three $9 \times 24$ Double Odell Rolls, or breaks on wheut; four $9 x 24$ stone Rolls for Middings, and three pair
Middling Stones; three Gurden Bits and Ave Smith Purifers; one Three Break Scalper and sixteen Flour


 terms, etc. The mill is sitiuted on Firth and Center streets, Litte Hock, Ark. A bird'seye view of Little
Roek, showing location of mill, will be sent on application. For further particulars address,


## RECENT MILLING PATENTS．

The following are a list of Patents relating
to Milling and Grain－handling applaances， granted during the month of Aprili，as spe－ cially reported for the U．S．MILLER，by Chas．
E．Brock Patent Atturney，Pacitic Building，
Wat Washington，D．C．t ．t $\begin{aligned} & \text { Brney，Pacitic Building，} \\ & \text { No．} 449,703 \text { ，Corn－conveyer，W．Riedel，Baker，}\end{aligned}$ No． 499,703, Corn－conveyer．W．Riedel，Baker
No． 449.743. ．Fan－blower，F．F．Landis，Waynes－ No．449，743，Fan－blower，F．F．Landis，Waynes－
boroukh Pa．
No． 449,788 ，Centrifugal cleaner，L．Wommer

Minneapolis，Minlı，assiguor of oue－hat to A ．W．Paris，same place．
449，79．：Methiod of preparing flour， H ． arating the tood constituents from sep－ and stiorts or cortical portion and germ of wheat or other cerreals and utilizing the same，which consists in washing the bolt－
ings with cold watrr until the stare teil，and soluble salts are removed，then macerating with dilute acid to dissolve the phosphates remaining，separating the ting the salts out of the solution by addi－ tion of ammonia orotherinnocuousalkali， then washing，collecting，drying and pul－
verizing the product thus obtained and adding in the proportions named aned and adding in the proportions nampd to flour．
449,913 ．Bolting－screen，T．Parkinson and G．M．Parkinson，Doncaster．England．
． 449.946 ．Dust－collector，L．V．Rathbun， assignments，to $\ddot{\mathbf{M}}$ ．E．Rathbun，mesne place． No．450．014．Grinding－mill，L．D．Harding， Ciffax，Wash．
No． 450,198 G Grain－cleaner，F．M．Shaw，Min－ No．${ }^{450}{ }^{2 i 23}$ ，Grain－meter，C．S．Beggs，Ash－ No． 450,267 ，Coal or grain bin，W．Walker，
Scandia．Kans． No． 450,269 Dust－collector，D．A．Ward，War－ No．${ }^{\text {saw．III．}}$ III． ．Feed－regulator and register，W． No． 450,310, Bolting－machine．O．Esche，Mil－ waukee，Wis．，assignor to the Superlative
Purtier Manufacturing Company，same place．
 nation．with the tapering separating for the dust－laden air，whereby the air and dust are caused to whirl in the cham－ ber，an outlet for the purified air，and a dust discharge opening at its apex，of an end of the separating．chamber and sur－ rounding the opening in the apex thereof．
No． 450,430 ，Grain－car door，C．A．Schroyer， No．45ichiogo，Attachment for hominy mills，H． No． 450,629, Corn sheller，West．S．L．Langenau， No． 450.689 G Grinding－mill，c．Willard，New－
 W．C．Wottring，Prospect，O． No．Detroit，Mich As a new article of man utacture，the product from rice，consist．
inc of drawn and compressed films form－ ing of drawn and compressed films form－
ed from rice in its normally dry and raw No．condition． 451,111, Grinding－mill，H．A．Duc，jr．， No．Charleston，S．C．C．Gry－mill，H．A．Due，jr．
No． 450,139 Dist－coilector，W．D．Smith，De－ Smith Manufacturing Co．，same place．
No． 451,236 ．Coffee－separator，G．H．Rich，Chi－
No． 451.306 ．Apparatus for conditioning or drying grain，C．Mallonson，Liverpool， No．${ }^{451,392 .}$ ，Grinding－mill，roller mounting
II．A．Duc．jr．，Chaleston，S．C．

From Ocean to Ocean is the title of a
neatly printed book just received which gives neatly priuted book just received which gives Salvation Army from the Atlantic to the Pa－
cific．Itis written by CommissionerButing eific．It is written by Commissioner Ballington
Booth，and gives very much valuable informa－ Booth，and gives very much valuable informa－
tion in reference notonlyto what the Salvation Army have done，but what they propose to do for the elevation of humanity．It deeserves and
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ON REGULAR TIME
LEAVE MILWAUKEE FOR Chicago daily，Saturdays exceepted，at．．．．．．7：00 P．．
Racine daily，

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Exporting millers should write to the Riverside Printing Co．，Milwaukee，Wis．，for he best Flour Cable Code ever published． Thereare more copies of this Code in use than of All other flour codes published．It is
simple and accurate．It is ealled＂The Rimple and accurate．It is

the keystone Flour Mills. $\quad$ Corn Mills. ${ }^{*}$ ※ Hominy Mills.

St. Francis, Kan..,
the J. b. allfree co., Indianapolis, Ind.:
Dear sirs-In reply to yours, we have been running six
weeks and cann say that your rolls are the be.t we have ever
handied. They have not given us any troble since we handied. They have not given us any trouble since we
started, aud the adjustments canno be beaten, and the flour
drensers and ent
 work. They can not be beaten. All the other machinery,
shafting. pulleys and everything is fitted no so nicelythat there
is no trouble to set it up. We oun make fifty barrels of flour in
 Co. is the best frrm we ever had anyd oallings with. They
did more than the contrat called for. If we need any more
machinery after this, they will get the order. did more than the contract called for. If we need any mor
machinery after this they will get the order. Yours very truly,

The J. B. Allfree Co., Indianapolis, Indir 16, 1890 Gentlemen-In response to your inquiry of Oct. 15, would say we are pleased to state that we have run the mill about three months and are doing all your machines the same as you do your bolter "Success." We have this day mailed you a sample of our Climax Patent, of which we We per cent. Beat it if you can

Wishing you success, we remain your friends, Ziliak \& Schafer Milling Co.

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15 PARK ROW Vulcanized Rubber Fabries FOR MECHANICAL PURPOSES. Rubber Mats, Rubber Matting and Stair Treads. RUBBER BELTING, PACKING AND HOSE. SALESROOMS | ALTIMORE, 12 North Charles St |
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## 

# American Flour Mill 玉Grain Elevator Directory 


#### Abstract

It contains: 1. A list of Flour Mills in each State, Territory and Province, with names of owners, P. O. and county; in thousands of instances giving their capacity in barrels per day, kind of power used, etc., also indicating such firms as are supposed to be worth $\$ 10,000$ and upwards. Total number of mills given, 17,145 . 2. A list of miscellaneous mills, such as Corn, Oatmeal, etc. 3. A list of Millwrights. 4. A list of Grain Elevator Owners and Grain Dealers.


5. A list of well-rated Flour Brokers, Merchants and Bakers in all parts of the United States and Canada, which has been compiled with extraordinary care, capital and credit being considered in the compilation.
6. A list of Foreign flour and grain importers, secured by our own special correspondents and believed to be thoroughly reliable. In short, it is a complete KEY for reaching the Flour and Grain Trade, enabling any department of the trade to reach any other desired.

The price is invariably Ten Dollars per copy, on receipt of which it will be sent, post paid, to any part of the world. The complete work only is şold. We do not supply lists for single states. These Directories have been issued every two years since 1878, and have been declared indispensable by the prominent mill-furnishers, flour brokers, millers, etc., of this country and Europe. Address,

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cess, we are yours traly,
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THE JONATHAN MILLS MFG. CO.
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THE BRADFORD MILL CO., Cincinnati Ohio:
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Gentlemen-Mr. Clark has just given me his order for the Dunlap Bolt, and wants it shipped as soon as possible. Make up and ship with the Bolt a Conveyor as per enclosed sketch. * * * Respectfully,


THE LANE \& BoLLEY CO., cor. John \& Water Sts., ciliciniafl, 0 .

THE IMPROVED WALSH Doubie Turbine Water Where

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ment will be of inestimable benefit to members, and trust that sufficient enterprise may be shown by the members of the Nationa Association to insure its ultimate success.
By order of the Executive Committee,

Frank Barry, Secretary.
(Writen for the United stites Miller and

## MACARONI.

眩层HIS article of food, the manufacture of which may be considered the chief industry of south Italy and Sicily, requires neither great means or skill in its production. Macaroni is the semoule or flour of wheat moistened with water, in the proportion of 16 pounds of water to 30 pounds of flour, kneaded until it assumes the requisite consistency, cut or pressed into the
thoroughly dried.
For the best Macaroni, the hard, semi-translucent varieties of wheat, grown in warm countries, which conused in the form of semoule; for the cheaper grades, common flour is used. Any intermediate grade can be made by mixing the two in various proportions. It is an article of daily household production in a large proportion of Italian families, the necessary articles therefor being very simple-a smooth board, a piece of marble for kneading and a common rolling-pin. The house hold process is as follows: One pound of flour is mixed with four or five eggs, moistened with water at 160 degrees Fuhrenheit, kneaded a few minutes and then rolled very thin with the rolling-pin. After drying on the kneading board for some 15 or 20 minutes until the surface loses it minutes until the surface loses it
adhesiveness, it is rolled up tightly
and thin slices are cut from the ends. The slices, falling apart, constitute strings of Macaroni, and are ready for use. Thousands of small factories are scattered throughout Italy, and are operated entirely by hand. The pro-
prietor, with one or two workmen, make the Macaroni, and the wife sells it. The machinery is inexpensive and the hired labor costs from 30 to 70 cents per day, according to locality. Their machinery generally consists of a mixer, kneader and a press. The large establishments are furnished with the nost approved modern machinery and are operated by steam power. They generally buy wheat and prepare
semoule and flour, not only for their own use, but for the market. The largest Macaroni factory in Rome has four steam boilers, 7 feet in diameter, and a Compound Corliss engine. Being thoroughly cleaned, the wheat, in this
factory, passes through ten successive factory, passes through ten successive
pairs of rollers, each pair being grooved smaller than the preceding pair, before it is crushed into the proper degree of fineness for semoule. The semoule must be hard, strong, granular and entirely free from dust or flour. When the quality is right, the Macaroni made from it can be boiled an hour without losing its shape or becoming soft. From the floor above two measuring spouts run to each mixer, so that the quantity of semoule in each charge is uniformly the same. Hot water having a small quantity of saffron in solution measured for each charge.

From the mixer the dough is taken o the kneader, where it is well kneaded. The bed of this machine revolves slowly and the wooden bar above it is worked up and down on the dough. The dough is still further kneaded by being passed a number of times through pair of rollers which are geared so as automatically reverse their direction as soon as the charge has passed hrough either way. The dougb is now ready for the presses. These have double cylinders, revolving on a central pivot, so that while one cylinder is in position the other is free to be cleansed and charged, ready, in its turn, to
The presses are operated by hydraulic power, the pressure being 3,600 pounds to the square inch. The small and fancy-shaped Macaroni is made in horizontal presses. Cutters revolving more or less rapidly near the face of the die, according to the length required, cut it into any desired length
From the presses the long Macaron is carried on light bamboo sticks to the drying rooms. The small and fancyshaped are dried on screens, consisting of wooden frames about $2 \times 6$ feet allow a circulation of air.
The drying of the Macaroni is the most difficult and delicate part of the manufacture and depends much on the
state of the atmosphere. It is first
dried in the open air, whether in the sun or shade depending on the temperature and dryness ${ }^{4}$ of the atmosphere. The time depends on the size of the macaroni, from half an hour to three hours. It is then carried to a close damp room to rest, where it remains perhaps twenty four hours. The room is kept sufficiently damp by small team jets or by the evaporation of water. This rest is a retarding process, of the Macaroni from drying too fast, as it naturally would, and to allow the the interior to harden. When properly rested, it is carried to large, spacious rooms that have thorough ventilation, either natural or artificial. For export, Macaroni is packed in cases containing $24+$ pounds.

## the vessel must pay for shortage.

| (10) |
| :--- |
| 10 |UFFALO vesselmen do not relish a decision just rendered by the Court of Appeals of the

 ushels on R . K . Rhodes fell short 820 The shortage was charged to her and her owners sued to recover it. The case was tried before the Superior court at Buffalo and a verdict gives for defendant. Plaintiff carried it into the Supreme ourt, which affirmed the verdict. Then it was appealed to the highest court in the state and again the verdict against the vessel has been affirmed. This is the first time a shortage case has been decided by the Court of Appeals. It is a well-known fact that grain in ransit absorbs moisture to a more or ess extent, depending, presumably, on the state of the weather, and consequently, should, at its destination, exceed in weight what it was on being received aboard a vessel. The deducion therefore is, that in case of shortage at point of delivery, either an error was made in weighing from elevator to the vessel, at point of shipment, or a similar error in transferring from vessel to elevator at point of delivery, or that short weight was given at either point from some cause, intentional or otherwise. It is not reasonable to infer that any quantity of grain could be abstracted from a vessel's cargo while in transit and shortage could not occur from leakage, as it possibly might from cars, and we can conceive of no other cause than that stated. The shortage in this case was very large and we are informed that shortage of any amount is quite unusual, the result, generally, being an overplus of small amounts, as it, undoubtedly, in the nature of things, should be, in which case the vessel owners profit thereby. Such being the case, that is, if vessel owners receive the benefit of whatever the surplus amounts to, they should, certainly, be required to furnish the full amount called for by the bill of lading, and to that end should by proper means insure to themselves a correct weighing at both feceiving and discharging points.
who will have assistants all important sea-ports of the United States.

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Don't put off buying the machine referred to. Every day will add to your regret that you also have not put in a

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## United States Miller

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ATATE MILLER AND THE MILLING ENGINEER.
[Entered at the Post Office at
mail matter of the second-elass.]
MILWAUKEE, JUNE, 1891.
We respectfully request our readers when they write ts persons or firms advertising in this paper, to mention that their advertisemen Was Been in the AND THE MILLING ENGINEERR. You will thereby oblige not only this pape vertisers.

$T_{\mathrm{ti}}^{\mathrm{H}}$HE Pennsyivania Millers' Association will meet in the Logan House, Altoona, Pa., Sept. 9, 1891

THE European excursionists have had a grand time of it visiting the foreign cousins, according to reports
printed in the British papers. The printed in the British papers. The first section of the party sailed for
home on June 3d, and the later conhome on June 3d,
tingent on the 10th.

WE have received and read with inry P. Robinson entitled "Our Railroads." It is an able essay and we wish it could be read generally, especially by hat class of people who are "agin the railroads anyway" good or bad

$S^{\text {T }}$TATISTICS show that $400,000 \mathrm{im}$ migrants have arrived in this country during the past ten months, and close observers at the ports of entry are of the opinion that the general character of this influx of population from foreign sources is less desirable than in former years. The question which stares our people in the face is, "What are we going to do about it?" Certainly no undesirable immigrant should be admitted to American citizenship, but there is still room for industrious, lawabiding foreigners.

THE MILLER of London in its June 1st issue, contains a lengthy report of the visit of the party of American millers, reporting verbatim the toasts and responses at banquets given at Tarbet and Richmond.

In speaking of the personnel of the party The Miller says: "Our transatlantic visitors include forty-eight millers, whose pilgrimage is shared by eleven ladies and two children. Willie Edgar * * * although no patriarch in years, may, in one sense, be called its father. Oh! papa Willie! Mother will be pleased!

THE Executive Committee of The Millers' National Association has perfected plans for the organization of a flour tracing bureau, and will submit the same to the members by a circular letter, a copy of which we publish in his issue. It is intended to confine the action of the bureau for the present to tracing and hurrying forward export shipments, and arrangements have been made with a competent representative to act at the sea-board. A sufficient guarantee fund has already been subscribed to insure the inauguration of the enterprise, we are informed; though it is hoped that the movement may receive general support from all members of the National Association, and that sufficient enterprise will b required, to put the bureau squarely upon its feet and enable it to be made what it should be from the start. If that the trade generally is most seriwhat it should be from the start. If ously hampered and the result is in-
jurious to American millers, inasmuch as a large discount in price has to be allowed the buyer on account of the risk taken. These grievances are brought to the notice of the Consul General, with a view to his embodying the facts in his report to this Govern ment and with the hopes that its as sistance may be enlisted and the abuse remedied. $\qquad$
are pleased to see that
E are pleased to see that our

- Government, through its Com missioner of Labor, is properly inter ested in industrial and manual training shools, as is evidenced in the fact that inquiries of an extensive nature are being made as to the results obtained thereby. We have advocated the establishment, in this country, of flour milling colleges, wherin young people may be taught, as far as possible, the theoretical and practical requisites of this very important branch of
country's manufacture. Actual ex-
perience in a regular flouring min is good educator to the business, but the
fact is, that the knowledge which would be readily imparted to pupils, by tutors in an established public college, would be withheld to
by head-millers in private establishments, on the principle that such matters were not included in their duties, as they are employed to operate the milling machinery according the best of their knowledge, obtained through experience and observation, and not to impart to others such knowledge as would make for them competitors and probably cause their displacement or, on account of surplus of obtainable ability, cause a reduction in the remuneration received. In regularly established colleges, wher professors are engaged and paid fo instilling knowledge, and who naturally take pride in producing exceptiona examples of their ability in that direc tion, such excuses would not exist, and we hope to see the time when a college of milling, on an extensive scale, will be established in this country, as they now are in Germany and France. college of milling in Paris, France but lately established, now contains over 100 students.

" $\mathrm{T}_{\mathrm{b}}^{\mathrm{o}}$00 many irons in the fire" has been the cause of the downfall, financially, of many who otherwise might have succeeded. Persons doing a reasonably paying business, which, from practical knowledge, they thoroughly understand, should adhere to that to the exclusion of all unnecessary "side issues". Improve it by all justifiable means. Let the world know what business they are in and by their action in conducting such business convince all with whom dealings are had, that all transactions are conducted upon a basis founded on true knowledge and integrity. Avariciousness is the cause, in most cases, of persons undertaking to carry on two, three and often more separate and distinct branches of business at the same time. Success in the original undertaking has probably enabled the laying aside of a few hundreds or perhaps thousands o dollars, and an opportunity present itself, through the glowing representations of interested party or parties where this "nest-egg" can be made to bring in additional dividends to that already being realized from presen business, and the picture is so well word-painted, the result so well assured independence, as to wealth, so certain to the investor, that the accumulated

Possibly good results and possibly not. In either case a certain amount of mental work is entailed, either to the detriment of the original business, or to additional strain on the brain capacity. And this in hopes of attaining the coveted goal more speedily. But the ultimatum is never reached. Though, in case of success, a point is marked out, when attained, the desire is not satisfied and a higher standard is planted, to be again advanced in due time, while in case success of the new venture depending on financial aid being represented, the chances are that in order, as is supposed, to save what has already been advanced, the original business is crippled to provide a crutch for the forthcoming bonanza, which in the end, probably falls helpless and carries with it what might otherwise have stood. Let well enough alone.

HE accompanying circular is being red throughout the land

| United Suates, , rrunted to Addreas sechwart or Buad Pesth, Hungry, for an Improvement in Mills for <br>  <br>  Jor forth The majority of all the roller mills in use in the United Sates contain pairs of rolls constructed and designed to operate as described in the above quoted |
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We are informed that suits have been entered under the above mentioned patents, against the John T. Noyes Manufacturing Co. of Buffalo, N. Y., and Stillwell \& Bierce Manufacturing Co. of Dayton, Ohio. These Mechwart patents bade fair some years ago to reate considerable disturbance in the milling world, but it is said that, owing to lack of sufficent funds to combat with the organized body of millers, action in the matter was deferred. Whether the present owners of the patents are prepared to furnish the necessary amount of money, which will be called for by litigation so extensive as these suits must necessarily be, or not, is a quesion, but they seem to be putting on a oold front, and we should not be surprised, if in the near future, there would be "music in the air." Millers who have refrained from joining the Miller's National Association, because they "cannot appreciate the benefits to be derived from membership in any direction except in that of patent litigation, and because all seemed quiet in the field of patents," are liable to find that the "Old National" is of inestimable value to those who have remained within its ranks.
The Executive Committee of the Na tional Association, appreciating the value of agreements, which members from roller mill litigation, secured a cast-iron bond, executed by the four firms which compose the Consolidated Roller Mill Co., which bond is in the sum of $\$ 100,000$, and binds those manufacturers to provide defense, and secure from all harm, all members of the National Association, who may purchase and use their roller mills. This bond will save the members from all expense and trouble, which may follow litigation as suggested by the above circular. Millers who have preferred to insure themselves against patent suits, rather than to pay the small fee necessary for membership in the "National," may have an opportunity to enjoy the privilege of their own underwriting.

## CORRESPONDENCE.

LThe following letters are all from our own special
correspondents, and reflect thelr views and the views of the trade in the location from which they write.]

## OUR LONDON LETTER.

We Weather-Advance in Price of Bread-
Result of an Advance in Bread 100 Years
ago-The American Mullers-team Flour Mills at Pekin, Chin

DURING the month of May the weather has been most unseasonable; the country generally being visited with hard frosts at night, and snow and hail storms during the day, with the result that the wheat plant has gone off color and is often thin on the ground besides being universally of backward growth. Such harvest prospects at the end of the month of May kept the high prices of a month ago at about the same level, in spite of the quantity of Indian wheat that is being sent to this country. The average price of wheat for the first week in May was the highest since 1883, and this had the result of making bread $2 \frac{1}{2} \mathrm{~d}$. per gallon dearer in many districts of the country. Happily the result of higher prices is not so serious as it would seem to have been rather more than one hundred years ago, for according to the Universal Magazine of Knowledge and Pleasure, bearing the date Aug. 26th, 1766 , when the result of a similar rise in the price of wheat, was as fol-
lows: "We hear from Newbury, in Berkshire, that on Thursday lasta great number of poor
people assembled in the market place during the time of the market, on account of the rise of wheat, when they ripped open the sacks and scattered all the corn about; took
butter, meat, cheese and bacon out of the butter, meat, cheese and bacon out of the
shops, and threw it into the streets, and so intimidated the bakers that they immediately fell therer bread 2 d. in the peck loaf, and
promised next week to lower to 8d. per galpromised next week to lower to 8d. per gal-
lon. From Newbury they proceeded to Shaw Mill, where they threw the flourinto theriver. broke the windows of the house, and did other eral other mills, to the amount of nearly $£ 1,000$. A poor man, whose name was Parker one of the mob, was killed, who mas had a arm broke, but we do not hear of any further accident. They threatened to proc
ther if provisions were not lowered.

On the 1st of this month, June, this country had its first day of summer, with the result that the Mark Lane market, although there was a large attendance of the party of American
millers who are now on a visit to Great millers who are now on a visit to Great
Britain, was very slow and prices were inclined to be easier. Sellers manifested impatience at the "waiting policy" shown by buyers of wheat, who however, will not buy heavily, as there still remains a good chance of a splendid
wheat harvest in Great Britain. Your readers will, no doubt, recollect reading in your journal a few years ago, your quotations from the Miller, of this city, with reference to State granaries, which that journal advocated should be established in order to have enough food in the country to feed the people in case of war. During the past week the French Government has become alarmed at the existing shortage of wheat and other breadstuffs in the chief centres, and they have come to the conclusion that the Ministry of War should stock all their fortified towns with two months' reserve supplies of wheat or flour to feed the inhabitants within the towns in case of siege during war. In towns where the population exceeds 40,000 , half the cost of forming these reserve stocks will be borne by the municipalities. The total cost, it is calculated, will be about $£ 1,750,000$, and about 750,000 qrs, of wheat or flour will be required for the purpose. The operation of securing
this large quantity of grain, on account of the bad outlook in Europe will be carried out gradually instead of by taking up the whole quantity from the current supplies.
The party of American millers broke up this morning, some proceeding from here to Paris, some to other parts of the Continent, others remaining in London and some returning to Liverpool on their way back to their homes in America. The party which consisted of 48 gentlemen, 11 ladies and 2 children, arrived at Liverpool on Wednesday, the 20th of May, and were received by a committee of members of the Liverpool hotel. On Thursday, the 21st, the American milling party, in company with about 40 members of the Liverpool Corn Exchange paid a visit to the old English city of Chester, where they were welcomed by the mayor and conducted around to some of the most interesting portions of this old city After lunch, which was provided in the Town Hall, the party paid a visit to Eaton Hall, the residence of the Duke of Westminster, after which the return journey to Liverpool was made. Sight-seeing occupied the whole of Friday, the 22d, and a great deal of time was devoted to the inspection of the Liverpool docks, the Waterloo grain warehouses and the warehouses in the Alexandria docks. On party took special train to Edinburgh, which city they reached the same evening and were welcomed by a committee of the Edinburgh and Leith Flour Trade. On Monday, the 25th, the local committee took the party for a trip to the Forth Bridge in a special steamer. The company, including the Provost of Leith, a number of local millers and the American consul, Mr. Wallace Bruce, took luncheon on the saloon deck as the steamer was nearing the bridge. After thoroughly inspecting the bridge the party returned to Leith and in due course made their way to their hotels in Edinburgh. Early next morning, Tuesday the 26th, the visitors set out for Sterling, where they visited, after having partaken of breakfast in the Royal Hotel, the castle of that ancient and historical town After leaving Sterling the party proceeded through the "land of the Macgregors" to Aberfoyle to the Trossachs Hotel where they were met by their Glasgow hosts-members of a commit-
tee of Glasgow flour importers and mer-hants-and entertained to and mer After lunch the company proceeded to Loch Katrine where they embarked on board a steamer which conveyed them o the top of the lake in a down pour of rain, which continued most of the time occupied by the coach run of six miles from Stranachlachar. which is situated near the topof Loch Katrine, to Inversnaid, on thes hores of Loch Lomond. A steamer, specially chartered by the Glasgow Reception Committee, took the party up the Loch as far as Audlin and then "turned about" and proceeded to Tarbet, where dinner was served in the hotel of that place to a
company of over 100 persons, including the American Consul at Glasgow, Mr. Levi Brown. After dinner and before the speeches, the loyal toast of Queen of England and the President of the United States was given by the chairman, and by way of honoring the first part of the toast the first verse of the National Anthem was sung, after which the American visitors, led off by Mr. H. B. Sanderson, of your city, sung the
first verse of the American National Ode most enthusiastically. After dinner the company re-embarked on the steamer and proceeded down the loch to Balloch, where they took train to Glasgow, thus closing a long day's travelling which was accompanied with much real pleasure. The following day, Wednesday, the 27th, was given up to sight-seeing and visiting the Regents Flour Mill as well as several of the large baking factories. On Thursday morning, the 28th of May, the party left Glasgow for London, where they arrived late in the evening of the same day. The following day was given up to sight-seeing and shopping and on Saturday, the 30th, the visitors became the guests of the London Flour Trade Association, who organized a trip for one section of the party including the ladies, by special train to Windsor Castle, returning by a steam launch down the Thames to Richmond. The larger party took a special train to Richmond and were driven through Richmond Park to Hampton Court, where they were shown the Palace and grounds. They were then driven back to Richmond and joined the gentlemen who had returned from Windsor, at the banquet given by the London Flou Trade Association at the Star and Garter Richmond. After a bountiful feast and a number of speeches the company broke upand boarded the special train, which carried them back to London. On Sunday the party dined together and yesterday, Monday, 1st of June visited various sights in London, while a large number attended Mark Lane market. Today the party dispersed some leaving London to visit friends in other parts of England, or on the Continent and others to return to thei homes.
The Temps states that the uncertainty existing concerning the future increase of the import duty on corn had caused ten mills in Marseilles to cease work whilst a further batch of ten are only working two or three days per week Forty other mills propose to suspend operations as soon as their stocks are out of employment. The correspondent of the same paper states that the clos ing of the mills after that of the spirit distilleries will complete the disorganization of Marseilles trade.
The National Association of British and Irish millers have decided to hold here annual convention this year in Northampton on July 7th, 8th, 9th and 10th, and a most enjoyable programme has been arranged by the President, nominated by the Council for the coming year, Mr. Joseph Westley, of Northampton. In my next letter I will give you the programme in detail, but I have heard that Earl Spencer, K. G., will be present and ake part in the proceedings.
The American millers will be astonished at the latest news from China, which states that the Imperial government has granted permission for the erection of two steam flour mills in Pekin, and these are, if successful, to be followed by three others. The mills are to be under the management of a large piece goods firm in Shantung, and the order for the necessary machinery was placed, in March, with a foreign firm at Shanghai. This development is said to be due to the favo with which the Emperor and Empress received some cakes provided for them
in 1889 by the late Marquis Tseng made from foreign flour.
London, June 2d, 1891.

## OUR BUFFALO LETTER.

Canal va. Runt Freights-New Macaront Wanal vas. Rull Frelghts-Now Macaroni APT. THOMAS COLLINS, of this city, one of the best known navigators on the chain of the Great Lakes, died suddenly at his home here, June 6th, aged 59. Capt. Collins was no ordinary man, and it can honestly be said of him that there is more sincere sorrow at his untimely taking off, than has been expressed in this city for many years. Upright, bold and true to his friends, with a long, clear head, and a judgment so keen that even his worst enemies respected him. He had but few of the latter. His was an eventful life. Early at sea he drifted into many lands, returning some twenty years ago to settle down in Buffalo. The resolution passed by the Merchants' Exchange, of which he was an honored member, fitly expresses the feelings of all: "His rugged adherence to the right in all matters pertaining to the public and private interests, has made him a place in this Exchange that will cause his loss to be deeply deplored." Flags on the shipping were lowered to half-mast, out of respect to his memory, and his funeral was attended by a large body of our most respected citizens.
The receipts of flour by rail from the opening of navigation to June 15th, were $1,518,000$ bbls. against $1,200,000$ or the same time last year; of grain $19,072,000$ bush. against $28,600,000$ last year.
Railroad shipments from opening of navigation to May 15th, 10,200,000 bush. against $11,900,000$ last year. The canal carried $6,400,000$ bush. since May 5th against $10,200,000$ last year.
The Imperial Mill Company of Duluth, is making what appears to be foolish attempt to gain a penny or two by sending down its flour in vessels outside of line boats. This is all right in its way, but considering the power of these through lines, it would pay better to give them the business.
The Attica Mills are flourishing un der the management of Mr. Charles Bork. Work will soon be commenced on a new office $20 \times 30$ feet on the northeast corner of the present building, extending over the creek. The present office is a dingy, unhandy affair, altogether too small for the increasing business. A new cupola has just been completed on the big mill.
Head miller C. Schroeder of the Atica Mills, is one of the fire laddies of that village, and made the trip to Lockport with the "hooks" a week ago. Mr. Bork and his business manager, A. A. Gillespie, are also full-fledged firemen, and run with "de masheen" in Attica.

All of Pillsbury's damaged flour will be repacked in the new Lackawanna house here. This work was heretofore done in Paterson, New Jersey.

Mr. Shuttleworth, of the Banner Milling Company, has the sympathy of the Merchants' Exchange in the loss of first his mother and a few days later a loving and devoted sister.
It is quietly rumored that that stu pendous bucket shop, the New York Produce Exchange, did itself proud in the entertainment given the millers. You bet-and the visiting millers will not forget it either.
The West Avenue Mills in Attica, N. Y., are figuring to pui in the patent Pennsylvania oil burners to replace coal.

## 

Duluth wheat has held its own in for several months. If the Cheeryble factory explanation of his early arrival. The Grand Jury, on June 10th, found
his market above all expectations. Brothers, made famous by Charles Some millers secured bargains in Minneapolis, special lots to arrive from Du uth at 5 @10c under the market, but outside of this limits have been well maintained, and wheat is no cheaper than it was a month ago.
Corn has numerous friends here on the outlook which is considered excellent for light receipts and a consequent advance in prices. Quite a number of the best old heads have a jag or two on hand.

The wheat crop in this country at present is the best on record. Every field is grand and the farmer is banking on a propitious yield. Oats are looking puo
at the start.
C. J. Mann's floater has had a sorry time of it. One accident after another has been its misfortune since starting in to break the Association. Several men were injured and a quantity of good wheat wasted in the desperate endeavors to unload a cargo of 25,000 bushels in two days. Mann's floater will never "bust" the Association, nor a dozen like it.
It is astonishing how our country cousins are coming to the conclusion that they are as good men as "Old Hutch." I find new faces from the country in our broker shops every day and from their conversation it is evident they are in it deep. A successful play on the part of one "farmer" is a shops as it is sure to bring in the poor suckers in droves, anxious to be scaled Stick to the farm.
Business has been dull at Wright's change in prices is greatly needed. Pork is the deal for a sharp advance in most places. Prices of flour have been very unsteady. Spring Patents were sold in car load lots at $\$ 5.75$ and $\$ 6.00$ to jobbers. Winters were offered at $\$ 5.35 @ 5.50$. Straight Spring, $\$ 4.85 @$ 5.25; do. Winter, \$4.25@5.00; Red-dog, $\$ 2.25 @ 3.00$. Rye flour is quoted at the old prices of $\$ 4.75 @ 4.95$.
Taking the shortage of grain cargoes into consideration there is no money in vessel property this year. All ports are alike, with perhaps Duluth taking the lead as usual in "stealing" wheat. Masters of vessels trading with the latter port are doing some tall cursing.
Mr. Wm. Meadows and Mr. Pierre Russell have formed a co-partnership under the firm name of Wm . Meadows \& Co. They will deal principally in Duluth wheat. This is December wedded to May, the difference in ages being about 35 years.
Canal freights dropped to the lowest rate in the history of this big ditch, namely, $2 \frac{1}{2}$ cents on wheat to New York. This beat the rail and consequently the roads withdrew. Rates then advanced to $3 \frac{1}{4}$ on wheat by canal but the rail appears to have enough o
this kind of fighting for the present.

Mill feed has been rather unsettled Several lots brought down ky lake were forced on the market and went at a low price. These were picked up by Heinold \& Rodebaugh. Coarse Winter Bran and Mids sold at $\$ 16.50$ and Spring at $\$ 15.00 @ 15.50$; Fine White Feed is held up to $\$ 23$ per ton, owing to light offerings and good demand.

Several country mills in this vicinity have shut down, among them being the Newman mill at Akron, and Parsons \& Co.'s of Batavia.
Mr. L. Simons of Chicago, is visiting his brother, N. Simons, and will remain

Dickens, ever had a counterpart it is in these two old gentlemen. They are inseparable, and to hear them talk and atch the attentive listening when a rare treat.
The late Millers' Convention was, judging from the silence maintained by the Buffalo delegates, not of a satisfacwilling to talk.
It has certainly been dull in the flour
trade, but when compared with last year it does not look half as bad as some millers are inclined to make it. The stoppages were less frequent and of shorter duration this year and the stocks on hand are no larger. In fact if eastern purchasers would order it out with the same rapidity they did
last year the supply here would be light enough to advance, or at least hold prices exceedingly firm. Some of these days the position will change suddenly We have these dull times about four times each year and I have never known it to fail.
Secretary Thurstone, of the Merchants' Exchange, has returned from Atlantic City, where he has been the past six weeks in search of health. He shows considerable improvement but hard work will again bring him down. Secretary Daly, who has also been absent for two months with a serious attack of rheumatism, is on deck again and will probably recover entirely when warm weather comes. At least this i the heartfelt wish of the members o the Exchange, who have greatly missed his valuable servant.
The case of Stephen Sherman, sen tenced to five years in the state prison was argued on appeal in the General Term Supreme Court June 5th. Th attorneys for Sherman made able arguments trying to show that "Steve" did wicked brother probably was responsible for the theft of 350,000 bushels of good wheat and the mixing of 300,000 more The case was submitted. Steve will come back to Buffalo some of these days and catch a bigger he did before Sure.
More discrepancy comes to light in he Dakota elevator, which probably may be added to the other relics of the Sherman Bros.' misdeeds. About 2,200 bushels of ungraded wheat which, rumor says, had been shipped here by the Shermans for the purpose of mix ing with the standard grades of hard Duluth wheat, are missing. The elevator in question shows a reluctance to settle the matter with the owners of the wheat, and another law suit, which will, no doubt, bring to light some more infamous transactions in the nasty elevator scandal is among the possibilities.
As an instance of Yankee enterprise I would like to have the following go on record. When Mr. A. R. James heard that Pierre Russell intended to start on his trip around the world, he packed up a neat bundle of 2,000 small abels of his famous "Bridal Veil" flour, and in all the earnestness which his glibe tongue is capable of producing actually got Mr. Russell to take them with him to plaster up the dead walls of all the ancient towns he visited particularly on the Pyramids of Egypt.
"Clint" Newman returned quite unexpectedly from the Millers' Convention at New York. Everyone on 'Change was surprised to see him before the
adjournment, and tried to get a satis-
"Clint" stuck to one story and that was: |a true bill against them, charging "I got tired of the crowd." It was left them with offenses against the gambfor Mr. George Urban to give the true ling laws. This is the first attempt in inwardness of the reason why. When Buffalo to break up the bucket-shops, asked about it, Mr. Urban said: "Why and from the evidence produced it will 'Clint' took what he thought was the go hard with these rogues. The case elevated train and waited for the con- was brought against them by a few ductor to call out 42nd street. The country dupes.
first he knew the train hands were shaking him and yelling: 'Buffalo! Buffalo!'"
The affairs of the Buffalo Forwarding
Company are in the hands of W. C
Jacus for final settlement. The furni-
ture in the office was auctioned off last
week and Joe Hadcock, in order to show his innate cunning, attempted to bid up the price of a long desk which he must have. The boys helped the bid ding on and finally knocked the cumbersome piece of useless furniture down to him at his own figures. Half an hour after the purchase he was given notice to remove the desk forthwith or storage would be charged. Joe is ready to settle at a loss of $\$ 5$, but the boys bottle.
Mr. George H. Wolcott, representing
Patten Bros. of Chicago, is in possession of the most unique specimen of a "downeast Yank" ever captured in this city. He is a jewel in the office and a sensation on the floor of the Exchange. Mr Wolcott purchased a line of corn from a seller here when it was down among the fifties and sold some of it as high as 83c. Ever since the last car was delivered the first seller has been pushing Frank Eames, which is the name of Wolcott's clerk, for the output of one o these cars which had been sold down in the country. Frank, for reasons best known to himself, had a plausible pretext for not giving the weights, but finally a settlement was demanded. Several days elapsed, when one morning Frank appeared at the office of his tormenter in great perturbation, with the startling intelligence that "the man was dead." "What man?" asked the head clerk. "Why, the man with the output of that car of corn-was walking along the track-engine came along-ground him into mince meat-certificate of freight in his pocket - all buried together." There was a tear on Frank' cheek as he walked out of the office fol lowed by the roars of laughter from all sside.
The Buffalo Maccaroni and Vermielli Works, of which Mr. Louis Onetto and Pietro Terrile are the proprietors, re using 18 bbls . of flour per day in he manufacture of these goods. Most of the flour is made for them by the Urban Mills, and as the trade is increasing daily, new machinery will be put in by the Urban for the special grades of flour desired by the Italian firm. Orders were received last week for as high as 4,000 boxes and 100 bbls. of the different kinds of maccaroni from one firm, and it is claimed that the superior quality made is fast driving out the imported article.
The local wheat market has been dull, in fact dead, for three weeks. Millers bought fairly liberal of cargoes to arrive and c. i. f., and at the unsettled stage of the trade are not anxious to take on more than will supply immediate wants.
Mr. J. B. Mongin, of the milling firm of Sweet, Mongin \& Co., Waterloo, was on 'Change last week.
John C. Allen and his "wicked" partner, G. L. Pratt, bucket-shop keepers and swindlers, are in trouble here.

There is little need of denying the report from Minneapolis that $2,000,000$ bushels of bin-burnt wheat wasshipped to this market for sale. Millers know etter.
I see by the only reliable daily market paper published in Buffalo that Alexander Mann, representing John B. A. Kern \& Son's Eagle Flouring Mills, Milwaukee, Wisconsin, has sent some valuable "pointers" on the coming crops. Alex. should get a position in the Agricultural Department of Uncle Sam. His knowledge concerning wheat and other cereal crops is certainly up o the standard required by the present head of that department. He says: I desire to call your attention to the coming boom in breadstuffs. The facts I give are based on some reliable information obtained in my travels, from government crop scouts, at a large expenditure for which I have placed on my expense account "oil for knowldge:"
1st. The wheat crop of Greenland is almost a total failure.
2d. The corn crop of Labrador and celand is ditto.
3d. The reserves in Finland and Kamschatka are at the lowest point known in years.
4th. It is about time for the ten. dollar-a-barrel miller in the Northwest to issue another manifesto.
5th. Buffalo traders are advising Buffalo millers to buy wheat-always sure "copper."
6th. Last night was New Moon and liver and milk-colored dog howled all night in the backyard of old Hutch's boarding house.

Take notice my friends and govern yourselves accordingly. A word to the
Buffalo, N. Y., June 13, 1891.

## OUR ST. LOUIS LETTER. gin in the South-Telegraph Wires Re- Millers' Pic-nic-Merchants Exehange

 T. LOUIS milling news is very scarce this month and the topics for a letter are hardly as interesting as they might be. Harvest season has just set in in Southern Illinois and Kansas and the reports of he crops are excellent. On June 13th all the Southern Illinois farmers set to work harvesting and during the presnt week Kansas and Missouri will be hard at work. Not only the government and state reports but also private intelligence, all speak of the wheat as far exceeding any year in its quantity. The last few days of rain, both here and in Illinois were hard on the wheat and damaged it somewhat but it was in a small section of country.
At the last meeting of the Board of Directors of the Merchants' Exchange it was decided to allow all the telegraph companies to replace their wires on the Exchange floor. This action was taken on a communication received from the Western Union asking for the privilege, and was the direct outcome of a very serious accident happening some time ago to the messenger boys employed on 'Change by the company. When the wires were ruled off the floor some time ago, the telegraph people placed their private wires right outside the entrance to the floor. This necessitated the boys running into the Exchange,
an action not at all pleasant to the members. Lately two boys in trying to expedite matters by running very fast with their telegrams, ran into each other. Both were knocked senseless and one was very seriously injured. On a protest from the prominent men of the Exchange the company will again place its wires on the floor. This action will bring about $\$ 1800$ into the treasury of the Exchange yearly.
On June 4th the millers held their annual picnic down the river.
2,100 people attended and enjoyed a very pleasant day. The trip down the river brought the party to Montesano Springs, where are spacious picnic grounds. About four o'clock the trip back was commenced, the party arriving at St. Louis at eleven o'clock, tired but not regretting at all the day's trip.

The Exchange took two holidays this month, one on Decoration Day and a half holiday to attend the laying of the corner stone of the new city hall. Just now the spring race meet is going on and attracting as many flour men as the wheat market.

As usual the vote on 'Change to expend the surplus fund on a new home resulted in a victory for the kickers. The vote was very small being only about 1,300 votes in all, but the threefourths necessary to carry it were not obtained and the money will remain still in Government bonds. It is expected soon however, to hold another vote when it is coufidently expected that it will pass.

Freight rate cutting is going on and rates to the East are much better than before.

Receipts this week, June 13, were 71,329 bush., as against 106,359 bush. last week. Shipments, 38,542 bush., as compared with 98,510 bush. last week. Stocks also have fallen being only 105,046 bush., as against 181,462 bush. the week previous. Withdrawals for export amounted to 27,000 bush., with 30,589 bush. for city consumption and 45,524 bush. for rail shipment. - Markets on all grades were well up and maintained good prices all week, closing as follows: No. 3 Red, 94c, No. 2 Hard (Kansas) $91 \frac{1}{2} \mathrm{c}$, No. 2 Colorado, 94 c , No. 2 Red, $98 \frac{1}{2} \mathrm{c}$.

## flour.

Receipts were 21,754 bbls., and 25 , 491 bbls. last week. Shipments a mounted to only 46,198 bbls., as against 48,871 bbls. the week previous. During the past week the market has been very dull and sales were very slight, being only to supply Southern and local orders. Extra fancy sold better than all the other grades, prices were entirely to high for buyers and while there were good offerings the millers would not accept same at high quotations. Present quotations are : XXX $\$ 3.40$ @ $\$ 3.50$; family, $\$ 3.70$ @ $\$ 3,80$; choice, $\$ 4.00$ @ $\$ 4.20$; fancy, $\$ 4.40$ @ $\$ 4.50$; extra fancy, $\$ 4.65$ @ $\$ 4.75$; patents, $\$ 4.85$ @ $\$ 5.00$.

Walter Howard Bain. St. Louis, June 15, 1891.

## MILWAUKEE REVIEW.

THE breadstuffs market are somewhat weak and declining owing to a demoralized feeling in European markets and fine weather on both sides of the At-
lantic. A brisk export demand exists, however, and the movement from the seaboard is fairly large. The export clearances of wheat from both coasts of the United States for the week
ending on the 13 th inst., were $2,190,000$ ash, $\$ 5.50$; patent hoops, $\$ 7.00$; flour bushels, against $2,699,000$ bushels the previous week. Since July 1, 1890, the exports aggregate $94,477,000$ bushels, against $102,000,00$ bushels in 1890 The following table shows the closing prices of wheat and coarse grain on 'Change, June 13, as compared with those of the same day of 1890:

|  | 1891 | 1590 |
| :---: | :---: | :---: |
| No. 1 Northern. 0. | $\begin{gathered} 100 \\ \hline .951 \\ .95{ }_{2}^{2} \\ .72 \\ .82 \\ .57 \\ .43 \end{gathered}$ |  |
| No. 2 do, i. s. |  | $84^{4}$ |
| No. 2 barley, |  |  |
| No. 1 ryee, i.s |  |  |
| No. 2 w oats, ot t........... |  |  |

The stock of wheat here on the 13th inst., was reported at 155,834 bushels against 144,304 bushels the previous week, and 728,823 bushels the corresponding day last year. The receipts of grain for the 24 hours ending 13th inst. were: Wheat, 36,580 bush.; Corn, 1,300 bush.; Oats, 22,000 bush.; Barley, 2,800 bush.; Rye, 3,480 bush. Shipments: Wheat, 6,914 bush.; Oats, 41,000 bush.; Barley, 700 bush.; Rye, 2,580 bush. The receipts and shipments for the week ending same time were:
$\qquad$

Rail freights are quoted on the basi of 25 cents per 100 pounds for flour and grain to New York. Lake transit rates are on the basis of 23 cents per 100 pounds on flour and feed to New York. Lake and rail rates are quoted 5 cents below all rail, or on the basis of 20 cents per 100 pounds to New York. There is barely any inquiry for vessel room and freights are inactive and nominal, the rate to Buffalo being quoted at 1 cent for wheat.
The average daily flour production for past three weeks were as follows: Week ending May 30, 3,675 barrels; June 6, 3,750 barrels; June 13, 5,140 barrels. Flour is quiet and easy, the demand being light. Following are the latest quotations: No. 2 hard spring wheat patents, in bbls., $\$ 5.20 @$ 5.40; soft spring wheat patents, in bbls., $\$ 5.00 @ 5.20$; No. 3 wheat in sacks, $\$ 4.50$ @4.75; clears, choice bakers', $\$ 4.20 @$ 4.40; No. 3 wheat, $\$ 4.10 @ 4.30$; straight, choice bakers', $\$ 4.80 @ 5.00$; No. 3 do, $\$ 4.40 @ 4.65$; low grades, $\$ 3.00 @ 3.75$; winter straights, in bbls, $\$ 465 @ 4.85$; rye flour, in sacks, $\$ 4.25 @ 4.50$; in bbls., \$4.45@5.00.
Millstuffs are higher. Prices range as follows: \$14.25@14.50 for sacked bran, and $\$ 17.75 @ 18.00$ for fine middlings; corn-meal, coarse, in bulk, $\$ 22.25 @ 23.50$; ground feed, oats and corn, \$19.75@20.50.
The receipts and shipments of flour for the week ending with the 13th inst., as compared with those of corresponding date in 1890 were as follows:

| Receipts. |  | Shipments. |  |
| :---: | :---: | :---: | :---: |
|  | 1891. |  | 1890. |
|  | 1891. | 1890. |  |
| 24,582 | 17,067 | 46,527 | 32,975 |

Private advices say rain is needed in Western Wisconsin and Eastern Minnesota. In the vicinity of Kilbourn City, Wis., there is a district where moisture is needed very badly, as the crops are burning up and a general failure is threatened.
The latest quotations in cooperage are as follows: Flour barrel hoop poles, per 1,000 , Western, $\$ 11: 00 @ 12.00$; tierce hoops, oak, $\$ 12.00 @ 12.50$; flour
barrel, hand-shaved hickory, $\$ 7.00$;
barrels are quoted at 36 c for round hoops. Barrel stock, No. 1 elm slack per $1,000 . \$ 6.50$; oak, $\$ 7.50$; flour barre headings, $4 \frac{1}{2} \mathrm{c}$ per set; head linings, 12 inch elm, 35 c; do, 18 -inch, 45 c.
In milling circles generally the "midsummer round up" or clean up is on. Most mills are shut down or running short. The output has been light and even that has not been readily disposed of at prices that paid for milling. There are exceptions; a few mill managers acting on their convictions that the price of wheat would gradually go down, have kept sold ahead and when the time for delivery came around found they could buy and fill thei orders at a profit, but not all millers have the nerve to do that, for that is speculating. The majority of millers figuring on the price of wheat when the order came found that there was no margin of profit left to them. Sales have been slow and unsatisfactory, this is especially true of patents.
In the face of large receipts at the primaries and a generally conceded great promise of the growing crop people feel perfectly secure on the subject of future supplies and consequently buy from hand to mouth only. Thus it comes about that millers complain of dull market and small sales, but taking the crop year as a whole it has been fairly remunerative to the milling fraternity.
The number of mills idle has materially reduced the offerings of bran and middlings, and the sharp decline in corn and oats has brought these feed products into more general use again. Plenty of export orders could be got but they are at figures that most mills do not care to take. The fact is, foreign dealers have become so familiar with the cost of flour propuction in this country that they can take their morning cable of the Chicago market and figure to a penny just what it will cost the American miller to lay his products down in London, and they will not bid above that figure until grim necessity compels them to, or the turn of the political wheel or weather cock, gives some shrewd ones an idea that there was "money in it." The amount of wheat in sight to-day is $15,500,000^{\circ}$ bushels, and the amount afloat to the United Kingdom, 21,600,000 bushels. Total on land and sea, $37,100,000$ bushels. While our present supplies are being augmented at the rate of over a million per week, the drafts on it for milling and export are such that the net decrease weekly amounts to fully one million. At this rate we have about three months supplies, but that will carry us nicely into the next crop.

Everybody has been astonished at he great daily receipts, 276,000 bushels to-day for example, whereas it was believed that the surplus of sound grain was completely used up in July last year. Indeed, the writer has often asserted this to be a fact, but we hear from good authority to-day that Minne sota farmers are now marketing wheat of the crop of 1888 .
The price of July wheat at New York was from $\$ 1.04$ to $\$ 1.05$; at Duluth for hard wheat, $\$ 1.04$ to $\$ 1.05$; St. Louis for red winter, 90 c; here for No. 2 spring, $93 \frac{1}{2} \mathrm{c}$; Chicago, No. spring, 94 c .
The prices obtained for flour depends a good deal on the desire to sell. Buyers are able generally to make their own prices. Stocks in dealers hands are light.

According to an article by Davis in the Canadian Miller, this country will be an importer of breadstuffs within the next four years. The article is well written and should be carefully read and weighed by all who are interested in our food supply. I cannot agree with him that the available wheat land in this country cannot be greatly increased. To my mind, when the time comes, that the people of this country will have to import wheat, it will simply mean an era of agricultural prosperity, and our farmers will demonstrate that the present acreage in wheat can be nearly doubled, and that too without encroaching on or rather diminishing other crops. Nevertheless the article is timely and interesting in view of the very rapid increase of our population.
L. R. Hurd, of the Daisy Mill, reports orders ahead to keep the mill running full time until Aug. 15; having turned out since July 1, 1890, 330,000 bbls. of flour, not a barrel of which has left the mill until sold. Also that on the 15th of Aug. prox.--nothing in the mean time preventing-the mill will on that day have made a year's continuous run of 24 hours per day. Donaldson. Milwaukee, June 15, 1891.

## MILWAUKEE NOTES.

Supervising Architect Edbrooke, of Washington, D. C., will visit this city in a few days for the purpose of making a personal examination of the federal building site and its surroundings.
May 20th a large delegation from the City Council of Boston made Milwaukee a visit. They were royally entertained and shown such public works and private manufacturing institutions as they desired to inspect. They visited the Edw. P. Allis works and were surprised at the magnitude and evident prosperity of that institution. The Pabst Brewery was also visited and the Bostonians were shown how Milwaukee beer is made and they showed no conscientious scruples about sampling the manufactured article either.
Mr. E. Donaldson, for many years a commission merchant and flour broker in this city, and whose name is familiar to readers of Milwaukee Reviews in our columns, has accepted a position with a leading flour milling firm of Michigan. He will travel through some of the Eastern states in the interests of the firm, where we trust he will succeed to an extent that the capacity of the plant represented will be fully taxed.
The Wisconsin Free Malting Company incorporated June 9, with a capital stock of $\$ 200,000$. The incorporators are Charles Allis, Edwin Reynolds and John W. Free. Mr. Free has been connected for years with the malting business, and holds the title to some of the most valuable patents on malting machinery in the country. Mr. Allis is a son of the late Edward P. Allis and Mr. Reynolds is a member of the firm of E. P. Allis \& Co. The corporation is formed for the purpose of entering extensively into the malting business in this city, and the plant, which it is proposed, shall be one of the largest in the country, will be located near the present E. P. Allis works on the South Side. With the aid of the improved machinery the new plant will be also the most perfect in the country.


NEWS.-The Little Falls roller mill at Little Falls, Minn., was
destroyed by fire; June 3. The destroyed by ire, June 3 . The
fire is supposed to have originated fire is supposed to have originated by the explosion of a lamp in the basement. ing. Loss $\$ 65,000$; insurance, 817,500 . The building was comple fall of 1887, and a capacity of in the fall of 1887 , and It will be rebuilt, about 350 barrething definite can be said until a but nothing definite can The N. Knauf Co. succeed Zeeh Bros., millers at Chilton, Wis

At Uniontown, Ala., June 6, B. Howard's Ar Uill was burned. Loss, $\$ 2,500$ barkman \& Thiele, millers at Marcus, Lowa, are succeeded by Barkman \& Martin.
Ат Bloomfield, Ont., May 13, A. B. Saylor's flour mills
insurance small. Mapleton, Pa., May 11, the flour mill AT Mapleton, Pa., K. Robley was burned. Loss, $\$ 11,000$; of J. K. Robley
insurance, $\$ 7,000$.
At Eagle Mill, Tex., June 3, the milling At Eagle Mill, Tex., June 3, the miling
plant of Hicks Bros. \& Lassiter was burned. plant of Hicks Bros. \& Las

At Uhrichsville, Ohio, June 6, fire totally destroyed the flouring mill of Loss, $\$ 15,000$; insurance $\$ 10,000$
At Oshkosh, Wis., May 26, fire in the barns owned by the Foote Bros.' Milling Company did $\$ 6,000$ damage; insurance, $\$ 3,000$
At Chico, Cal., May 19, the Durham Flour ing Mills were burned, William M. Taylor ing Mils. proprietor. Loss $\$ 5,000$; insurance $\$ 2,700$.
Hon. John McKenzie, mill owner at De korra, Wis., died May 6, aged 59 years. H
The London, Eng., Flour Trade Association gave a banquet in honor of the visiting IT is reported that work will shortly commence on a 100 barrel roller mill at Fairfiel Wash. C. H. Potter and James McKay a the projectors.
Ат McGregor, Ont., May 28, Higgins Bros. grist and saw-mill outbuildings were burne with some lumber and flour. Loss, $\$ 20,00$ insurance, $\$ 6,000$.
Van Slyke \& Adams' flouring mill at Leslie, Mich., was recently burned. Los is
$\$ 7,000$ with slight insurance. The cause is believed to have been incendiary
C. W. Washburn, of Junction City, Ore., and his son, B. A. Washburn, of Springfield, for a 150 -barrel roller mill at the latter-named place.

At Buffalo, Minn., May 31, the large elevator and grist mill, owned were burned. Loss $\$ 12,000$. The supposition is that the mill was struck by supposition
lightning.

At Albany, Ga., May 24, the Stresian flouring mill and elevator were burned, together with six freight cars loaded with flour, fully insured.
Mr. Yates Ashley, miller, of Pardeeville, Wis., made us a pleasant call on the 9th inst. He said business was good, particularly custom trade.
his way East on business
At Alexandria, Minn.,
At Alexandria, Minn., May 15, fire broke
out in the old Pillsbury elevator and partially out in the old Pillsbury elevator and partially destroyed it. The main building was saved but in damaged condition. T
and contents are a total loss.
and contents are a total loss.
In the list of shipments by The Jonathan Mills Manuf'g Co., published in our last issue, the item of Purifiers to the Kratochwill Milling Co., should read instead, to James
Kratochwill, Carrollton, O., which is near Dayton.
Armstrone \& Co's. elevator at Lincoln, and a lot of cribs adjeinis in which wer 40,000 bushels of corn, were burned May 20 entailing an aggregate loss of $\$ 38,000$, with no insurance.
The injunction suit of Fred. O. Crary, of Hudson, Wis., to prevent the formation of the Northwestern Consolidated Milling Company, of Mimneapolis, Minn., was com paid him $\$ 2,500$ for his $\$ 5,000$ of stock.
At Lorena, Texas, May 21, the grain warehouse and steam corn sheller, togethor with Henry C. Schaffer, was burned. Nothing Henry C. Schaffer, was burned. Nothing was insured in local agencies for $\$ 1,350$. Loss $\$ 6,000$.
The result of the investigation of the experts in regard to the alleged wheat the handling of wheat at Duluth is perfectly straight and regular, and that no wheat was straight and regular, and shipped out of Duluth without the knowledge of either the weighing or inspection departments.

Mr. Thomas Hillier, of Buffalo, Minn. hose mill and elevator were burned May 31 Western Millers' Mutual, of Minneapolis and $\$ 5,000$ in the Millers' National, of Chicago. His loss over and above insurance was between $\$ 4,000$ and $\$ 5,000$.
The failure of Charles Haight \& Co. of ew York will in no way complicate mbarrass the Freeman Milling company of
Superior. A. A. Freeman has satistied the superior. A. A. Freeman has satislied the
superior stockholders of that. His individua Superior stockholders of that. His individual
relations with this company are in fact improved as a result of the failure.
A man at Pardeeville. Wis. dro A ran at Pardeeville, Wis., drove into a mill pond with a load of flour to wet his wheels. The bank there is quite steep and wefore he could prevent it the whole outfit
was afloat. The wagon went to the bottom but the man, team and wagon box got out very much wet and the man very mad.
Incorporation papers were filed
Incorporation papers were filed at Columbus, O., June 1, for the Consolidated Oatmeal Company, with a capital stock of
$\$ 3,500,000$. All the natmeal mills of the $\$ 3,500,000$. All the oatmeal mills of the country are thus brought under one manageThe incorporators say prices will probably The incorpo
be lowered.
The liabilities of Chas. Haight \& Co, flour commission merchants at No. 24 State street, New York, are reported to be about $\$ 300,000$ and nominal assets considerably larger. The assignment was due to legitimate business causes, and speculations in wheat had nothing to do with it, as the firm had not speculated at ali.
Articles of incorporation have been filed at Athena, Ore., by the Athena Flouring Mill Company, the objects of which are to build and operate a 100-barrel flour mill a Athena. Capital stock, $\$ 13,000$, divided into hares of $\$ 50$ each. The incorporators ar T. J. Kirk, L. D. Lively, C. W. Hollis, C. A Barrett, E. L. Barnett and J. H. Hiteman all of Athena.
Porter \& McKay, of Spokane, Wash., have contracted to build a flouring mill at Garfield, Wash. The contract stipulates hat work on the construction shall begin not fully than June 15, and that the mill shall be ber 1 1891. The mill is to be of not less tha 50 barrels per day capacity, and the building suitable for a hundred or hundred and fifty barrel mill will be built.
At New York city, on the morning of June , fire started in the four-story building of the Brooklyn Cooperage Company, occupying an entire block. The fire extended to the bagging factory, also covering a block, and to the tenements in the rear of the bagging factory. There was a large amount of machinery in the bagging factory which was destroyed by the fire and water. The loss will amount to $\$ 420,000$.
AT Centerview, Mo., May 31, the grain elevator and agricultural implement house of Porter \& Dela included 6,000 bushels of corn 500 bushels of wheat, several hundred bushels 500 of ef baled hay and a lot of of oats, a quimplements, including seventeen wagons There was no insurance except $\$ 200$ on building. The fire is supposed to $\$ 200$ on building.
In November, 1887, while employes of the Standard Oil Company were unloading a car of oil at Fort Worth, Kans., the tank broke open and the escaping oil ran into the engine room of the Goodlander Mill Co., caught ire and destroyed the entire plant. The mill company claims the accident was caused by a defective ortion tand and on Say 15, 1891 ,
filed a declaration iled a declaration in the
against the oil company for $\$ 200,000$ damages
The Capital Mills, located at Salem, Ore. were transferred May 25, from Rober Livingstone to the Portland Flouring Mill Company. It is reported that the same wil be transferred to the Willamette Valley Milling Co., whose stockholders are Theo. B. Wilcox, Charles E. Ladd and A. N. Bush The mill will be thoroughly overhauled, and plans are now being made to commence of 600 bbls.
The Minnesota Fire association and the Millers' and Manufacturers' Mutual Fir Insurance association have consolidate under the name of the 'Millers' and Manu facturers' Insurance company. The tota capital is now given at $\$ 421,601$ and the total liabilities at $\$ 71,364$. The omcers remain the same as of the Miliers company. The object of the union is to secure to the Millers' company the charter possessed by the fire association.
Articles of incorporation of the Freeman Miling Company, of Superior, Wis., eapita
$\$ 250,000$, were filed June 9, at Madison with the secretary of state. The new mill will be built this season and situated on the east side of Hughitt slip, where it will occupy a
side which fronts 900 feet on the slip and 300 feet on Howard's bay and is valued at 875 , oco. The mill structure itself will be $114 \times 80$ feet in size, of brick and stone, and 6 stories in heighth. In addition to this will be constructed a separate building for a power house and a grain elevator of one hundred and forty thousand bushels capacity for the xclusive handling of mill wheat. The mill is designed to have a capacity of twenty-five hundred barrels of flour daily, and when complete and ready to run will probably epresent a cash outlay of $\$ 175,000$.
When J. C. Stout failed to come to time with the $\$ 88.000$ bond necessary for an appeal in the injunction suit against the Sidle, Fletcher, Holmes Co.,of Minneapolis, the nex tep was a compromise between the warro factions. thas been known that that of Crary was simply to dispose of their stock, and they through their attorneys, formally accepted an offer of 50 cents on the dollar for their stock. A stipulation for the dismissal, signed by both parties, was filed in the United States court, June 11. Another evidence of the removal of all obstacles in the way of the proposed consolidated company was seen by the filing in the register of deeds' office on 11th inst. of a deed of the Sidle-Fletcher-Holmes company's millsite property. The consideration named wa $\$ 125,000$.
fred A. Freeman, Henry Koper and E. C. Haight, composing the firm of Charles Haight \& Co , flour commission merchants, at No. 23 State street, New York, made an assignment on June 9, without preference, to
Parker P. Simmons. Mr. Freeman was also Parker P. Simmons. Mr. Freeman was also a partner in the firm of A. A. Freeman \& Ruyter, River Falls, Wis., both large flour mills. The firm claimed a capital of $\$ 400$, 00 , have irm claimed a capial of credit and had the confidence of the trade. The sheriff served an attachment on the 9th inst against Robert Gregg \& Co., millers, of Can non Falls, Minn., obtained by the Chemica National Bank, of New York, for $\$ 6,300$, on drafts dated Jan. 30. It was supposed tha Haight \& Co. had flour belonging to Gregg \& Co. in their stores. The flour mill of A. A Freeman \& Co., at La Crosse, Wis., was
burned in August, 1890, and all his known burned in August, 1890, and all his know property in Wisconsin, at present, is his Rive Falls.

## mILLING AND MECHANICAL NOTES.

When selecting pulleys and belts In't be afraid of having the face of the pulley or belt too wide. Economy wil e found in the use of wide belts, if no arried to extremes.
If the grate surface under a boiler is larger than is necessary to burn the required amount of coal, it is neither economy, convenience nor good judg ment to retain the full surface, as bette results with less labor and more econo my in fuel, would be obtained by shor ening the grates to such an extent that from eight inches to twelve inches of fire would be required at all times.
Don't Force Your Boiler.-One
very important cause of deterioration in boilers is due to the fact of their becoming too small to do the work without forcing, so that the pulsations of the engine cause a well marked succession of shocks on the boiler, which result in the weakening of the material. By placing one's hand on the head or shell of the boiler, the vibrations of the metal can be felt similar to the rising and fall-
ng of a man's chest while breathing.
To Clean Machinery.-A usefu ecipe for a mixture to clean the iron portions of machinery and ordinary tools is as follows: Take two to three ents' worth of paraffine, chipped fine dded to one litre of petroleum in a stoppered bottle, which for two or three days should from time to time be shaken up until the paraffine is dissolved. To apply it, the mixture is well shaken, spread upon the metal to be cleaned by mean of a woolen rag or brush, and on the following day rubbed off with a dry

## woolen rag.

Cementing Iron Grating, etc.-Th following mixture has been used with
railing tops, iron gratings to stoves, etc., with such effect as to resist the blows of sledge hammer. This mixture is composed of equal parts of sulphur and white lead, with about one-sixth proportion of borax, the three being thoroughly incorporated together, so as to orm one homogeneous mass.. When the application is to be made of this composition, it is wet with strong sulphuric acid, and a thin layer of it is placed between the two pieces of iron, five days it will be perfectly dry, all races of the cement having vanished, and the work having every appearance of welding.
Banking Fires.-The fire in a boiler was banked over night, and during one evening a considerable portion of the water leaked out. In the morning the fireman stirred up his fire and then noticed that there was no water in sight, and considerably frightened, he drew the fires and waited for the engineer,
not daring to put in water. The engineer did not get excited, but took a piece of waste, wet it well, put it on the end of a poker and rubbed it over the boiler plates and appeared satisfied. "What do you do that for?" inquired the fireman, and from the engineer's reply he gathered that if the plates were overheated, the water left by the wet piece of waste would show it by quickly evaporating, but if they were not overheated the water would remain on the plates. From this little test he satisfied himself that it was safe enough of fill up the boiler.
Cyclone Flour.-The other day we called upon the millers of this flour and saw the system at work. It is a system of producing flour from wheat by pulverisation instead of either grinding by stones or rollers. By means of a cyclonic current circulating in an hermetically sealed chamber, the wheat is dashed is pulverised into particles of various degrees of size. So far there is little difference between the old system of milling and this. It is in the dressing hat the difference begins. It is true under the old system of milling heat is volved,whereas under thisit is keptcool by being freely ærated. Dressing in the ld system is done by sieves or silks, where the particles are graded by size In this system they are graded by weight, specificgravity being the grading power. After the wheat is p ulverised, it is
driven byablastof air and separated into six different grades. The heaviest particles fall into the first compartment, the next heaviest into the second, the next heaviest into the third, and so on to the sixth. The result of this is that the old proportions of bran, gluten, starch, etc., are altered. This may be an advantage, or it may be a disadvantage. We are not yet prepared to say which. We hear from pretty good authority that cyclone meal and flour is finding a ready sale. -British \& Foreign Confectioner, London.

The Wadhams Oil \& Grease Co., of Milwaukee, Wis., and Seattle, Wash., advise us of the receipt of the following letter, in reference to their "World's Fair Metal Pomade". They are sending on application, free of charge, a small sample of same.

Mllwaukee, Wis., March 17th, 1891.
Office of the C. M. \& St. P. Ry.
J. A. Whaling, Gen'l storekeeper.
 ha

## INDUSTRIAL TRAINING.

OLONEL WRIGHT, the Commissioner of Labor, has nearly perfected plans for an inquiry through his department regarding the results of industrial and manual training in industrial institutes and trade schools. When the subject of the work of these schools was first suggested, it was generally supposed that the inquiry would be mainly of a statistical character. Colonel Wright, however, came to the conclusion that such an inquiry would add little to the information which is already gathered by the Bureau of Education and by the Census Bureau, and that much more profitable work could be done in studying the results and the benefits of the employment of the graduates of the trade schools. It will be somewhat difficult to confine the answers to such inquiries within statistical limits, but an approximation can doubtless be made towards the aggregate benefits of the system of special training for manual employments. The inquiry will relate mainly to the schools of general manual training, and to those giving expert training in special lines of mechanical and scientific business. The schools of design will also be reported upon, although they are not considered strictly a branch of manual training.
Among the questions which will be considered in the proposed inquiry are the proportion of graduates of training and trade schools who obtain positions in mills and factories, their degree of superiority over workmen without such training, the rapidity of their advancement in comparison with those without training, their advantage in salary, and the benefits resulting to the establishment by the skill and training of such graduates. Colonel Wright obtained the suggestions of prominent manufacturers and students of education regarding his inquiries, and has prepared a series of questions to be put to the graduates of training schools. Among
the questions asked are the economy shown by graduates in the use of materials, their faculty for managing men, their facility in handling tools, and whether in employing new help the employer gives the preference to
graduates of the schools. No wide inquiry of precisely this nature has ever been made, although certain features of it have been touched upon by investigations under the State vania, and by a recent commission authorized by the British Parliament. All of these inquiries, however, dealt more with the bare statistics than with the economic results of special training.
Colonel Wright will rely upon both correspondence and the work of special agents to get at the facts he desires. The inquiry will be prosecuted in Europe as well as in this country, and the success of the modern technical schools there compared with our own. Trace of the graduates of these schools in both countries is usually kept by the officers, who will gladly exert themselves to furnish the Department of
Labor with the names of as many as possible of their graduates who have found places in mills and factories. A circular letter will then be sent to the employer of each of these graduates, embodying such questions as those just referred to. If prompt answers are not obtained by mail, special agents of the Department will visit the factories and seek the information verbally. There can hardly be any objection by a manufacturer or mill owner to furnish-
ing the information sought, and as it will be of considerable value to such employers, it is expected that they will gladly furnish it. It will probably take eight months or a year to get all the data desired, and the results will be then embodied in a special report to Con-gress.-Commercial Bulletin, New York.

## EX-GOVERNOR LUDINGTON OF WISCONSIN DEAD.

$\xrightarrow{1110)}$ G-GOVERNOR HARRISON LUDINGTON of this city, died June 17. He was born July, 30, 1812, at Ludingtonville, Put nam County, N. Y. After acquiring an education, such as was afforded at he common schools of his native vil age, he decided to make an effort in his own behalf in the more extended fields of the then far West, and together with his uncle, Louis Ludington, began his business career in Milwaukee in
November, 1838, as the successor of November, 1838, as the successor of Solomon Juneau, Milwaukee's firs white settler. In 1851, after thirteen years of success, he withdrew from merchandising to embark in the manufacture of lumber, and for forty years he was one of the most prominent and successful lumbermen of the Northwest. He was elected alderman in 1861 and re-elected in 1862. He was mayor in 1871; was re-elected in 1873 and held the office until January, 1876, when he resigned to assume the duties of governor of the state, to which office he was elected in November, 1875.
Several strong elements in his disposition contributed to Mr. Ludington's prosperity. Among them were both personal and moral courage, energy and integrity, honesty and firmness, good judgment and willingness to conform to business methods and wholly avoid speculation.
Mr. Ludington brought the first seed wheat from the East to Milwaukee, and bought the first load of grain brought o this market. Old settlers speak of him as the first "elevator," because he carried this grain on his back into an upper story
stored it.
His physical decline dates back to 1885, when he slipped on an icy sidewalk and injured his leg, from which he never fully recovered. The injury prevented him walking to his office, and getting his customary exercise, the failure to get which began to tell on his general health at once. On June 8, last, he suffered a partial stroke of paralysis, and this, acting upon a system that was run down and worn out by the experiences of a long life, culminated in his death.
During his business career of fiftythree years his credit has been unimpaired, and war, panics and the various commercial revulsions of this long term failed to prevent his meeting every obligation fully and promptly.

## EXPORT FOR MAY.

The Chief of Bureau of Statistics reports the following statement of the exports of domestic breadstuffs for the month of May, 1891: Barley, 196,476 bush.; Corn, 853,876 bush.; Cornmeal, 17,118 barrels; Oats, 17,636 bush.; Oatmeal, 321,708 pounds; Wheat, $6,286,987$ bush.; Wheat flour, 799,497 barrels. Total value of breadstuffs exported for the month, $\$ 12,330,231$; same month, $1890, \$ 13,684,733$. Total value of breadstuffs exported for the 11 months, ending May 31, 1891, \$109,956,984; same period, $1890, \$ 139,855,022$. These statements include 98 per cent. of entire exports of the articles named from all ports of the country.

## a milwauke plant.



OING through the immense plant of the Edward P. Allis Company, with its endless and hundreds of workmen, machines and hundreds of workmen,
one would think there was not work enough in the world to keep it going, but it finds more work than it can do and is rushed day and night. The advent of electricity as a motive power has added greatly to its work and it has orders ahead for any number of engines for electric purposes. The Allis people estimate that 40 per cent. of all the engines they build now, drive electric generators. A 350 horse-power engine every day. That is the present capacity of the Allis works. It is safe to say that there are few machine shops in the world with anything like such a capacity.

## JUNE CROP REPORT.

The June report of the statistician of he Department of Agriculture, makes the area in winter wheat as compared with the breadth harvested last year 111.5; spring wheat 103.4 ; barley 107.1 ; rye 101.5; oats 97.9 . Condition: Win ter wheat 96.6 ; spring wheat 92.6 ; barley 90.3 ; rye 95.4 ; oats 85 . In comparison with 1889 the increase in wheat acreage is quite moderate. The reduction last year of more than $2,000,000$ acres suggests the reason for most of the present increase. This advance is therefore both replacement and developement, the former notably in Illinois, Missouri, Kansas and California, the latter in less degree in Washington, Oregon, the Dakotas and in several territories. The condition of winter wheat has declined one point. The average of NewYork 96; Pennsylvania 97; Georgia 98; Texas 98; Ohio 99; Michigan 90 ; Indiana 99 ; Illinois 98 ; Missouri 99; Kansas 95; California 97. The first monthly statement of averages of spring wheat makes Wisconsin 77; Minnesota 89; Iowa 95 ; Nebraska 97; the Dakotas 96. Early sown wheat was injured by frost in Wisconsin and Minnesota. Germination was arrested by drouth in the same region. In South Dakota drouth has retarded growth. Conditions have been more favorable in North Dakota. Recent rains in Iowa and Nebraska have greatly benefited wheat and encouraged the growers.

## thade notes.

Needham Bros., Ishpeming, Mich., M. B. Wells \& Co., Waupun, Wis., O. Paulson, Clearmont, Iowa., W. L. \& O. Churchhill, Alpena, Mich., R. D. Pike, Bayfield, Wis., D. J. Murray, Mfg. Co., Wausaw, Wis., have placed their orders with Menasha Wood Split.Pulley Co., of Menasha, Wis., for Hickory Pulleys The price of the Standard small Pulleys made by the Menasha Wood Split Pulley Co., has been reduced about one-half.
May 18.-The Jonathan Mills Mfg. Co. of Columbus, O., have just shipped Purifiers to the following parties: Miles \& Son, Frankfort, Ky.; a repeated order for two double machines to Acme Milling Co., Indianapolis, Ind.; 2 single machines to W. L. Kidder \& Son, Terre Haute, Ind.; a repeated order for $3 \mathrm{ma}-$ chines to Goshen Milling Co., Goshen, Ind.; John Clee, Detroit, Mich.; Shumacher Milling Co., Akron, O.; R. F Harris, Charlottesville, Va.; Stillwell \& Bierce Mfg. Co., Dayton, O.; Wm. H. Snyder, Dayton, O.; a repeated order to The St. Jacob Enterprise Mill Co., St. Jacob, Ill.; 2 single machines to Walton \& Whisler, Atlanta, Ind.; Gardner \& Seymour, Fulton, N. Y.; a repeated order for 2 machines to The F. Schu-
macher Milling Co., Akron, O.; 9 Reels to Thos. M. Holt, Haw River, N. C.; 12 Reels to Rio Milling Co., Charlottesville, Va.; 5 to S. Bennett, Redbank, N. J.; 1 to Besser \& Marvin, Marshall, Ill.; 1 to W. E. Brown, Sparta, III.; 1 single Air-belt Scalper to Yaeger Flour Mill Co., Carlinville, Ill.; to Barry Milling Co., Barry, Ill.; R. F. Harris, Charlottesville, Va.; Wm. Rathman, Uniontown, Ky.; Reed \& Carnrick, Bainbridge, N.Y. They report among work they are shipping at the present time: 3 double Airbelt Scalpers, 5 double Air-belt Puri fiers, $2026^{\prime \prime}$ Flour Dressers to John Dempster, Lenoir City, Tenn.

## tовассо.

DR. SEAVER of Yale College, is waging war upon the habit of tobacco smoking, which some of the students there indulge in. He is the physician of the college and the professor of athletics, a man of science who follows scientific methods in any investigation he may undertake. He has been engaged for eight years in observing the effects of tobacco smoking upon the bodies and minds of the Yale students, and he has just published a remarkable budget of statistics.
Dr. Seaver informs the public that the students of Yale who indulge in tobacco smoking are inferior in physical vigor and mental ability to those who do not. According to his reckoning, the smokers have less lung power than the anti-smokers; they have less chest-inflating capacity; they are of less bodily weight, and they are even of less height. The muscular and nervous power of the smoking students is notably and noticeably less than that of the anti-smoking. From an athletic point of view, therefore, the Yale professor of athletics considers himself justified in waging war upon the tobacco habit.
Not only in a physical way, but also in an intellectual way, the Yale smokers are inferior to the anti-smoker. The smoking habit is disadvantageous to scholarship. Of those students who, within a given time, have received junior appointments above dissertations, only five per cent were smokers, and very few smokers received appointments of any kind. It would seem, therefore, that the brain power and the scholarship of the smokers at Yale are far inferior to the anti-smokers.

The demonstrations of Dr. Seaver appear to be influencing the Yale mind. He is able to report that seventy per cent of the senior class in the college do not smoke, that the leading athletes do not smoke, and that not a single candidate for the rowing crew is a smoker.
Young A merica, athletic, intellectual, and ethical, can ruminate upon the Yale statistics collected by Dr. Seaver. - New York Sun.

## more niagara water-power.

The Railroad Journal says: "The preliminary survey has been begun for a water-power canal which is to take water from the Niagara river at Tonawanda, near Buffalo, and to run thence to Lockport, where the projectors expect to utilize the power obtained from the fall. From Lockport it is to run to Olcott, where an additional fall will be obtained before the water is discharged into Lake Ontario. It is expected that some $250,000 \mathrm{H}$. P. can be obtained. The distance from Tonawanda to Lockport is about fifteen miles; from Lockport to Olcott, twelve miles."

## OUR LEGAL DEPARTMENT.

specially prepared for The United states Mil
and Milling Engineer, from the latest
Endorsment of Note after Execu-TION.-A person, not a party to a negotiable promissory note, who places his name on the back thereof after its execution and delivery, before maturity and before it has been endorsed by the person to whom it is made payable, is, as to subsequent bona fide holders, an endorser of the paper.-Buck v. Hutchins, Supreme Court of Minnesota, 47 N. W. Rep. 808.

Sufficiency of Evidence to Prove Negligence.- In an action by an employe for injuries received from a belt negligently left uncovered near a machine at which he was at work, where he testifies that he was not sure whether he was caught on the belt or not, and none of his witnesses saw the accident, his case is fatally defective in that he does not show that his injuries resulted from his employer's negligence. The ground of liability is not danger, but negligence, and the test of negligence is the ordinary usage of the business.Ford v. Anderson, Supreme Court of Pennsylvania, 21 At. Rep. 18.
Compromise of Litigation.-Where an effort is made to compromise complicated litigation series of transactions, and from the whole course of the negotiations, embracing various propositions and counter-propositions, it appears that the parties intended to include all matters of difference between them, the compromise ultimately reached will be
held to embrace all the claims, though one claim was not specially mentioned in the proposition that was ac-cepted.-Coburn v. Cedar Valley Land and Cattle Co., Limited, Supreme Court

Contributory Negligence.-Where an adult had worked about a saw-mill for nearly four years, and for about a year as helper to the sawyer at an "edger," and testified that on several occasions he had run the edger himself, by
direction of his employer, after telling him that he did not understand machinery; that the saws were stopped and started at will by pulling respectively, two ropes which hung near; that the morning of the accident was quite dark but there were no lights; that he had been directed to run the machinery, and while doing so a sliver had dropped apon the shaft which he attempted to remove, as he had seen the sawyer do, without stopping the saws, and while doing so his sleeve was caught by the set-screw, of whose existence he was ignorant, and his hand was cut off. There was no evidence of negligence, but he was guilty of contributory negligence. -Ingerman v. Moore, Supreme
of California, 25 Pac. Rep. 275.
of California, 25 Pac. Rep. 275.
Liability for Negligence.-Plaintiff while in the employ of defendants, working on a scow which received mud from a dredging machine, was injured by the careless management of the machine by defendant's employe who controlled it. There was evidence that the negligence of such employe was caused by his intoxication; that he had been intoxicated two or three times a week for nearly two years before the accident, during which time he had been employed by defendants, although their superintendent was frequently at the dredge during that time; and that plaintiff had seen him drunk on three occasions dur ing the eight days of plaintiff's employment, but he did not report the facts to
the defendants or leave the employment
on that account. It was a question for channel and furnish an additional head the jury whether the plaintiff as well as defendants was charged with negligence, and a dismissal of the complaint was in error.-Tonneson v. Ross, Supreme Court of New York, 12 N.Y. Supp. 150. Failureto Deliver Telegraph Message. - Where a telegram is sent by a wife, about to be confined, to summon her husband, and by reason of negligent delay in delivery of 24 hours, he did not arrive, whereby the complainant alleges that she suffered more physical pain, mental anxiety and alarm on account of her condition, and sustained permanent and uncurable injury for want of his presence and services, such damages are
not too remote. Mental suffering caused by negligence and delay in the delivery of a telegram not of a pecuniary nature, may be ground of damages, though no physical pain or pecuniary loss is suf-
fered. Where a telegraph office had the sign of the defendant company ove the operator at that point testified that he paid over all receipts to the treasurer of said company, the office is an office of
the company. The stipulation on a tel egraph blank against liability for an unrepeated message does not protect the company where such message is negligently delayed in transmission. If such stipulation has any validity at all, it is only in case of a mistake in transmitting, and then only when the negligence is slight.-Thompson v. Western Union
Tel. Co, Supreme Court of North CaroTel. Co , Supreme Court of North Carolina, 12 S. E. Rep. 437.
Implied Grant of Water Rights.The owner of certain mills had also title to a pond, from which water was carried to them through a flume. Under an agreement with other mill-owners he acquired an interest in a reservoir for the storage of water, which was allowed to flow to the pond as required. This interest was by the agreement declared appurtenant to and forever inseparable from the mills and the water privileges connected therewith, which were charged, in whosesoever hands they should come, with a share of the cost in maintaining the reservoir. The owner con-
veyed the mills, but not the pond, the deed granting the right to draw water from the latter through a six-inch pipe as long as the pond should be continued. This deed contained the usual covenants of title, including one against incumbrances. At the same time the owner leased to the grantee for 20 years, all
the water in the pond, to be used for he water in the pond, to be used for flume leading to the mills, at an annual rental of one dollar, which was duly paid during the term of the lease. The water from the pond or a like quantity from other sources, was necessary to the operation of the mills. The term of the lease having expired, the grantee claimed the right to use the water from
the pond and reservoir as theretofore, as an easement created by implied grant. Under the deed no rights in the waters of the pond or reservoir passed by the deed except those expressly mentioned, and at the end of the term of the lease, the grantee's rights in the waters ceased if the pond should be discontinued, and were limited to the flow through a sixinch pipe should the pond be main-tained.-Washburn \& M. Mfg. Co. v. Salisbury, Supreme Judicial Court of
Massachusetts, 25 N. E. Rep. 724.

## MINNEAPOLIS NOTES.

 he Pillsbury - Washburne milling syndicate contemplate building a new dam at the foot of Tenth Avenue, south. The purpose is to bring water out of the east side
channel and furnish an additional head:
of 30 feet at that point, thus adding largely to the manufacturing possibilities at the falls. According to the preliminary estimates of the engineer, the improvements could be completed in a year. The dam will be a heavy stone
structure, and all complete, it is estimated, will cost about $\$ 800,000$.
Upon stipulation of counsel for the plaintiff and defendant, a change of venue was granted June 4, from Ramsey to Hennepin county, in the injunction case of J. C. Stout against the Sidle, Fletcher, Holmes Co.
Francis B. Webster, aged 76 years, died suddenly on the 5th inst., at the residence of his son, Edward E. Webster, manager of the Holly flour mill.
The Northwestern Consolidated Milling Company of Minneapolis has filed a certificate of incorporation signed by John Martin, Fred. C. Pillsbury, Chas. K. Sidle, Albert C. Loring and Ernest Zeidler, all of Minneapolis.
The great Minneapolis mill combinaion was blocked by an injunction from the St. Paul District Court, restraining them from consolidating.
C. T. and J. C. Buchanan, doing business as the Shakopee Mill Company, assigned to Charles G. Hinds, on the 12 th inst. Liabilities, $\$ 37,500$ nominal assets, $\$ 60,000$.
Judge Nelson granted to Fred O. Crary, of Hudson, Wis., a temporary injunction, restraining the Sidle-FletcherHolmes Company, in which he owns stock to the amount of $\$ 5,000$, from entering the milling combine. A hear-
ing of the matter is set for June 23 in the United States Court, at St. Paul. A life-size portrait of Chas. M. Loring was presented to the Chamber of Commerce on the 10th inst., by about 70 members, men in active business about the chamber. The presentation took place at the monthly meeting of the Board of Directors. Following is the letter accompanying the portrait:

## To the Board Commerce

The undersigned, members of the Chamber of Commerce, desiring to show their appreciation of the great worth and eminent services of the Hon. C. M. Loring, as president and director of this institution for many years, herewith present
through you, an oil painting of Mr. Loring, asking you to kindly place same in a suitable asking you to kindly place same in a chamber
location in the directors'room of the Cham ocation in the
There is a speck of war springing up between A. G. Mosher, city sealer of weights and measures, and some of the elevator men in regard to the weighing of grain. Under the provisions of existing ordinances Mr. Mosher is compelled to exercise supervision over the scales used in weighing grain at the elevators. The state law also provides for the inspection of all scales used by the grain dealers, who foot the bills for such inspection. Owing to this conflict of jurisdiction the elevator and grain men are called upon for more inspection fees than they think should be demanded of them, and will appeal to the council on Friday evening for relief. They are perfectly willing to pay one fee for inspection either to the state or city, but regard a do
as too much of a good thing.

The big injunction suit of James C. Stout, against the officers of the Sidle-Fletcher-Holmes Company, that snag in the organization of the Consolidated Flour Mill Company, was before Judge Lochren on June 8. The suit was originally begun in Ramsey county, but the defendants secured a change of venue to Hennepin county.

Jas. C. Stout, a stockholder in the Sidle-Fletcher-Holmes company, owning 400 shares valued at $\$ 50$ each, is decidedly opposed to the transfer of the mill and its furnishings to the consolidated company, and prays for an injuncion against the company and its officers, Fred C. Pillsbury, John Martin, Chas. T. Fox, Chas. K. Sidle, H. G. Sidle and Jas. W. Lawrence, to restrain them from making the transfer. He asserts that the mill is a paying concern and has property worth over $\$ 400,000$. The union with the Columbia, Galaxy and Petit mills he holds is undesirable and of no benefit to the stockholders. In fact he deems it an exceedingly hazardous step, from a financial point of view, to change the existing order of things. He as a stockholder has never given his consent to the consolidation but has opposed it entirely. Moreover, he asserts that the officers of the company have no authority to convey the property of the Sidle-Fletcher-Holmes company to the consolidation. The complaint and answer are both very long and are ornamented with a wealth of legal terms. The answer, in brief denies that the concern is a paying one and is worth $\$ 400$,000 , and asserts that the consolidated scheme is desirable in every way, and is agreeable to all the stockholders except he plaintiff, Mr. Stout.
The case came up on a motion by the plaintiff to have the action continued, in order that he might have expert bookkeepers go over the books of the company. His claim is that the indebtedy or corporation wascaused mainly gambling in wheat, and he wants The motion was denied.
In the district court, June 9, James . Stout received a set back in his injunction case against the Sidle-FletcherHolmes company, in which he sought o have the corporation permanently enjoined from going in on the new flouring mill consolidation scheme. After hearing all the arguments for and against the temporary injunction, issued some days previous, Judge Lochren ordered it dissolved, granting, however, a stay of 24 hours, in which time Mr. Stout may file an appeal bond in the sum of $\$ 86,000$.

The industrious country grain dealer is working a novel scheme whereby a relatively high price is received for low grade barley. This is worth something ike 1c. per th. on the market, or around $60 @ 62 \mathrm{c}$. per bu., while oats are selling at $1 \frac{1}{2}$ c. per th. or better. A quantity of cheap barley is mixed carefully with a much larger quantity of oats, and upon its arrival sells as oats, hence the barley whose identity is thus lost, commands the oat price on the $32-\mathrm{mb}$. basis.-Cincinnati Price Current.

June, July and August.
The most charming Summer Resorts, of which there are over three hundred choice locations, are to be found in Wisconsin, Iowa, Minnesota, South Dakota and the Peninsula of Michigan, along the lines of the Chicago, Milwaukee \& St. Paul Ry. Nearly all are located near lakes which have not been fished out.
These resorts are easily reached by railway and range in variety from the "full dress for dinner" to the flannel-shirt costume for every meal.

September and October.
The finest shooting grounds in the Northwest are on and tributary to the lines of the Chicago, Milwaukee \& St. Paul Ry. The crop of Prairie Chickens will be exceptiose. ably good this year; also Ducks and Geese.
In Northern Wisconsin and the Peninsula of Michigan splendid Deer shooting is to be had. Full information furnished free. Address, Geow H. Heafrord, Gen. Pass. Agt., Chicago, Ill.
the right to repalr patenteo articles.

WHAVE heard the ques tion repeatedly raised by railroad men of late: Can we have patterns made to renew the parts of broken car-couplers without obtaining permission from the patentee? This matter has been definitely settled in the courts in relation to other patented devices. The rule laid down by the United States court is: "Where a patent covers as an entirety a machine composed of several separate and distinct parts, the purchaser of such machine from the patentee will not infringe by replacing such parts as wear out, as often as necessary, so long as the identity of the machine is retained But if the patent is for a separate and distinct element of the combination, a purchaser will
This means that if the knuckle, for instance, should be the only patented part of a coupler, or, if it should be covered by a separate patent, it would be illegal for a railroad company, or an
agent acting for them, to make new knuckles; but if the knuckle is merely a part of the patented coupler, new ones may be made for repairs without infringement of the patentee's rights. In cases where the railroad companies can legally make pieces to repair a patented article they are at liberty to employ other manufacturers to do the work or any one in its employ, is under no obligation to use the same kind of materials in repairing as were used in the original manufacture, and these may be replaced by better materials.-
tional Car and Locomotive Builder.

## IDEAS ON MACHINERY ADVERTISING.

sUPERIOR mechanism and systematic and persevering
methods of advertising methods of advertising are
antial elements for the attainment of the greatest success in the machinery business.
I have in my mind one concern which grew from a very small beginning to its present greatness in a few years through the application of these
adjuncts. Not one of its customers has ever seen a representative or drummer offering its productions, for they are sold only through the influence of the newspapers and trade journals. This is the age for "something new," and
the master spirit guiding the mechanical department is alert to find out the wants of the possible customer. The merits of new machines also need to be presented through effective and thorough advertising. My argument is, that both the mechanic and the advertising man must display more than ordinary experience and intelligence to bring forth the best results.
In days past it was thought important to dress the machine with colors and stripes to please the eye. Now the one that sells the best, and rarely is one seen with other than an ordinary coat of steel colored paint. This change was wrought entirely through the effectiveness of advertising. It was thought that the additional expense of fancy painting could be done away with, the labor and expense saved, and the money invested in advertising. In time the public became convinced that paint was not so desirable a feature, after all; what was wanted was machinery to do its work in' a manner to secure the highest efficacy.

All readers of newspapers do not buy
do; not many. Sellers of most goods have buyers of some kind at all times. Their eyes can be caught by an advertisement worded with special attractive ness; but the man who wants a machine for a certain purpose must have it brought to his notice in the shape of a handsomely engraved cut displaying its valuable points. The better the cut, the quicker the perception of its usefulness is reached. The machine must have value or the advertisement is lost.
There are many machinery buyers who have some slight knowledge of machinery, but who have made their money in other business than the one they expect to engage in. With them, too, comes the value of a superior engraving. They are impressed with the quality of the work and the skill required in its execution; thus the first attack is won.

The next is a description stripped of all unnecessary verbiage, written so plainly that a child of passing understanding can almost realize the machine in actual operation. It must be shown in its best light and position, with the parts numbered or separately shown; this appeals to that sense of desire to study out from the description what lack of comprehension they may have fit. Then comes the correspondence to sell it. That is strictly office work and
not in the advertising line. To bring the customer to the office or to have him mail his letter for further information is where the advertising man stops. Of course, it is understood a conspicuously displayed advertisement cannot by any means be overlooked. It is just as much required as a printed letter.
Reading notices which are adroitly written and compactly worded assist
towards securing correspondence. By all means bring the "something new" forward at every opportunity and hit the nail hard, not once, but often, to drive it home. While admitting that all men have not the special aptitude for getting the best returns through the medium of newspaper circulation, there can still be a decided improvement shown by the machinery builders in their advertising. We all agree that the advertising man is the mainstay of growing business, and his connection with it becomes so close that he is not to be classed with the ordinary cle
-James T. Brown, in Printer's Ink.

## bRITISH SENTIMENT.

The Liverpool Corn Trade News, remarking on an entertainment of the American millers in that city, said : "An occasional exchange of hospitalities by the various branches of commerce and manufacture between the two great English-speaking people, would do more in the interest of universal peace and the furtherance of substantial and material progress than all the acts of Parliament and Congress, or the standing armies of the continent duplicated. The united voice, wealth and resources of the hundred million English-speaking people would hold the brawling nations of the world spellbound."
A large number of American millers have just arrived in this country. Without doubt their errand is to spy out the nakedness of this used-up old and-at least, in the matter of improved milling appliances. Within the last few years, however, our larger flour mills have been considerably im-
fitted with much of the best machinery and most recently discovered advantages that skill and long-tried experience could suggest. Thus, even in Scotland, we can show some recent developments in milling enterprise which, though we hardly expect that they will make an advanced American miller open his eyes wide with astonishment, should at least moderate their contemptuous feelings for our puny, one-horse affairs compared with their magnificent milling concerns. Perhaps if our American milling cousins did not get their splendid water-power so cheap they would hardly be able to bounce so much about their large flour factories. Still, if our millers are unable to show them extensive ranges of granaries and buildings, often ten or twelve stories in height, perhaps they may be able to show them some samples of their make of flour which the Yankees will find it difficult to beat in color or quality or silkiness of dress. In any case, we trust the American millers will thoroughly enjoy their trip. We can show them famous cities and old historic scenes. They have nothing of
this character in all the surrounding vastness of their boundless prairies, or amid the raw and unfinished urban centres where heterogeneous populations cluster together. We suppose a good many of the party, especially i they are accompanied by their lady kind, will not fail to replenish their stock of toggery with two or three suits of new clothes, and save as much on the Custom-house duty which they will shirk the payment of as about cover the whole cost of their trip. If they could so arrange their tariff as to ensure a similar bounty to travellers from this, country visiting America, a good many of us would be quite willing to return the visit in the fail of the year.-
British Baker, Confectioner and Purveyor, British Baker, Confectioner and Purveyor London and Glasgow.

The people who live in this golden ge have much reason to be thankful for the abundance of all kinds of food at very moderate prices. If farmers are not satisfied with the price they get or their wheat, the people, at least, have no cause to grumble at its dearth. And not only is flour to be had at reasonable figures, but the quality, generally speaking, is exceptionally fine. In color, flavor, and nutritious qualities the flour and the bread placed within the reach of the poorest as well as the richest in the land, were surely never surpassed in the history of flour-milling and bread-baking. Time was, in some parts of England, at least, when there was an inducement to vamp up inferior qualities of flour with alum or other deleterious substances; but such is not now the case. Low grades of flour, even of good quality, are not readily sold, nothing but the "pick of the pack" being usually wanted. Flour that has in any way been injured in quality by accident or otherwise can scarcely be disposed of for any purpose whatever; it mostly has to be used up in some cattle-feeding mixture. Just lately, at a meeting of the Kidderminster Town Council, the Health Committee reported the seizure of 418 sacks of flour at the railway station, and its condemnation as being untit for human food. It seems that the flour had been temporarily placed in a shed in the railway yard, near where the manufacture of artificial manure is carried on. The owners, however, are to be permitted to use the flour for dog biscuits, pig feed, or purposes other than for rock.

## Ameriean Steam Cauge Co. <br> 

WITH LANE'S IMPROVEMENT.
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AMERICAII POP SAFETY VALVES
For Locomotive, Stationary and Portable Boilers, and Instruments Inciden
tal to the use of Steam. Send for Price List $I$.
36 Chardon St., BOSTON, MASS. Send for Catalogue K.
human consumption, and we presume that they will have a good claim against the railway company for any loss in consequence.-British Baker, Confectioner and Purveyor.

The following appears in Digest of Decisions of the Commissioner of Patents and of United States Courts:

Word "Vienna" as Trade-Mark for Flour.-The word "Vienna" declared entitled to registration as a Trade-Mark for flour, it appearing that no flour made in any town called "Vienna" in this country has been placed upon the market under the name of "Vienna;" hat no flour is upon this markeo coming from Vienna, Austria; that th word was arbitrarily selected by the petitioner, and that it is the custom in the flour trade to use fanciful names to designate flour, rather than the names of places of production.
Same-Foreign Commerce as a Basis of Registration.-While the fact that flour from Vienna, Austria, is not on sale upon this market would not of itself authorize registration, when foreign commerce is invoked as a basis of registration, it does not appear in the present case that flour from Vienna, Austria, has any reputation in the markets of the world or that the word "Vienna" would indicate to a purchaser hat the flour upon which it was used came from that city.

The Reach and Scope of Intellect. -Every man is fitted to fill some position of importance. Every man's mind is more or less expansive, more or less reaching, more or less comprehensive The man who loves his profession al ways possesses an inquiring mind; he is judiciously inquisitive; he guides his inquisitiveness in the line of his profession; he is a learner and a teacher. If he becomes a mark among men, the mark is always in proportion to his success. If he confines his investigations to a scientific line, he discovers and applies the truths which govern his operations. This makes him a successful man; if a farmer, he is ready for all emergencies, he succeeds because he understands nature's laws and her demands. His crops are always fair,
almost always good, generally superior, and he flourishes like a green bay tree.-Ex.
A German engineer has devised a new method for fixing a foundation under water. By means of a powerful blast of compressed air he drives powdered cement down into the sand or mud at the bottom of a stream. The action of the water immediately fixes the cement, and it becomes like solid

## MANUFACTURING SITES FOR SALE!

The undersigned owns a few of the best manufacturing sites in the city of Milwaukee, adjoining those now occupied by the Milwaukee Car Wheel and Foundry Co. and the magnificent plant of the Fuller-Warren Stove Works which cover nearly ten acres of ground. Best of railroad facilities. Parties desiring a suitable location should investigate this. A.ddress,

## E. HARRISON CAWKER,

36 \& 37 Loan \& Trust Building.
MILWAUKEE. WIS.

B. H. \& J. SANFORD sheboygan falls, wis. For special figures mention this paper.

MILWAUKEE STENCIL \& STAMP WORKS The Oldest and Most Reliable Stamp Works

- FLOUR BRANDS, $R^{\text {UBBER STAMPs, Seals, Burning }}$ Brand, Adver-
 OHAS. H. OLARKE,
Letter Cutter, Engraver and Die Sinker. on cor. E. Water \& Wisconsin Sts.,

Some eastern millers are making war on grocers for selling outside flour when it can be had at lower prices than local flour. They evidently do not consider that they do business on a very similar plan themselves, whenever an opportunity presents itself. While generally using local wheat, it is solely done on the ground of economy, and the miller who would hesitate to purchase wheat outside, if by so doing he could secure better grain, or buy at a lower figure, would be very difficult to find. Then again, it is not an unusual thing for them to offer their surplus flour at cost or even below cost in wholesale centers, and they sometimes job it out to outside grocers at less than home prices. In this way they are often the means of inflicting the same injuries upon other millers as those of which they make such loud complaint. If, instead of protesting, these millers would advertise their brands more, they might obviate the difficulty to a great extent, provided the flour is kept up to a desirable grade and offered at reasonably low figures.-Grocer and Country Merchant.

## INTEREST FOR SALE.

WILL SELL or take partner in a $100-$ barrel steam tiouring minl, fitted with the
best and latest improved machinery, situated
in in the best wheat belt of Nebraska. Does a
very large exchange business. Has sidevery large exchange business. Has side-
track which facilitates shipping and gives
 exceeness. Has a large cash trade, and is
busing
located so as to control flour market of Northlocated so as to control flour market oin and
western Nebraska, Northern W yoming and western Nebraska, Aorthern
Southern Dakota. Address,

KLOMAN \& ARNOLD,

## 6-3t

FOR SALE-In Genesee Co., N. Y.
PIECE OF MILL PROPERTY, 25 acres two houses, with a twenty-two foot fall of
continuous, unfailing spring water supply continuous, unfailing spring waters supply.
This property is within a few rods of the West shore Reailroad and in a a great custom
business vicinity. Will advance monty to business vicinity. Will advance monty to


## haLf INTEREST IN ROLLER MILL.

FOR SALE-One-half interest in a ful roller mill, 50 barrels capacity, located in railroad town of 500 population, doing a splendid business and making money, Best
of reasons given for selling. An excellent chance for a practical miller with small capital. Address,
6.1t
W. E. WELLS,

## A BIG SNAP.

To close out a partnership. we offer for
sale our 50 -barrel Richmond City Mill Works short system roller mill, located at Mitchellville, Tenn., and enjo ying good exchange
trade. Two members ot the firm engaged in trader business is the reason for selling.
Write for full description. Reduced R. R. Write for full description
fare on July 4. Address,
fare on Suly 4. A. BLAKELEY \& CO., 6-1t Bowling Green, Ky
A. 巴. MYERS. 371 Broadway.
FOR SALE-REAL ESTATE.




 prices and on the same easy terms as heretnorore, and
they are bought by parties who Intend to build nice
homes More thau one-half of all lots in the above homes, More thau one-half of al hots in wary to use
subdivision have been sold. It is unnecessary
a club to convince anyone that sees these lots that a club to convine anyone that sees these lots that
they are sold at very low prices. If you want anything
in the real estate line oall on or write in tf
b-t

## SECOND MILLER WANTED.

 We want a good man as second miller for general work in our roller mill. Capacity, 75 bbls. Must be a German, and a married man preferred. Steady employment for theright man. For further information address or apply personally to

MILLER WANTED.
A good miller, in a 50 barrel roller and stone mill, located in Wisconsin. One tha karticulars address, stones. For furthe particulars address.

Care United STATES A. Ailler
Milwaukee, Wis.
H. G. UNDERRMOOD
 And Sollo 107 Wisoonsin street, 107 Wisconsin street, milwaukee
telerphose No. 002 6-1y Practices in all United States Courts.

## MILL SITE FOR SALE.

In Marshall County, Kansas, on Little Blue River. Never failing water power. Mill burned recently and property will be sold CHEAP. $6^{1 / 3}$ acres of land, two dwellings. granary, barn, scales, wheels set in flume, ready to couple to, stone dam, walls of building still standing. For particulars address,
F. F. THORNE, Assignee,

5-2t waterville, kans.

## FOIE SATEF-In WTisconsin.

125 -bbl. roller flour mill, 4 stories, frame with stone basement, including plenty water power for 4 water wheels. Flum dam and mill in good condition. Frame warehouse and office close by, and long sheds for farmers' teams. The whole property in full operation 16 hours daily, doing profitable business. Has big grist business. City of 2,000 population; two railroads. Good trade with citizens, farmers and lumbermen, for flour, feed and rye. Good local grain, and plenty of it. G oon pace to ive, has schools and churches, and close to other large citie the reason for selling. Address,
4-tf
MENASHA WOOD-SPLIT PULLEY CO., Menasha, Wis.

## FLOUR MILL FOR SALE.

## A RARE BARGAIN. A foUR-STORY BUILDING SITUATED ON GROUND soxiso.





 terms, etc. The mill lis situated on Firth and Center streets, Little Rock, Ark, Ardirdseye
Rock, showing location of mili, will be sent on application. Fur further particulars address,
the arkansas press, hittle rock, Ark.

## ENGINE AND BOILER FOR SALE.

A 25 horse-power Reynolds Corliss engine, with 40 horse power boiler and heater and connections, all in first class condition and in use at present. To be delivered in July, 1891. A bargain for anyone in need of same. Reason for selling, more power required. For further information address,

RIVERSIDE PRINTING \& ENG. CO.,
124 Grand Avenue, MILWAUKEE, WIS.

## KLANTED.

Position as traveling flour salesman in the Eastern states or cities. Applicant is a thoroughly well informed flour salesman and acquainted with the dealers and wants of the east.

Address " $D$,"
Care of UNITED STATES MILLER, Milwaukee, Wis.

## ORGANIZATION OF MILLERS IN THE UNITED STATES.

THE MILLERS' NATIONAL ASSOCIATION.


Cairo, Ill.
Winona, Minn
Milwaukee, Wis.
ofFICERS OF STATE ASSOCIA TIONS. President, E. C. Kreyder. Jacksoonville.
Seeretary, C. H. Seybt. Highland. Secretary, C. H. Seybt, Highland,
President, F. E. C. Hawkes Goshen.
Seeretary, E. E: Perry. Indianapolis.

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Seeretary

 Pecretary, D. H. Harris, Bennett.
President, A. R. Aames., Butralo.
Beeretary, H F. Shutuleworth, Buffalo
 $\left\{\begin{array}{l}\text { Secretary, J. M. Turner, Mandan, } \\ \text { Presidenat; Homer Bald wh, Xoungstown }\end{array}\right.$ $\left\{\begin{array}{l}\text { President B. F. Pavis, Bge. Huntingdon. } \\ \text { Bereatary, L. Levan, Lancaster }\end{array}\right.$



## RECENT MILLING PATENTS．

The following list of Patents for Milling
and Grain Handling Appliances，granted and Grain Handling Appliances，granted
in May，1891，is specially reported for the United States Miller and Milling En－ gineer by h．G．Underwood，Patent At torney and Solicitor，No． 107 Wisconsin St．
Milwaukee，Wis．，who will send a copy of Milwaukee，Wis．，who will send a copy of
any patent named，to any address for 25 cents No． 451,542 ，Dust－collector，Rama R．Wat－ No．451，543，Dust－collector，Rama R．Wat ters，Akron．Ohio．
No．451，580，Grain－scourer，Charles Rippin，
St．Louis，Mo． No． 451,670 ．Attachment for fanning－mills，
John Herson．Port Huron．Mich．，as－ John Herson．Port Huron．Mich．，as－
signor to Sidney Cole，William H．
Burgess，Frank McKenney and James Burgess，Frank McKenney and Jame
H．McKenney，all of Croswell．Mich．
452，065，Grain sieve，John S．Rowell and
Theodore B．Rowell，Beaver Dam．Wis． Theodore B．Rowell，Beaver Dam．W is
452，191，Frame for Conveyer－belts，Revilo 452，434，Grain－scourer，Allen C．Branth
ingham，Winfield，Kans． ingham，Winfield，Kans．
452.580 ，Separating－machine，Orville M Morse，Sackson，Mich．
452，581，Separating－machine，Orville M
Morse， Morse，Jackson，Mich．
452，702，Mill－race fender and screen
Phares R．Grabill．Millersburg，Pa． same place．
452，812，Boiting－reel．Ferdinand P．Traut－
wein．Lutesville，Mo． wein，
Sturtevant，Framingham，Mass，assigno Sturtevant，Framingham，Mass．，assignor
to the Sturtevant Mill Company，Boston Mass． 452,959 ，Composite－Millstone，Thomas L． to the Sturtevant Mill Company，Boston Mass
D53，06，Grain－meter，Lincoln L．Sharp，
Douglas，Nebr． Douglas，Nebr．

Theory and Practice．－No expres sion is more common among mechanics， than，＂The thing is all right in theory tice it won＇t work．＂The fact is that the theory of a thing is all right，and that theory is correctly applied in prac－ tice，it will surely work，and when a thing fails to work，either the theory or the practice，or both，are wrong．
When the theory of a thing has been developed as far as it seems possible to develop it，and it seems to stand the test of mathematics and of all the other sciences which can be brought to bear upon it，including that which has its final expression upon the drawing board and still the machine or process，when actually tried，fails to work，the tempta－ tion is strong，as we well know，to declare that the thing is perfect in theory but that practically it will not work．It is the frequency of such expressions，no has created the very general feeling among practical mechanies，of distrust if not contempt，for what they call the ＂impractical theorizers，＂and the belie that mere theory is of no account what rect theory has been in the past，is now， and probably will continue to be，of the greatest importance in the developmen of the science and practice of mechanics．

It is to be considered that practice is by no means perfect，and the＂practical man＂needs to remember this when disposed to blame theory for the failures otherwise unaccounted for．No one has ever yet seen a perfect shaft，or gear or screw，and it is not probable that any one ever will，while it is probable that many theories regarding mechanics are much nearer perfection than practic will ever get．
When correct practice is based upon correct theory in the building of any ma－ chine，that machine will be correct，and will work correctly，and when the prac－ tice is known to be correct，and the machine will not work correctly，then it cannot be correct in theory．Neither a machine nor anything else can be cor－ rect in theory and wrong in practice． American Machinist．

All persons desiring to reach the entire milling and grain trade of America，by cir－ cular or otherwise，should obtain a copy of Grain Elevator IMrectory for 1890－91．
玉AIエヤヘエ．

## B

BIG FOUR ROUTE

## CHICAGO

INDIANAPOLIS
CINCINNATI

## The Only $\begin{gathered}\text { Line running the Popula } \\ \text { Sleoping Cars between }\end{gathered}$

CHICAGO and CINCINNATI
The only Line from Chieago running solld
Vostibule Trains into Central Union Dopo
Cinelnnati，where connection is made with Cinelinnati，where connection Ls made with
Through Car Lines for Florida，avoiding all

 Sleepers．Mea
Dining Cars．
Fur tickets，

＂THE FINEST ON EARTH．＂
The Cincinnati，Hamilton \＆Dayton R．R is the only line running Pullman＇s perfected safety vestibuled trains，with chair，parlor sleeping and dining car service between Cin－ cinnati，Indianapolis and Chicago，and is the only line running through reclining chair
cars between Cincinnati，Keokuk and Spring－ cars between Cincinnati，Keokuk and spring car Cincinnati to Peoria，Ill．，and the only di－ rect line between Cincinnati，Dayton，Lima， Toledo，Detroit，the lake regions and Canada．
The road is one of the oldest in the State of The road is one of the oldest in the State ondi over twenty－five miles of double track，and from its past record can more than assure its
patrons speed，comfort and safety．Tickets on sale everywhere，and see that they read
C．H．\＆D，either in or out of Cincinnati，
Indianapolis．or Toledo．E．O．MCCORMICK General Passe
cinnati，Ohio．

Bombarded the Town．－Three years
go，says a Kansas City correspondent of the Chicago Times，Henry Singleton aged 50 years，with an intellectual cast of countenance，but with an eye which showed instability of mind，went to Sen－ eca，Kas．，and bought the old flour mill half a mile from the town．He made no flour，although the engines were often heard running，but lived in the mill， admitting no visitors，and explained that he was making a flying machine The impression that the fellow was a harmless crank was dispelled last nigh when he commenced a bombardment of the town．
At 11 o＇clock，one day，L．L．Haggard was sitting in front of Hotel Cameron， when a crash was heard on the roof，and round missile rolled down and struck him in the abdomen．Immediately an－ other crash was heard across the street and a fusilade was kept up，balls o burnt clay weighing five pounds striking every half minute and doing considerable damage in the west end of thetown．Men armed with revolvers and shotguns started for the old mill and soon cap－ ured the man．The balls of which 800 were found ready for use，were thrown by a powerful and ingeniously－made steam catapult which carried a distance of a mile．The catapult has been viewed by hundreds of people to－day．On Sin－ gleton＇s person was a manuscript story in which he（the hero）is represented as conquering various cities with his engine of war．The man is in jail awaiting legal action．

NORTH：WESTHERTMN
RAILWAY．
 $\qquad$
 $=$ Fast Vestibuled Trains
 $\overline{\text { Pullman and Wagner Sleepers }}$ CHICAGO to SAN FRANCISCO

COLONIST SLEEPERS CHICAGO TO PORTLAND，ORE． and SAN FRANCISCO． FREE RECLINING CHAIR CARS DENVER \＆PORTLAND，ORE．

w．

## 

Fast Mail Line with Electric Lighted
and Steam Heated．Vestibuled Trains and Steam Heated，Vestibuled Trains
between Chicago，Milwaukee，St．Yaul

Trans－Continental Route with Electric Lighted and Steam Heated Ves－ Council Bluffs．Omaha or St．Paul and Creat National Route between Chi－
cago．Kansas City and St．Joseph，Mo． 67OO Miles of Road reaching all prin－ nesota Lowa Missouri，South Dakota and North Dakota．
For Maps，Time Tables．rates of passage and freight，
ote．，apply to the nearest station agent of the chi－ CAGO，MILWAUKEE \＆ST．PAUL HAILWAY，
Railroad Agent anywhere in the World． ROSWELL MILLER．A．V．H．OARPENTER， For in ormation in reference to Lands and
Towns owned bv the CHICAOO，MILWALKKE \＆ST．
PAUL RAILWAY COMPANY，Write to H．G．HAUQAN，

## Choice of 3 Trains

## MONON ROUTE

CHICAGO and INDIANA POLIS， CINCINNATI， LOUISVILLE， LEXINGTON．
Onsurpassed Pullman Car Service． Short Route to Florida． Be sure your tickets read via Monon is guaranted．

AMMS BARKMR，Gen＇l Pass＇s Agomb，Mincaco Adams Express Building．
Grand Haven Route
D．，G．H．\＆M．R＇Y．
THIS FAVORITE SUMMER ROU
CITY OF MILWAUKEE and WISCONSIN AND．


BUFFET PARLOR AND SLEEPING CAR SERVICE
Tiekets on sale at all coupon tieket offices；com－
pany＇s officee．${ }^{99}$ Wisconsin St．，and at dock，foot of
West Water St． JOHN W，LOUD，

B．O．MEDDAJGH


## ASHLAND <br> MILWAUKEE． LAKE SHORE \＆ WESTERN R＇Y

Through Sleeping ？Parlor Car Line
FAST TRAINS
CHICAGO AND MILWAUKEE
Appleton，Wausau $\mathbb{W}$ Ashland GOGEBIC，PENOKEE AND MONTREAL IRON AND MINERAL RANGES．
Hurley，Ironvood，Bessemer and Wakefield
The Manufacturing Centers and Lumbering Districte
of Central and Northern Wisconsin． SHEBOYGAN，MANITOWOC，KAUKAUNA，
APPLETON，WAUSAU，ANTIGO，EAGLE
RIVER AND RHINELANDER．
The only line reaching the celebrated fishing resorts
of Northern Wisconsin and Michivan．
Gogebic，Tomahawk and Pelican Lakes，
Rhinelander，Bagle Waters，Twin Lakes，Lake Vienx Desert，Watersmeet．
The ontonagon，brule and other Trout Streams． their excellent，Muskalonge，Bass，Pike
Pickerel and Trout fishing． ロエネECT エINE

SEYMOUR，GRAND RAPIDS，AND STEVENS POINT．

SUPERIOR，DULUTH，
PACIFIC COAST AND INTERMEDIATE POINTS．
Guide Books，Maps，Time Cards and full informa－
ion furni hed on application to the Gen＇l Pass．Agt． Chan．L．Ryder，Gen＇1 Agt．
A．W．Russell，City P．\＆T．Agt．$\}^{197}$ Clark Street，
CHICAGU．
Milwankee City 0ffice， 95 Wisconsin street．
H．F．WHITCOMB，ERNEST VLIET， eneral Manager．
MIL WAUKEE，wis．

$\boldsymbol{s}$ Hest，
cincimatit to New Orleans

110 Miles the Shortest，
7 Hours the Quickest，
Cincinnati to Jacksonville，Fla．

Direct Connections at New Orleans，and S1
port，for Texas，Mexico and Callfornila．
Trains leave Central Union Depot，Cincinnati，
crosing the Famous High Bridge of Kentueky，and
rounding the base of Lookout Mountain．
Over One Milion Acres of Land in Alabama，
the Future Great State of the South，subjeot to pre－emption．Unsurpassed Climate． For Rates，Maps，etc．，address，

C．S．HENRY，Traveling Passenger Agent， 193 Clark St．，Ohieago，ill．
$\begin{array}{lll}\begin{array}{c}\text { C．C．HARVEY } \\ \text { Vice Pres＇t．}\end{array} & \begin{array}{c}\text { OINOINNATI，} \\ \text { OHIO．}\end{array} & \text { D．G．EDWARDS，} \\ \text { G．P．} \& \text { T．A．}\end{array}$

## Goodrich Steamers <br> \section*{ON REGULAR TIME}

LEAVE MILWAUKEE FOR
Chicago daily，Saturdays excepted，at．．．．．．7：00 P．．．
Hacine dally，Saturdays excepted，at．．．．．． $7: 00 \mathrm{P}$ ．


[^3]

THE KEYSTONE
4 Roller Wheat Mill. Flour Mills.
$\qquad$
ST. Francis, KAN., October 5, 1890.
O., Indianapolis, Ind.: Dear sirs-In reply to yours. we have been running six weeks, and can say thut your rolls are the be-t we have ever
handied. They have not given us any trouble since wee
started, and the adjustments cannot, be beaten, and the flour dressers and centilfogals are 'dassiten." They work just work. They, can not be beaten. All the other machinery,
shafting. puleys and everything is fitted up so nicely that there In no trouble e to set it up. We can make ffty barrels of flour in
24 hours from No. 3 wheat. Our wheat is very poor and our flour is giving very goid satisfaction, and The J. B. Alifree
Co. is the best firm we ever had any doalngs with. They
Come Yours very truly ENKINS \& NEWBAUER.

The J. B. Allfree Co., Indianapolis, Ind.: Gentlemen-In response to your inquiry of Oct. 15, would say we are pleased to state that we have run the mill about three months and are doing frrst-class work, and think you ought to brand all your machines the same as you do your a sample of our Climax Patent, of which we a sample of our climax it if you can.

Wishing you success, we remain your friends, Ziliak \& Schafer Milling Co.

Adim, THE J. B. ALLFREE MFG. CO., 76 th 85 Shably Sh, INDIANAPOLIS, IND.

The Keystune



This book with its numerous tables, short cuts in fipures, etc., is simply invaluable to Millers, Graindealers, Farmers and Business men generally. Prices,
post-paid, as follows: No. 1. Bound in waterproof post-paid, as follows: No. 1. Bound in waterproof
learherette, 50 cents. No. 2 . Fine artificial leather, lea herette, 50 cents. No. . Fine artifleial eather,
with bocket, silieate slate and accou"t book, 75 cents. No. 3. American Hussia or Morocoo, with pocket slate and renewable account book, \$1.00. Address, E. HARRISON CAWKER, Publisher United States Miller, Milwaukee, Wis.

## CATWTIKREIEN <br> <br> American Flour Mill EGrain Elevator Directory

 <br> <br> American Flour Mill EGrain Elevator Directory}$\Rightarrow$-FOR 1890-1891——信

It contains: 1. A list of Flour Mills in each State, Territory and Province, with names of owners, P. O. and county; in thousands of instances giving their capacity in barrels per day, kind of power used, etc., also indicating such firms as are supposed to be worth $\$ 10,000$ and upwards. Total number of mills given, 17,145 .
2. A list of miscellaneous mills, such as Corn, Oatmeal, etc.
3. A list of Millwrights.
4. A list of Grain Elevator Owners and Grain Dealers.
5. A list of well-rated Flour Brokers, Merchants and Bakers in all parts of the United States and Canada, which has been compiled with extraordinary care, capital and credit being considered in the compilation.
6. A list of Foreign flour and grain importers, secured by our own special correspondents and believed to be thoroughly reliable. In short, it is a complete KEY for reaching the Flour and Grain Trade, enabling any department of the trade to reach any other desired.

The price is invariably Ten Dollars per copy, on receipt of which it will be sent, post paid, to any part of the world. The complete work only is sold. We do not supply lists for single states. These Directories have been issued every two years since 1878, and have been declared indispensable by the prominent mill-furnishers, flour brokers, millers, etc., of this country and Europe. Address,

E. HARRISON GAWKER, MILWAUKEE. WIS.

36 \& 37 Loan \& Trust Building.


‘ The Jonothan Mills Universal Air Belł Purifier.

Requires no cloth, no dust house, nor dust catchers.
All grades of middlings perfectly purified with absolutely no waste.
In use in many of the representative mills in the country and being rapidly adopted in all sections by all classes and sizes of mills. M
Indianapolis, Ind., March 3, 1891.

Anderson, Ind., March 30, 1891. The Jonathan Mills Mfg. Co., Columbus, O. Gentlemen-You will please find our
check enclosed for
bills of Feb. in paymenent of your
 entire satisfaction, and the Scalper is a
dandy.". We realy think this ocalper of
yours is one of the most important im-
provements that has been made in milling
machinery for the past 10 years. Wishing
mact yourements that has been made in milling
pachinery for the past 10 years. Wishing
mach success, we are yours truly, WELLINGTON, SCHALK \& CO.

The Jonathan Mills Mfg. Co., Columbus, Gentlemen-We have now been using
our Air-Belt Puriflers for six months, your Air-Belt Purifiers for six month
and are very well satiffied with them. They replaced smith Purifiers. They do
better work, take greatly less power, make no dust, and give no trouble. We, make think
them the best Machine yet invented Yours truly,
RICHARDSON \& EVANS.

Syracuse, N. Y., March 21, 1891. The Jonathan Mills Mfg. Co., Columbus, O . Gentlemen-You will find enclosed oheok
for for Purifl whioh we cheerfully send you.
The Purifer more than meets our expeota-
tions, does much better work than we had tions does much better work than we had
anytea it would our Mr. Lockerbie
wrote you a few dys ago, and if you will
Give us the same guarantee on that gtook
that you did on the other, please send the
to that you did on the other, please send the
Machine diong at once, as we cinnot aftord
to be without it.
Yours truil, JaCOB AMos.

## THE JONATHAN MILLS MFG. CO.

Write us for particulars and references. 娄
GOI」UMBUS, OHIO, U. S. A.

## "PRINZ" PATEUT IMPROVED COCKLE MACHINES

Immense increase of trade without traveling agents. OUR COMPETITORS GROSSLY ADVERTISING and imitating our STEEL REELS, we have decided to reduce our prices still more. Our Machines are working satisfactorily in the following

BIC MILLS IN MINNEAPOLIS :
Christian Bros. Mill Co.; Minneapolis Flour Mfg. Co.-Standard; Washburn Crosby Co."A" Mill; Pillsbury-Washburn Flour Mills Co.-Palisade; Sidle-Fletcher Holmes Co.-Northwestern Mills; Stamwitz \& Schober-Phœenix; Hinkle, Greenleaf \& Co-Humboldt; D. R
Barber \& Son; Pillsbury-Washburn Flour Mills Co.-Anoka Mill; Minneapolis Mill; Holly Mill; Zenith Mill; Pettit Mill.

The Phoenix Mill; the Jupiter Mill; the Gem Mill; the Daisy Mill and the Duluth Mill.
to be sure of getting the best machine buy the genuine
"PRINZ" IMPROVED STEEL COCKLE REEL.

## THE PRINZ \& RAU MFG, CO., MILWAUKEE, WIS.

## - AFTER "THE TEST"  <br> DUNLAP <br> (®) WAS CHOSEN.

KITNESSETH:
THE BRADFORD MILL CO., Cincinnati Ohio:
AKRON, OHIO, September 23, 1890.
Gentlemen-Mr. Clark has just given me his order for the Dunlap Bolt, and wants it shipped as soon as possible. Make up and ship with the Bolt a Conveyor as per enclosed sketch. * * *

Respectfully,
FRANK E. NEAR.

JAS. F. OLARK

## FARREL FOUNDRY \& MACHINE COMPANY

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* Flour Mill Builders and Furnishers, * RELIANCE WORKS, MILWAUKEE, WIS.


AND THE TMILLING ENGINGER.

Sixtenth Year,-No. 7.
SEPARATIONS AND PURIFICATIONS.

THIS subject is the most complex in the science of making flour, as milling is rapidly approaching a true science and is entirely too deep a subject for the thousand and one amateurs that we nowadays so frequently meet. I feel incompetent, with all the varied experience I have had, to treat the subject in a proper manner without taking too much of your valuable time. It would require more than a dozen lectures, with lines of samples and a good set of hand-sieves, taking in the whole gamut of bolting silks, to properly demonstrate the true importance and show up the true science of separations, and then, after all that was done, it would but show you the results on one grade or kind of wheat. If the results were shown on our soft winter wheat, it would require a different clothing of sirk to show you what was best for hard or spring wheat. Our white wheats, and such wheats as are grown in California, Oregon, Washington and Colorado, would require another grade of clothing. Then, if we clothe a mill for perfect work that is operated along our lakes or on the sea coasts, and could transplant the same mill back 50 or 100 miles away from the lakes or ocean, it would not work satisfactorily, the separations would not be right. So you see a mill has to be clothed to suit dry or damp atmospheres. The atmosphere is at all times more humid along large bodies of water than in the interior of the country. Remove an Evansville mill bodily without any change of cloths or other changes to the east side of any of our large lakes, in the humid atmosphere of the lakes, and its capacity would be reduced at least one-third.
To illustrate this fact, we will say a reel in an Evanstville mill might have 24 iuches of No. 8 cloth on the tail to dust out the stock so it would pass over the tail dry. (You all understand the term "dry," I believe.) Remove the same reel and stock to the lakes, and you would require not less than 36 inches of No. 7 cloth in place of the 24 inches of No. 8; and this principle holds good on about every cloth in the mill. Successful separations can only be accomplished by a continuous system of scalping off the coarse from the finer stock repeatedly, and this system holds good on all wheat-hard, soft or white, and in every climate, dry or humid. Every separation is more or less of a purification.
I will now take up purification, and briefly describe the proper manner, as I see it, to get the best results. The true principle and the only satisfactory one is to grade your middlings into as many grades as there are grades of cloth. The only man that I know of who is carrying out this system to its fullest extent is the Honorable Homer Baldwin, in his City mill at Youngstown, Ohio. He is purifying middlings
that have passed through a No. 14 silk and been dusted over a No. 16 silk, and is making a larger percentage of very high-grade flour than any other winter-wheat mill in America, and making a barrel of flour out of fewer pounds of wheat. A good way is to grade your break middlings into not less than five grades, and handle each grade on a separate purifier. After they are purified, they should be lightly reduced or sized on your smooth rolls, the flour bolted out, and the unreduced middlings again purified and again bolted. The middlings that are tailed over the bolting reel should again be purified. This should be carried out with all grades of middlings by using a tail cloth on these middlings bolting reels of a fineness to send over the tail nothing but the heaviest of the middlings; you then have a middlings through the tail cloth on each reel that should be sorted with a view of quality, or ratber color, by doughing, and ascertain which of them you consider fit to again be reduced for patent flour. But all should be purified, and similar qualities can be brought together of the same grade and re-purified together on purifier for the purpose.
The day is rapidly approaching when true system of sorting of middlings for color by doughing will be adopted in all first-class mills. Nothing is so deceiving to the eye as some grades of middlings, and the same grade from one grade of wheat will not be equal in color to some other grade of wheat, and both wheats may have passed as the same grade when you bought it. The fine discrimination of the miller's judgment can only be proved by his eternal vigilance, and by constantly testing his middlings for color by doughing. The greatest danger in letting middlings into your patent flour lies right in your various fine middlings from the reductions of the middlings. I merely give these points to set millers on their guard and to point out where the trouble may exist, in holding their patent flour up to a high standard, and how to keep it there in uniform grade and constant.
It is just as important, and I think more important, that the middlings left from the reduction of the middlings be purified, then the purification of your tirst or break middlings, and the lighter you reduce your break middlings, and each successive reduction, and purify the remainder at every step, the better results you will get. This is a fundamental principle that will always command a market and bring profit in close competition.
There are already to many "sooner" mills in this country for the good of the trade. This is largely brought about by the millers wanting to build mills for a cent, and each furnisher swears he can do it with a reel and a
roll less than the other fellow, roll less than the other fellow, and stands ready to guarantee to make the號
world and the other fellow. If these "sooner" mills are ever all paid for
when completed, they are universally when completed, they are universally piling a mortgage on themselves by loss in yields, and at the end of the first year or two you find complaints that milling is awful close, and they begin to hustle to put in every jimcrack of a machine that is offered that they think will help them out, but generally go to the tail of the mill to commence.
The way to get a good week's work done is to commence early Monday morning and do your hardest work
every day of the week. You need not every day of the week. You need not
expect to lose Monday, Tuesday and Wednesday, and do as much work in the week as the fellow who commences early and does all he can every day in the week This illustration applies with double force when it gets down to
a "get-there-sooner" mill and starts in after the other fellow has done half his week's work.

## the wheat supply in europe.

1T has never been more difficult than it is now to speak with exactness regarding the European supply of wheat and the probable demand. The statements published this year are singularly contradictory, and even from official and the most reliable sources estimates varying very widely are issued. Thus one statement recently published is that Russia will have no surplus of wheat for export, while another from equally good authority announces that Russia will have a fair crop, which means a large quantity for export. The accounts in regard to the probable yield in Germany and also in England are almost equally irreconcilable, while French authorities are themselves widey at variance. It is probable that these divergent opinions as to the supply of wheat this year are in part due to the great controversy in France and in some other countries respecting the duties on imported grain. The anxiety of the farmers to secure the highest possible duty is not unnatural, and it prompts many people to represent the probable supply as large as possible. On the oiher hand the opponents of high duties, and particularly those who represent the trades unions and other bodies of consumers, lay great stress upon the probable scarcity of wheat this year, in order to strengthen their argument for at least a temporary eduction of duties on imported grain. A statement from Mr. Griffin, United States commercial agent at Limoges, announces that the National Millers' Association of France bas carefully collected data of the probable wheat harvest of France and Europe for this year, and forwards the figures. This statement shows that the average need of wheat in France for seed and food is 123 million hectolitres yearly, but this year $5,000,000$ hectolitres must be
added for resowing where the grain
of 128 million hectolitres. The estimated yield this year is but $82,779,000$ hectolitres, if the weather and all other conditions from this time forward continue favorable. The dispatch adds, "This is the maximum estimate; it will be 31 per cent less than the harvest of 1890, leaving a deficit to be supplied by importation amounting to 40,221 ,000 hectolitres. The average price paid for wheat under favorable circumstances is 23 francs per hectolitre; consequently $925,000,000$ francs will be spent in the next twelve months for wheat."
It is a somewhat serious matter for France to face an expenditure of a sum so enormous, at a time when a large portion of the people are embarrassed in their circumstances by the failure of crops, or by other industrial causes. It is not strange that, under such conditions, the controversy regarding the duties on grain has become quite bitter, and the advocates and opponents of the extreme duty are charging each other with improper motives. If the supply of wheat in other portions of Europe were as large as usual, there would be less risk of failure in meeting the demands of France, but according to all accounts there will be a considerable deficiency in Europe outside of France or Great Britain. The British imports are always large, and according to present reports are likely to be somewhat larger than usual this year. The estimate of the National Nillers' Association of France is that the production of Europe in 1890 was 225 million hectolitres, and the estimated production this year is but 111 million hecto. litres, leaving a deficit to be supplied by foreign countries amounting to no less than 114 million hectolitres. The statement adds "Russia, Tunis, Egypt, Roumania, and some of the Danubian provinces will have a fair harvest; in Hungary it will be below the average this year." But it must be remembered that other statements from equaly as good authority indicate that the Russian harvest will be decidedly below the average.

## BUSINESS PRINCIPLES,

Experience teaches that it is always best to do business on business principles, no matter with whom it is done. It is a good plan to make a memorandum of any contract you undertake, either for the payment of money or an agreement to do a piece of work. It often saves annoyance in case one or the other forgets the terms. Never hire a person and 'set them to work without first having the price fixed upon. Many law suits have arisen from such neglect. Never sign a paper, no matter how simple a matter it may appear to relate to, without first carefully reading it, and if you do not thoroughly understand it, have it explained before you sign it. These are simple rules, but they are the only safesones to do business by.-Manufacturer's Gazette.

## When buying a scalper, be sure and get the <br> NEW ERA SCALPER <br> IT WILL BE MOMEY II YOUR POCKET IF YOU DO. <br> <br> YORTEX DUS DUT GOEEEGTOR

 <br> <br> YORTEX DUS DUT GOEEEGTOR}
(8)

HEN this Scalper was put on the market three years ago, its success was immediate, and its merits were recognized by every practical miller who saw it in operation. Naturally other machines sprung mere extensively advertised as "just as good as," but they have proved a source of worry and expense to the user, and we can count up a
dozen of them that are never heard of now. The New Era on the contrary dozen of them that are never heard of now. The New Era on the contrary
has given satisfaction wherever used, and where one goes, others follow, as its merits become known. We have any number of testimonials of its merits from millers in all parts of the country. Draw your own conclusions.

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| built in |
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## 


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IT INFRINGES ON
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MACHINE, AND
WE GUARANTEE INDEMNITY AGAINST
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$\left.\int\right]^{H E}$ merits of this Collector are shown by our cond. stantly increasing trade among both millers and mill furnishers. No inferior machine could show such results after three years of trial.

MILWAUKEE, WIS.

## FOR CIRCULARS, PRICES, ETC., ADDRESS <br> VORTEX•DUST•COLLECTOR•CO.,

We are still "In lt" with two of the best Grain Cleaners manufactured.

## THE MOREAII SOOUNER



- Both Dpright and Horizontal Machines, manulactured with or without Shoe. -

THIS machine has always been recognized as one of the most thorough, durable and reliable Scourers built. The only objection ever raised against it was its price. This objection is now overcome, as we can offer prices as LOW AS THE LOWEST. Consult your own interests and get a first-class machine, especially since it costs no more than the inferior scourers.



IF you want a Cockle Separator, write us. We can satisfy you both as to style and price. We build machines with reel or shaking graders, and with steel or zinc cylinders, as desired. Also in connection with Richardson's Dustless Oat Separator Attachment.

## PRICES GREATLY REDUUCED.

W E are manufacturers of Perforated and Indented Metal, and solicit orders for anything in this line, which we can fill promptly.

United States Miller

## E. HARRISON CAWKER, EDITOR.

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STATES MILLER AND THE MILLING ENGINERR. [Entered at the Post Office at Milwaukee, Wis., as
mail matter of the seoond-class.]

MILWAUKEE, JULY, 1891
We respectfully request our readers when
they write $t$ ) persons or firms advertising in they write $t$ ) persons or flrms advertising in
this paper,to mention that their advertisement Was sean in the UNITED STATES MILLER AND THE MILLING ENGINEER. You will vertisers.
THE Michigan Millers' Association nsing, July 9.

THE pilgrims on that wonderful European excursion of American millers have nearly all returned

AFARMERS' Elevator Company in Minnesota claims to have realized 125 per cent. in the last two years.

THERE is much complaint of inactivity in trade. Money is plenty and can be borrowed at reasonable rates but the business demand for it at the present moment is not great. A little later on there will be a change.

0$R$ Chicago contemporary has just discovered that there are frequent spots to be found in many samples of bread. He should either wipe the dust from his spectacles or buy a purer article of flour for his private consumption.

WE regret to announce the death of Mr. Liberty Hall of Kansas City, Mo. He was the father of C. F. Hall and was associated with him in conducting the Modern Miller. He was a vigorous writer and a man of sterling character.

THE latest Alliance notes are to the effect that the farmers of Kansas and Georgia are going to store their grain to effect a shortage in the market also the Georgia planters will hold back their cotton. We do not believe the report to be true.
 Dorsey, of Baltimore, was married to Miss Leila Risteau of the same city. The ceremony took place at Grace church. We congratulate the newly married couple and trust that a long life of happiness lies before them.

$I^{1}$$\left[\begin{array}{l}\mathrm{T} \text { is funny to see how the milling } \\ \text { papers "flop" every once in a while }\end{array}\right.$ on the Millers' National Association question. It makes little difference to the Association how they write as the members appear to be well satisfied with the present condition of affairs.

T
 has just issued the second part of the "American Dictionary of Printing and Book Making." All who have examined it pronounce it to be one of the most valuable publications ever issued for the benefit of the printing and book making trades.

0what we supposed was reliable ade in our last issue that the owners of the Mechwart roller mill patents had booeghit mitis gegiain Tho Jobin T .
 the Stillwell \& Bierce Mfg. Co., of Day-
gation that no suits whatever have been
commenced under these patents and we regret having made the announce ment.

A MEETING of Missouri and Kansas
Farmers' Alliance men will be held July 16, for the purpose, it is said, of seeing how the farmers can get the highest price for their grain this summer. Movements of this nature have been made in secret meetings all over the country, and it is rumored that there is an immense scheme afoot to induce all the Alliance farmers in the country to hold off their wheat until the last possible moment and then sell it at a fixed figure much above the present market price.

T
HE opportunity for testing one of our new cruisers in actual war has passed by, the Chilian insurgents having surrendered the runaway steamer Itata without a contest. Of course war is to be deprecated, and it is well that a fight was avoided, but while the public generally acknowledges that fact, it is somewhat in the position of a boy with a new knife, and would not have been sorry for a chance to see one of its new ships put to the test, a feeling not unnatural, though somewhat illog cal.
In the chase the Charleston proved herself a good sea boat and a fast steamer. The criticism made on her in some quarters for not catching the Itata are hardly well founded, and indeed are made chiefly by persons who do not realize the difficulty of finding a ship which has the start to begin with, and the whole Pacific Ocean on which to select her course. The chase must be wholly by guess-work, and the chances are tremendously against the pursing stip, no matater hoov grata an advantage she may have in speed.

THF Reatite Commitue of tion Millers' National Association for 1891-2, held its first quarterly meeting in Chicago, June 27, 1891. After formal action upon the minutes of the preceding session, the subject of the Tracing Bureau was taken up and arrangements made for putting the same
into operation on July 9 th. Action in regard to "tricky and irresponsible dealers, cancellation of orders on flimsy pretexts, etc.," which is the province of the Committee on Domestic Trade, was deferred, pending some investigations into the subject. It was decided to closely watch the matter of drawbacks on export burlap bags, and if neces sary, prompt and vigorous action will
be taken by the National Association be taken by the National Association. In view of the bond of the Consolidated Roller Mill Co. in the sum of $\$ 100$, 000 , under which that company is bound to defend any suits brought against members of the association, arising from the use of machines manufactured under their patents, and as the matter is an old one which has arisen after some years of rest, the committee did not deem it necessary to ake any action in regard to a claim for royalty as set forth in a circular letter, which is being distributed by a patent expert of New York. A claim against the P. C. \& St. L. Ry. Co. for loss of a car-load of flour in the Johnstown flood of 1889 (it is said), was assumed by the National Association, which took similar action in reference to a claim against the Anchor Line for delaying the shipment of a certain invoice contracted for special delivery. Suit will be brought against the steam-

$A^{\text {b }}$FTER giving its readers a much needed rest from its customary billingsgate and abusive language for a
few weeks, our Minneapolis contempofew weeks, our Minneapolis contempofreshed energy upon the return of Willie from his European trip, and the Millers' National Association is the victim upon which the manager, editor, general supernumerary and office boy of The Northwestern Miller now vents his spleen.

Why this sudden change of heart and flop from the mueh vaunted champion of the old National to its most implacable enemy is not hard to discover for one who is acquainted with all parties interested. Possibly Willie's toes have been stepped upon and in accordance with his well known policy of rule or ruin, finding that he cannot do what he wishes with the Executive Committee, he forthwith tries to do the other thing.
If his efforts to work injury to the cause of organization among millers meet with the same results that some contemporaries have attained in the same direction in the past,-and we predict that they will-there is no great amount of satisfaction awaiting as a reward therefor. The Northwestern
Miller has in the past through its energy Miller has in the past through its energy
and enterprise made many friends, but the silly, puerile stand taken by it now as a vain attempt to appropriate and claim credit for a scheme which has been talked of by the Millers' National Association, and was put in practical operation by many of its individual members, even from the days when Willie peddled papers on the road, is too absurd to call for anything but contempt and unless Publisher Palmer muzzles his over enthusiastic employe in the near future, the effect of his gambols will, we think, be felt by him in dollars and cents, at no distant date.

While the attempt of the North western Miller to break up the Millers' Nationa Association, and start a new one of its own is not worthy of much attention and probably will have little or no effect upon millers, who, appreciating the benefits of the organization, are members of the National Association, we cannot refrain from calling attention to the absurdity of its position in the matter
Reference to the files of the Northwestern Miller during the past few months, renders it difficult to reconcile its present position with sense or reaIt has ostensibly been endeavoring to aid the National Association in its efforts to organize a Flour Tracing Bureau, until their efforts have resulted in the formation of an Association which though not as strong and broad as it should be, is still a creditable step in the right direction. A start has been made which is a good point gained and now the Northwestern Miller turns and from a policy best known to its editor opposes the movement, "tooth and toenail," prints ten trite reasons therefor, which are all decidedly weak at the best and demonstrate nothing but a sentiment of personal jealousy or disappointment at some thing, and casts slurs and sarcasm at the Executive Committee and officers who have worked hard and eranestly for the benefit of the milling industry of our country.
Now comes the last issue of the paper with a scheme to abandon the National Association and form a new organization, which is to bear a name that jingles pleasantly in Willie's ears, because he really did invent that much of
the scheme and which is to have the same ends and objects of the old Na tional Association.
In the name of common sense, if the old National Association is not what it should be in the opinion of the millers of the United States, what is there to prevent the coming into it and making it whatever they desire?
The doors of membership are open and its constitution, officers and entire outfit may be changed and altered to suit the will of the majority at any annual convention.

Abandon it and surrender its valuable licenses and arguments-W hat for? -Simply to give a new name to an organization composed of the same old members, rendering the same listless support that has made it impossible, except in times of great emergency where patent litigation threatened to maintain a thorough and business-like organization of flour manufacturers.
But the idea is too absurd for further comment.
THE N. Y. Commercial Bulletin in a recent number says: Secretary Foster's announcement that the Government will proceed with the coinage of the trade dollar bullion and recoinage of subsidiary silver, and that "therefore the question of the continued coinage of silver dollars as heretofore is not a practical one at present," is evidently the result of an earnest contest in the Cabinet, and is, in a sense, a postponement. If a complete postponement were possible, and all quesion and anxiety about the soundness and conservatism of the financial policy of the Government could be laid aside until after the currency requirements of the summer and autumn have been met, and the return of gold from Europe begun, it would be a very great gain. But, unfortunately, this is not possible.

It seems to be generally believed that the President has returned from the West strongly impressed with a desire to comply as far as possible with the wishes of factions whose advice, if followed too far, would, he knows, involve consequences that he cannot afford to face. 'The question, therefore, at once arises, how far these dangerous influences are to be permitted to interere with the clear and plain course of conservative and prudent financial adconservative and prudent financial ad-
ministration. Such a question cannot ministration. Such a question cannot
really be postponed. N'here seems to be good reason to believe that the responsible 'Treasury officials recognize the folly and danger of a departure from well-established lines of prudent administration, and that there was at least influence enough in a recent Cabinet meeting to prevent for the present decision that would commit the Government to a reckless course, and this much is reassuring; but, on the other hand, it is apparent that there was a strong influence in favor of the reckless folly and illegality of continuing the regular monthly coinage of standard silver dollars, and sacrificing every consideration of sound and prudent policy, at a time when such a decision would be peculiarly unfortunate.
That this question is merely postThat this question is merely postSecretary Foster's announcement. 'This means that for some weeks or months the West is expected to assume that the final decision will be on the way, while the East is expected to rest assured that it will be the other. The Administration probably fails to realize that, at the present moment, with big crops in prospect and conditions naturally favorable to active and prosperous business, one of the principal causes of depression, distrust and uncertainty, is the existence of just such dangers as
are threatened by the announcement are threatened by the announcement from Washington of a mere postponement of the question whether the fight for sound, safe and honest finances is to be carried on firmly and confidently, or whether there is to be a surrender disaster. disaster.

## CORRESPONDENCE.

LThe following letters are all from our own speciaa
correspondents, and reflect thelr views and the view of the trade in the location from whileh they write.,

## our buffalo letter.

WITH few exceptions the
big and small traders throughout this great looking for heavy receipts country are looking for heavy receipts
of the new crop of wheat, and naturally predicting the lowest prices ever known for this cereal. Europe, too, is of the same opinion, going so far as to refuse our flour in the hopes of buying it cheaper later on. Taking the prospects as presented today they are truly glowing, but it would be no surprise to see the course of the market turn contrary to all expectations, an anomaly in fact. Our wheat will be wanted in enormous quantities by millers at home, to say nothing of the foreign demand which has spoken for it long before harvest.

The only cloud in the bright prospect is a tight money market, but this con-
tingency with the great efforts now being made by bankers to secure the necessary funds and the increase in banking capital in the last ten years is reduced to a minimum. Taking everything into consideration I look for higher prices for the new wh
the demand is well supplied.
The estimate of $600,000,000$ in my opinion is within the limit. The quality of this crop is also assured being far superior as a rule to anything within the last five years. This is another argument in favor of higher prices, as a poor crop is always followed by an easy and steadily declining market. In 1879 a big crop was followed by a much larger demand, creating an activity which caused a sharp advance in prices and why may not history repeat itself this year.
The sensation of the month was the 23d. The upper story was discovered to be on fire about 4 o'clock in the morning and some reports state a loud explosion was heard soon after the smoke was seen issuing from the cupola. It seemed as if the building was doomed before the firemen arrived owing to the great headway made by the flames, but with the improved apparatus of the Buffalo department the damage was principally confined to water. The loss was fixed at $\$ 10,000$, covered by insurance. Only a small amount of flour and 3,000 bushels of wheat were in the mill at the time, the bulk of the flour, about 9,000 bbls. being in the warehouse out of the reach of either fire or water. Mr. George Urban was at the mill alınost as soon as the firemen although his residence is fully five miles from the center of the city. It was a wild ride but with a son of Jewett's Jerome Eddy, 2:164, and a clear smooth
road, it was just the sort of excitement road, it was just the sort of excitement Mr. Urban thinks " comes but once in a lifetime." At noon he was on change wearing the same pleasant smile. George Urban is not one of the "pretty men" of the board but he is one of the most manly, dignified, straightforward, liberal-minded gentlemen of the whole 550 members, none of whom would for the world have missed the opportunity of offering sympathy in his late loss or if necessary placed his bank account at the disposal of such a man as Mr. George Urban Jr.
It will take three months to put the Urban mill in shape for business again but with a fair supply of flour on hand and the leasing of the Frontier mills from Messrs. Schoellkopf \& Mathews,
customers will not suffer for the want of their favorite brands.
Mr. H. J. Harvey of the Queen City mill and John Esser of the Marine, were before the Canal committee investigating the mismanagement of that great water route. Of course they testified no injury would result from the giving away of a valuable strip of water front to a lot of greedy politicians backed by a number of no less greedy capitalists. Both the millers are interested in this scheme.
Mr. C. P. Flatley, the newly appointed agent of the Duluth Imperial Mill Co. of this place, has discovered that
flour is good canal freight and that flour is good canal freight and that
money is saved in shipping it to New York by that route. His first shipment made two weeks ago reached its destination in good order and the next was shipped as soon as that was heard from.
The cargos consisted of 200 tons, in exThe cargos consisted of 200 tons, in ex-
port sacks of 140 and 280 lbs each. In 1886 Pillsbury brought the railroads to time by sending 8,000 barrels through to New York in canal boats and it is not unlikely that the new agent of the Imperial will be seen before his next load goes out, although he declares the roads cannot carry it for the same money, the charges being about oneLalf that asked by rail.
It is reported that car service charges are " winked at" to a few favored shippers. When cars are wanted to carry grain east from the harvest fields which
will be the case in a few weeks, there will be some skirmishing anong the railroad agents to hustle the boys and favors will be unknown. Rail transportation will be more deficient this year after the new crop commences
to move than ever before. The new storehouse for Pillsbury's mills is completed and the flour sifter will be in operation in a few days to-
gether with the other machinery necesgether with the other machinery neces-
sary for the repacking of flour damaged by transportation.
The Duluth Imperial Mill Co.'s warehouse is far from completion, in fact the dock is only started. It will take some months yei before this enterprising company can store flour on their own roperty,
Mann's floater, or the "toboggan slide" as it is called by those who have been so unfortunate as to consign cargoes to it, to be transferred into canal ooats, is still looking for foolish cheapJohns. This elevator was built for a "strike" as a vesselman was honest enough to declare on 'change. "If it had been built to bust" the association,
I would have been willing to help it I would have been willing to help it was put up see how much the owners could get out of the association. They don't want to break the association because that would end their prospects of getting a slice of the swag."
The following new members of the Exchange have been elected: Deloss Graves, forwarder ; P. H. Griffin, car wheel builder; M. Purcell, grain merchant.
Assistant Daly, of the Merchants Exchange, has not yet reported for duty and the prospects are not good for his early appearance at his desk.
The large number of "posted" members for non-payment of dues excites no little comment especially as the list shows no signs of growing smaller.
The bureau for tracing consignments of flour, according to President James of the Millers National Association, will start its labors some time in the fall. He intends to give it a great push when
the time comes. "Lon" is equal to any
thing even to the making of a mostex- easier at present although 4.90 was recellent democratic stump speech. "Gro- fused for a round lot this-week. Rye ver" and "Lon." Keep still my heart. Syracuse has at last been successful in getting Skaneateles lake water and the morning the good tidings were an nounced, Mr. Simons came down to his office, although suffering excrutiating agony from rheumatism. Mr. Simons was the only man who was willing to bet his all that Syracuse would get this water in spite of the canal opposition. Old Niles Case could not be found for a week'after. Hurrah forSimons-he's always right, especially on the grain markets. There are few people in this country so well known among millers as Phillip Houck \& Co., and with all this not a half dozen friends of the senior member of this firm are aware that he fought and bled for his country during the late unpleasantness. Capt. Phillip Houck, of the 65th artillery, is his title. Capt. Houck was as successful in war as he has been in business. His men all came home but the fact that none were injured did not prevent the whole crowd getting pensions.
Buffalo millers are again agitating the question so troublesome in this market for years viz: The suppression
of order canceling fiend. Not one of order canceling fiend. Not one of the millers or agents here are without a long list of firms representing this class of bogus business men. An order is booked from an apparently responsible firm for flour but as soon as the market shows signs or has declined sufficiently to scare the "merchant" he telegraphs to cancel his order. If the market should advance it is different; the amount was doubled that stated in the dispatch. Of course a miller once fooled will not sell such a skunk another barrel of flour at any price, but this does not prevent him from playing the same game on every miller in the country. A system of sending the names of these frauds to every miller in the association should be adopted. The Buffalo Produce Exchange suffered great losses for years until a system of checking up accounts was adopted and firmly adhered to. A customer not settling for purchases on the Monday following is "posted" and a slip is dropped to the office of each member of the the Exchange notifying him that no trust be given to $\qquad$ This has effectually rid the market of tramps who for years plundered every merchant in his turn. Some such system would work to the great advantage among the Buflo millers.
Millers whose hearts have been heavy for some months past are greatly elated when inquiries are received from large dealers in flour at Albany and other eastern points asking for prices. New York agents of Buffalo mills also report a big improvement in the demand for old flours which is a great boon to those who have had large quantities in store there for three months or more. It is
just as I predicted in my last. The just as I predicted in my last. The
stock of flour will disappear much faster than it accumulated and at prices
which will at least let the miller out whole. Prices for a month past have been very unsettled; no attempt to stick to card rates being made. Every mill had its own price and was willing to shade that. The mills have all been running with the exception of one or two unimportant ones and singularly, too, no heavy supply is reported on hand in either of them. Spring patents sold at 5.40 and $6.65:$ straights
5.00 and $5.25 ;$ low grade 3.50 and 4.00 5.00 and 5.25 ; low grade 3.50 and 4.00 . Winter best 5.15 and 5.30 . Rye flour was never so scarce as it is this year and millers are not anxious to purchase this cereal in any sized lots as the crop in this state is reported in fine condition and will be ready to harvest before the 20th of this month.
John R. Weld is a regular visitor on 'change and a keen buyer of our choicest samples of winter wheat. It takes him all day to make his selection but when it is done he has the best offered and is not "stuck" on the price either. He is just a little too close a buyer to please the young crowd.

The canal is falling behind every day and the low rates of $2 \frac{1}{2}$ on wheat, $2 \frac{1}{4}$ on corn and $1 \frac{5}{8}$ on oats it is difficult to see how the boats are kept moving. Rates have several times been advanced with the result of giving the rail the best lots and when this was discovered down would go the prices only to find there was nothing to carry. The rail route has also shown a falling off in grain but the increase in flour fully makes up the deficiency.
Millstuffs are active and unusually steady for this season of the year. Heinold \& Rodenbaugh last week sold 65 cars of sacked bran at $\$ 17$ and $\$ 17.25$ per ton and still had orders on hand. Coarse mids. sold at $\$ 21$ and $\$ 21.50$ and fine at $\$ 23$ and $\$ 24$. The same firm is making a good thing in hay, having about 1,000 tons still on hand which is going to New York at prices netting a iberal profit.
No. 1 hard wheat has for a few years past gradually lost favor and today No. 1 northern rules the roost. Little is being done in the former grade and when transactions are made it is usually at price so near No. 1 winter that the difference is not noticeable. Sales of Duluth wheat in this market up to within a week have been at so much over Chicago. Lately the limits have been 16 over Chicago December for No. 1 hard, 13 for No. 1 northern and 10 for No. 2 northern, but as a rule these prices were shaded, the orders being to "sell as low as your neighbor." This caused no end of strife for trade and many tine bargains were secured.
The Buffalo Merchants' Exchange is now supplied with electric light. Instead of having a pair of big chandeliers a dozen small mandarin caps adorn the ceiling which entirely spoils the effect intended to be produced by Mr.Wm. Cornwall the artist.
The new Wells elevator is well under way and will be finished by October 1. Its capacity will be 500,000 bushels and the builders have taken advantage of all modern improvements to make this the best elevator in Buffalo. The cost will be in the neighborhood of $\$ 130$,000.

Mr. James Rodebough of the firm of Heinold \& Rodebough purchased a new white felt hat the other day and within half an hour after it and the gentleman appeared on 'change he received the following dispatch from Chicago: James Rodebough,

Merchants Exchange:
"Where did you get that hat?
Hutchinson."
The reply was quickly sent (collect): P. B. Hutchinson,

## Chicago:

Bought it on the profits of your advice that wheat was a purchase and would go to $\$ 2$ per bushel."
A boy brought the message back saying the Chicago party refused to receive it and the charges must be col- lected of H. \& R.


The Buffalo millers who "banked" of St. Louis to St. Louis. As the man heavily on high prices of old wheat before the new crop would be fit for use are sadly left. Never take a pointer from Chicago is all the advice necessary.

President Meadows of the new Metropolitan bank of Buffalo is deep in the mysteries of that business and has not shown up on 'change since the bank opened on the 1st of July. His presence will be missed by a few.

If the Buffalo correspondent of a certain milling sheet in the northwest will meet the Buffalo correspondent of the United States Miller between two days in Boston, satisfaction will be guaranteed. Weapons, stockings filled with shorts, distance twenty paces. Or if preferred a column or two of his padded Buffalo chips against a stickful of the readable matter from the United States Miller, he to choose the judges if the latter contest is accepted. As Sir. John A. McDonald would say: "My dear boy, you're not right in the head."

## OUR ST. LOUIS LETTER.

ROBABLY the item of great world to come the milling this month will be the indictment of Mr. J. B. M. Kehlor, of Kehlor Bros., by the United States Grand Jury at Springfield, Ill. It was claimed that Mr . Kehlor has violated the Interstate Commerce law; the claim being based on the testimony of a discharged Wa bash railway clerk. It is claimed that a commission has been paid Mr. Kehlor for his business. For some time testimony has been taken from clerks, etc., but the principals have not been called before the jury, as that body cannot indict the witnesses who come before it. Mr. Kehlor's cashier, Mr. Ellis, was called as a witness, about the first of this month and later Mr. Kehlor and Mr. Knight, of the Wabash, were notified of their indictment. Without waiting for the serving of the warrants both of them took the first train for Springfield and there gave the required bond for their appearance at the next court term. As this case is practically the first good one to come up before the courts it will be carried out very strongly by the Interstate Commerce people. As the law decides that every bill of lading on which a rebate has been paid is subject to the $\$ 5,000$ fine and two years' imprisonment, and as the court appears to be in possession of not a few such bills of lading I am afraid, if the charge is proven that it will not go very easy with the gentlemen indicted. As rumor has it, several flour shippers are guilty of the same offense and are at present in no enviable frame of mind as regards their own chances of getting safely over the affair.
Omaha's board of trade representatives arrived here July 3 d and after a reception on 'change were initiated into our inspection methods. Later they were shown about the city and given a view of our river front by an excursion on the river.

Kansas millers are again making things lively. Lately they have been discussing the plan of sending one of their number, to South America to make the necessary arrangements for grain and flour shipments. It is to be hoped that it pans out all right.
The State Board of Railroad Commissioners met on July 7th and issued an order summoning the traffic managers of two of the principal lines to answer to the question, why wheat rates
agers gave no valid reasons a reduction of from 1 c to 2 c per 100 pounds was made according to territory. This makes the reduction average about $\$ 5$ a car. The reductions are to go into effect right away.
Late crop reports place the Southern Missouri and Kansas outputat 26 bushels to the acre with an average of 63 pounds to the bushel. Yet at the same time alarming reports come in from the West of the grasshopper pest. Already it has reached Kansas where the harvesting has just been completed and from all accounts the insects will soon reach Missouri. Fortunately they come at a time when the wheat is for the most part out of the field, yet I doubt not but what some damage will result from their incursion
During the last month St. Louis has received as visitors several prominent and French and British grain and flour men, notably Messrs. Porteus Klein, the former of Liverpool and the latter of London. They all say that they will need our wheat largely this year to help them out in their orders, and it would appear that fall flour consignments to foreign ports will be in xcess of the past few years' shipments.
The Traffic Association is actively engaged in forwarding their organization. They have chosen a very able manager to see to the freight interests of their members, and are now looking for suitable quarters for their general offices. It is their intention to see that the Interstate Commerce Law be not violated to their detriment, to work against unjust discrimination, secure better shipping facilities and speedier transportation and other kindred sub-
jects.

> wheat.

Receipts this week though doubling those of last week, were far below the general estimate and reached only 493,041 bushels, with only 203,814 bushels for the preceding week. Ship ments were very small, being only 123,723 bushels this week and 13,582 bushels for the week previous. Stocks are naturally increasing considerably and are quoted 149,587 bushels, an in
crease of 62,947 bushels over last week crease of 62,947 bushels over last week
Withdrawals for exports were very large, aggregating 205,847 bushels, while only 44,423 bushels left the city by rail and 38,062 bushels entirely sufficed all city demands. The mar kets in both No. 2.Red and No. 3 Red were active; in fact in the latter grade buyers could not get enough either for city consumption or for export. No. 2 Red was abundant on the market but was readily taken up by the export trade. Quotations are:


Receipts footed up 21,105 bushels as against 15,315 last week. Shipments were also larger being 41,784 bushels this week and only 24,494 bushels for the week previous. Only a poor local and Southern demand, with no foreign trading. All low grades were dead on the market, while there
was but a suggestion of a demand in high grades. Many of the mills remain idle and it will not be until the new wheat deluges the market and prices that any activity in flour will be felt. Quotations are XXX 83.00 @ $\$ 3.15$; family, $\$ 3.25$ @ $\$ 3.35$; choice,
$\$ 3.60 @ \$ 3.75$; fancy, $\$ 4.10$ @ $\$ 4.25$;
extra fancy, $\$ 4.60 @ \$ 4.65$; patent, $\$ 4 .-$
75 @ $\$ 4.85$. New flour, patent, $\$ 4.60$ 75 @ $\$ 4.85$. New flour, patent, $\$ 4.6$
$@ \$ 4.70$; extra fancy, $\$ 4.35$ @ $\$ 4.40$. bran.
High but fluctuating and unsteady very good Eastern demand but only fairly good Southern and local orders Prices are from .65 @ .66, sacked screenings at 70 cents.
Waiter Howard Bain.

St. Louis, July 13, 1891.

## OUR LONDON LETTER.

TO crops that had a good seed bed and made a fair start the past month has been of the greatest benefit and the heat which has
prevailed during the last prevailed during the last three weeks were unable to harm the cereals as they were very strong in root. The outlook
of the English wheat fields is most sotis factory and the steady improvement in the weather have combined to cause a retrograde movement in prices. The concessions were made on the first of June and since then each week has marked a steady decline. Few buyers, even now feel disposed to operate be yond their immediate requirements During the late rise the best Mark Lane price for No. 1 fine California was 48 s ., and the present price for the same quality off stands is 44 s .6 d . per quarter. Australian was 46 s ., but is now offered at 42s. 6d. making a decline of over three shillings on the past six weeks. Russian wheat commanded 39s. to 46 s . at the best period and to-day the same quality can be bought at 37 s . to 43 s . per quarter. The sudden improvement in the weather and its effects on the wheat plant makes it now possible for the wheat harvest to become general in counties south of the river Thames by August 8th, in the midland shires by the 20th, and in the north by the end of the month. When the first ears of wheat are seen it becomes an easy matter to calculate the probable date of harvest; and the first ears of wheat were shown on Mark Lane Corn Exchange on the 19th of June or some nineteen days later than the average me. In Scotland wheat ears were 20th of June and were districts early as the ported from the central districts by the the 23 d .
The unprecedently large arrivals of wheat and seeds in Bombay this season and the pressure upon the railway administration has not been relaxed. For example the G. I. P. staff at Wari Bunder still have to deal with an average arrival of about a thousand truck loads a day. These heavy shipments now taking place from Bombay and Calcutta with minor exports from other ports which have commenced fully fortnight earlier than usual, do not tend to keep the prices in England at a high level and in my opinion the next six months will be a time when values will remain stationary. The values would have fallen still more but for the fact that in France a deficiency of $16,000,000$ quarters of wheat will hav to be covered from the next season's stocks either by imports or by using old stocks. The crop of last year was officially estimated last autumn at $41,000,000$ quarters, but is now known not to have exceeded $39,000,000$ quarters. By the end of July about $5,250,000$ quarters will have been imported making a total supply of $44,250,000$ quarters. The annual requirements in France are not less than $41,500,000$ quarters to which this season has had
seeds on account of a large area under wheat having to be replowed
As promised in my last the following programme will give the readers of the United States Miller an idea of the amount of work and pleasure that will be gone through at the forthcoming Northampton Convention which will be held next week. It will be noticed that pleasure predominates and only two papers will be read. This is much to be regretted as at these conventions the principal object of meeting should be to have five or six good papers read and discussed, matters which affect the trade and require to be put into shape and brought before Parliament,

## OFFICIAL PROGRAMME.

$11 \mathrm{a} . \mathrm{m}$. -Reception of the Convention by the Mayor and Corporation of
Northampton at Guildhall. 11.30 arton at Guildhall.
$11.30 \mathrm{a} . \mathrm{m}$.-Annual Business Meeting, Report of the Council, Election of
President, Officers President, Officers, \&c.
$11.30 \mathrm{a} . \mathrm{m}$. -Reception of the Lady isitors by the "Committee of Ladies." 1 p. m.-Luncheon in Masonic Hall a la carte.
$3 \mathrm{p} . \mathrm{m}$ - - Business Meeting, when papers will be read by Mr. J.W. Loveiband, Mayor of Salisbury, on "The Tintenometer," and Mr. C. E. Gittens on "Softening of Water for Steam Boilers."
6.30 for 7 p . m.-Annual Dinner (Ladies' and Gentlemen's Tickets, exclusive of wine, 10s. 6d.) at Masonic Hall, when the chair will be taken by the President.

## wednesday, 8th july

$10.30 \mathrm{a} . \mathrm{m}$.-Business Meeting, when papers read will be discussed
Hall a la carte. $1.45 \mathrm{p} . \mathrm{m} .-$
1.45 p. m.-Visit Mills, Shoe Factor-
ies, Breweries, \&c. ies, Breweries, \&c.
$4 \mathrm{p} . \mathrm{m} .-$-By special invitation of the President and the Local Association the visitors will be conveyed in carriages to Althorpe Park, the seat of Earl Spencer K. G., where a Garden Party will be given. It is hoped his Lordship will be able to receive and conduct the vis itors through the library, grounds, \&c. \&c.

## 8 p. m.-Party returns to the Mason- Hall, when at

$9 \mathrm{p} . \mathrm{m}$. a Smoking Concert will take place in the Banquet Hall, when it is hoped that visitors will give their assist ance.
thursday, 9th july.
9 a. m.-Special Train will leave
Castle Station for Leamington at reduced rates. The party will then drive to Stratford-on-A von and visit at 10:15 a. m.-The Beautiful Parish Church, the Theatre and Monument, Shak espeare's Birthplace, and the Fountain given by Mr. G. W. Childs, of Philadelphia, in 1887.
11:30 a m.-Leave Stratford in Cariages for Warwick.
12:45 p. m.-Luncheon at Woolpack Hotel at Warwick. Visit Castle, and eave Warwick at
3:15 p. m. for Kenilworth Castle where a photograph of the party will be taken.
5 p. m.-Leave Kenilworth for Leamington, passing Stoneleigh Abbey en

## 6 p. m.-Arrive at Leamington.

6:15 p. m.-Special train to North-
mpton.
Tickets for the whole excursion, including luncheon (exclusive of Wine) at Warwick, and admission to the various sights, etc., etc., 18s. each.

> FRIDAY, 10th July.

10 a. m.-Meet at the Masonic Hall. Visit Flour Mills, Queen Eleanor's Cross, Churches, Chapels, etc., etc.; or
Drive to Blisworth. Drive to Blisworth.
11 a. m.-Organ Recital at All Saints' Church.
1 p. m.-Luncheon at Masonic Hall, a la carte.
2 p. m.-Carriage Drive to Castle Ashby to view the Grounds (by kind permission of the Marquis of North

Tickets for the Drive, including Tea at Falcon Hotel, 5s.
$8: 30 \mathrm{p} . \mathrm{m}$.- Return to Masonic Hail, where an impromptu dance will take place. To suit the convenience of the members of the Association and their friends morning dress will be admitte both for ladies and gentlemen.
So much for the forthing convention of the National Association of British and Irish Millers which is becoming year by year more like an excursion. The mills that are being builtat Cardiff for Messrs. James Tucker Limited are making steady progress towards completion. The contract for machinery was placed last week with Messrs. Whitmore and Binyon of Mark Lane London, El and Wickham Market.

These mills when finished will form one of the most complete plants in the country and they will have a capacity of 50 sacks of flour ( 280 lbs .) per hour. Most of the dressing will be done on patented round reels and the purification will be effected by Victoria purifiers. The wheat cleaning department will be of a most complete character and the machinery, which will be capable of treating all kinds of wheat, will be principally of the well-known "Eureka" pattern, separate sets being arranged for hard and soft wheats. The mills are so situated that vessels drawing 30 feet of water will be able to come alongside and the machinery in the warehouse for discharging the grain from the vessels and storage of same will have a capacity equal to discharging teree such vessels. By the way, the eldest son of Mr. Whitmore of the firm of Whitmore \& Binyon, the milling engineers who are much envied by their other competitors for securing the large order, was for some time in the works of Messrs. E. P. Allis \& Co. of at the Iron works, Wickham Market. Some idea of the competition amongst milling engineers will be gathered by the annual report for the year 1890 dealing with the inspection of Liverpool factories. The accidents in this district amount to a total of 275 against 305 in 1889, 53 proving fatal. Most of these occurred in chemical works, slate quarries and iron and steel works of various kinds and the inspector of factories in the report complains greatly as to the apathy shown by engineers with regards to safety in continuing to loose collars of shafting. A well-known firm of milling engineers is mentioned in this report as having recently erected a flour mill in the district which was visited by the inspector who found that every loose collar throughout the building had been fitted with screws not only not countersunk but with half
an inch of screw as well as head projecting.

The strike of Grain Porters in Dublin still continues without a near approach to a settlement although the Shipping Federation are sanguine of winning as they state they can get an unlimited number of men. A cargo of malt was discharged on Saturday last into bins especially erected in the Custom House Dock Stores and the corn which the Great Southern Railway men refused to take from Messrs. Richard Perrin \& Son's men was accepted on Monday night last. Railway directors are determined to prevent their men from refusing to take delivery of any description of goods, no matter from what merchant consigned. The men, it seems, are determined to hold out, and say they will win, as they expect sup-
standing that Mr. Hunter has imported into Dublin some hundreds of workmen, and it is understood that he will bring 200 more from the North of Ireland and Scotland.
I have just learned that the National Association of French Millers estimates the wheat crop of France at 82 to 83 million hectolitres or $28 \frac{1}{4}$ to $28 \frac{1}{2}$ million quarters which would make the deficiency between 13 and 14 million quarers as last year's crops were officially stimated at 41 million quarters.
London, July 2.
X. Y.

## MILWAUKEE NOTES.

The Board of Directors of the Chamer of Cammerce has prepared amend ments to the rules governing the inpection of wheat, the adoption of which it recommends as a whole. The amendments announced at the session uly 24 and voted on by the Chamber, July 1, who adopted the recommendaions of the board.
The recommendation of the board is as follows:
Resolved, That rule XIX be and is hereby amended by the inserting of the following paragraph in section 1 , under the heading of "Winter Wheat."
No. 2 hard winter wheat, to be sound, reasonably clean and composed of not less than 90 per cent. of the varieties of wheat known as Turkish "winter," and that section 7 of rule XI e and is hereby amended to read as follows:
All contracts for the purchase or sale of
wheat, unless otherwise specified, shall be Wheat, unless otherwise specified, shall be
inderstood to be for No. 2 wheat, comprising No. 2 red winter and No. 2 hard winter wheat, and these grades, or the higher grades of these varieties, either in whole or in part, shall be received in fulfillment of such contracts.
A cut of 5 c per 100 lbs . in eastward land-and-rail rates has been inaugurated and one company's line at least akes flour and millstuffs to Boston at 20 c per 100 lbs . The other lines probably will follow suit.
$\mathrm{T}_{\text {HE }}$ failure of one of the largest grain commission houses in Milwaukee, Mohr, Zinkeisen \& Co., caused something of a sensation in financial and commercial circles; and legal proceedings were commenced by the firm's bankers.
J. A. Bbyden \& Co.'s warehouse and elevator had a narrow escape recently from total destruction by fire. It was, however, saved with a loss of only about $\$ 1,500$.
The Edward P. Allis Co. recently filled an order for a 200 h . p. ReynoldsCorliss engine in the shortest time on ecord. At 10 o'clock a. m. a telegram arrived from an electric light company
in an Iowa city, stating that their old high speed engine had met with an accident sufficient to render it beyond repair, and a new engine must be obtained in the shortest possible time Stock parts of the proper sized engine were put together by a force of selected skilled workmen, and by 4 o'clock p.m. of the same day a special train, consist ing of a locomotive and flat car, drew out of the Allis yards en route for the Iowa city, bearing a completed ongine. So the electric company lost the revenue
of one night's service only.

## JULY CROP REPORT.

合HE July report of the Department of Agriculture makes the acreage as compared with breadth harvested last year of corn, 108.3; potatoes, 102.3; tobacco 102 Condition-Corn, 92.6 ; winter wheat 96.2 ; spring wheat, 94.1 ; rye, 93.9 ; oats,
87.6; barley, 90.9 ; potatoes, 95.3 ; tobacco, co, 91.1. The heavy increase in corn acreage is more apparent than real. The comparison is with the breadth harvested last year when there was a loss of $6,000,000$ acres by abandonment on account of drouth. The present return makes the acreage slightly less than $78,000,000$ acres or somewhat smaller than the area actually planted. Kansas and Nebraska naturally show a large increase, but their area apparently does not exceed that harvested in 1889. A further and more minute investigation will be made in the districts which suffered most from drouth last year.

The crop is late in all sections on ac count of drouth and unfavorable conditions at the time of planting and cool weather during May, but June was warm with abundant moisture, and the crop was coming forward rapidly on July 1. In the Ohio and Upper Mis sissippi valleys the progress during the month was especially gratifying, but in Kansas and Nebraska considerable dam age resulted from excessive rainfall. In many districts the June rains prevent ed proper working, leaving fields foul but a few days of sunshine would rem edy this. The general average is a fraction below that of 1888 and of 1890 and slightly above that of 1889 . Th verages of surplus states are: Ohio, 93 Indiana, 95; Illinois. 96; Iowa, 94; Missouri, 88; Kansas, 82; Nebraska, 90.

The condition of winter wheat is re turned practically the same as in June. The crop is haryested, except in its more northern habitat, with a condition the highest reported since 1879 with one exception.
So far as can be judged at time of harvest the berry is reported generally plump and in keeping with the heavy straw, but occasionally mention is made of short heads. Averages of principal states are; Pennsylvania, 98; Ohio, 97 Michigan 89; Indiana, 99; Illinois, 98 Missouri, 98; Kansas, 94; California, 98.
The condition of spring wheat improved during June, the advance being in Minnesota and the Dakotas, where the month was exceptionally favorable. Chinch bugs have appeared in portions of the Northwest but with no appreciable damage yet. State averages are: Wisconsin 77; Minnesota, 93; Iowa, 96; Nebraska, 96; North Dakota, 98; South Dakota, 97; Washington, 98.
Oats have improved during the month, but the general average is the lowest reported since 1879 except in 1887 and last year, when a July condition of 81.6 was followed by a practical failure of the crop. The poor condition is generally the result of drouth early in the season, the present improvement having followed the seasonable rains and high temperature of June.
The first return of potatoes shows condition higher than the average of recent years, while that of tobacco is higher than in any year since 1886. The fruit prospect is very flattering in New England and the North Atlantic states and West of the Missouri river to the Pacific coast. The crop in Ohio and Michigan was materially damaged by the frosts of May. A special cable from the European agent indicates a heavy deficiency in the European rye crop.

All persons desiring to reach the entire milling and grain trade of America, by circular or otherwise, should obtain a copy of Cawker's American Flour Mill and Grain Elevator DIRECTORY YOR 1890-91.

## the gluten in wheat

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E relative proportion between the gluten and starch differs in different countries, and also on different soils; but the gluten being by far the more valuable of the two, any slight increase in its percentage would greatly improve the wheat. Our wheats have the reputation of possessing gluten in large proportions, and in many parts of the world they are sought eagerly for seed. But a great deal of this has been due to the fact that the wheat has been grown on the virgin soil of the Northwest, where the rich nitrogenous matter has been collected for centuries. Wheat grown upon the virgin soil of this country is so much superior to that of many other countries that 100 pounds of it will go further to sustain the strength of workingmen than 150 pounds of wheat from Australia and ther countries.
The object in cultivating wheat then is to increase the quantity of gluten, and the application of manure for this purpose has not yet been definitely settled. The fertilizer that will produce the heaviest crop of wheat does not always produce the greatest amount of gluten. Virgin soil, however, is the soil, when cultivated, that contains the essentials for producing a high percentage of this constituent, and anything that will tend to keep the soil up to this standard is good.
A great deal also depends on the wheat. That the West is specially adapted by the character of the soil for wheat growing may be shown by a curious result of sowing foreign seeds there. The round varieties of wheat contain a less amount of gluten than the elongated, but when these same round seeds are sown in the soils of the West they gradually become elongated, increasing the amonnt of gluten as they change in shape. Flour made from wheat rich in gluten is never the whitest, but has rather a creamy tint. The mistaken idea among many is that the whiter the flour is the better it must be. It may make the whitest bread, but it does not contain a large percentage of gluten, which is the constituent of the wheat that goes to make muscle and strength.-A. B. Barrett in Chicago Journal.

Milling in Sweden.-Only a few years ago flour milling was in Sweden in a most primitive condition, but in his respect a great change appears to have recently passed over that land. Large and well organized mills have sprung up as if by magic, especially in the ports, and their products have, it is said, well-nigh driven out the fine Hungarian, German and Russian flours, which used to find a ready market in Sweden. Competition between the native houses is already severe, and is of course likely to increase in proportion to the multiplication of merchant mills. But although the Swedes are taking so kindly to white bread, the bulk of the breadstuffs consumed still consists of coarse rye flour, which is caked into a bread peculiar to the country. This rye flour finds a good market in the sister kingdom of Norway, which seems to be less well provided with mills. Swedish millers are plainly men of some resource, as after bad wheat harvests they find work by making barley meal. Danish millrights used
to enjoy a sort of monopoly in Sweden to enjoy a sort of monopoly in Sweden of modern merchant mills they would appear to have been displaced by German milling engineers.

$\mathbb{N}$Ws.-The Coon Island Flouring let. Work will commence at once. Rapid Mill, of Washington, Pa., has been leased by J. D. Frazier who has put in the roller process. Near Charleston, Mo., July 5, John S Cordrey lost 2,2
sured for $\$ 1,500$.
At Hollister, Cal., July 6, the flouring mil furniture factory, and a store were burned Loss $\$ 4,000$; insurance $\$ 500$.
AT Decoto, Cal., July 4, Salz's grain warehouse, also store and saloon were burned. Loss $\$ 20,000$; insurance $\$ 10,000$.
The Manheim Roller Flour Mills, at Manheim, Pa., wnich have been undergoing reheim, Pa., wed operation July 9.
At Alvarado, Cal., July 4, the Alvarado Roller Mill and Grain Elevator. were
Total loss, $\$ 35,000$; insurance $\$ 25,000$. Total loss, $\$ 35,000$; insurance $\$ 25,000$.
Daniel F. Dietrich \& Sons will
Daniel F. Dietrich \& Sons will begin the manufacturing of flour at Reading. Pa.,
shortly, under the firm name of the Penn shortly, under the
Milling Company.
The new grist mill of Richmond and Rafter at Clifton Springs, N. Y., was damaged
by fire to the amount of $\$ 300$, July 2. Fully by fire to the amount
covered by insurance.
At New Rockford, N. D., July 6, J. W. Richter's elevator was struck by lightning and burned with 30,000
A large elevator and corn mill is being erected at Bangor, Me., by J. C. Towle \& Co., who expect to have it rea
by the first of September.
At Warren, Minn., July 6, the Inter-State Grain Company's elevator and warehouse with 10,000 bushels of wheat, was burned Loss, $\$ 25,000$; fully insured.
The elevator at Brownton, Minn., owned by Childs \& Hinreichs was burned with sevThe building and grain were insured
The liabilities of Chas. Haight \& Co. flour commission merchants at No. 24 State
street, New York, are reported to be about street, New York, are reported to be about
$\$ 300,000$, and nominal assests considerably $\$ 300,000$
larger.
On May 25 Mr . J. C. Hotham who recently rented the Ebensburg (Pa.) Steam Flouring Mill took charge of same. As soon as some needed improvements and repairs are made the mill will be put in full operation.

A syndicate organized at London and having Paris interests allied with it, has sent
a representative to the United States with authority to invest $\$ 28,000,000$ in grain. One of the heads of the Rothschilds in Paris is interested.
The London barley market is higher owing to reports of a serious drouth in south Russia. The weather in that country has
become excessively hot-"tropical" Beerbecome excessively hot-"tropical" Beer-
bohm calls it-and all crops are being seriously damaged.
At Davison, Mich., July 9, the flouring mill of D. P. Bothrick was burned. The mill was three stories high, and, with the machinery, was valued at $\$ 7,000$. It was a total loss. Insured for about $\$ 5,000$.
was little flour and grain in the mill.
McCullough \& Suffell have leased the flour mill at Connor's Point, West Superior, Wis. The mill has been shut down for some time and the new lessees are placing it in good repair preparatory to starting up as soon as possible.
200 barrels per day.
200 barrels per day.
The little village of Clitheral, Minn., four miles east of Battle Lake, Minn., suffered a severe loss by fire June 17. The grist mill, Northern Pacific elevator and two box cars were burned. The fire originated in the mill, which was being operated day and night Loss, $\$ 85,000$; insurance not known.
A Lansing, Mich., report says grain lice are almost so numerous as they were two years ago, when considerable damage was
done. Bloomington, Ill, says the arm worm is playing sad havoc with wheat in worm is playing sad havoc with wheat in Dakota terrific storms have damaged the crops.
W. A. Davis, a millstone manufacturer o the town of Rochester, Ulster County, N. Y. has been placed in jail at Kingston to await the action of the grand jury. He is charged with having forged the names of many of the principal business men in the neighborhood of his home to notes aggregating upwards of $\$ 300,000$.
At Toledo, O., May 27, ground was broken
for a large wheat elevator which is being built in connection with the Toledo Flouring Mill. The elevator will be $50 \times 100$ feet and 70 feet high, and will have a capacity of 200,000 bushels. The mill which is just ap4,500 to 5,000 barrels per day.
The contract for the erection of the Humbaugh, Mariott \& Co. elevator at Rapid City

City elevator capacity was increased 70,000 bushels and its milling capacity 150 barrels a day last year but there is still a demand for more mills and more elevators.
A syndicate has been formed at Gaithersburg, Md., to be known as Gaithersburg Milling and Manufacturing Co., for the purpose rels daily rels daily capacity. The same motive powe is to be used to operate machinery for cut ting and bailing hay and manufacturing Tertilizer. The capital is $\$ 50,000$.
Tie large roller process flouring mill at
Waynesborough, Va., which for several Waynesborough, Va., which for several
months bas been idle, will shortly be put in months bas been idle, will shortly be put in
operation. Andrew Boling, of the Augusta Roller Mills, near Staunton, and M. Kiolighan, a grain dealer of Staunton, have obtained possession of the mill and will soon have it running to its full capacity of 130
barrels per day.
The Stoneboro Steam Flouring Mill, at Franklin, Pa., owned by George W. Porter and A. E. McClelland, was burned to the structure erected about five years ago, and was furnished with first class modern machinery. The origin of the fire is unknown, but it is supposed to be the work of an in cendiary. Insurance $\$ 5,000$.

The Marion Milling company, of Marion, O., recently incorporated, has succeeded to the Gregory \& Sears mills with a $\$ 30,000$ capital and officers as follows: T. P. W allace,
president; J. Strelitz, vice president; J. B. president; J. Strelitz, vice president; J. B.
Fisher, secretary; William Wuntsuiger,
treasurer; M. E. Burke, manager, directors treasurer; M. E. Burke, manager; directors
E. Huber, T. P. Wallace, J. Strelitz, T Fahey, J. B. Fisher, M. E. Burke, E. Conley
Luke Marvin, assistant manager of the
Lage Superior Elevator Company, Duluth, states that the 279,095 bushels
which the experts could not account for in their report in St. Paul, is the exact amount of bin burned wheat disposed of under the direction of the railroad and warehouse commission and of which the experts would, of course, get no account. The experts apshipped out without inspection or weighing. Contract has been signed by the Cochrane Roller Mills, of Escanaba, Mich,, to imme diately remove their plant to Basic City. In stead of the Cochrane Roller Mill Co., the concern will be known hereafter as the Basic
City Iron Works. The Company will make a city Iron Works. The Company will make
specialty of manufacturing flour mills. They will also manufacture other machinery, such as chilled plates for ore crushers, car axles, turn-tables, chilled shoes and dies for stamp mills, couplings, shafting, boiler fronts, fire
arches, fire doors, fly wheels, etc.-Va. Manufacturer.
AT West Superior, June 23, a meeting of was held at which the following director were elected: W. H. Slack, H. T. Fowler Peter Deyo, C. E. Billquist, John L. Lewis,
A. A. Freeman, E. A. LeClair. The stockh. A. Freeman, E. A. LeClair. The stock subscribed. Director Billquist is of the old New York flour firm of Grinnell, Minturn \& Co. that will occupy the same position to the new mill company as the defunct Chas Haight \& Co. did originally.
The Mazomanie Milling Company and Bronson, Draper \& Co., bankers, both of
Mazomanie, Wis., suspended on June 25. The milling firm is composed of Bronson, Wendt \& Watterson. Watterson is a wealthy busi ness man of San Francisco. The assign ment is caused by the heavy drop in flour the milling firm having forty car-loads in New York. The bank is a private concern
and is directly interested in the milling com and is directly interested in the milling company. The liabilities are estimated at $\$: 0$, ,
000 . The assests will more than meet them

There has been inaugurated in Brussels an international bureau for the publicatio of the customs' tariff of all countries. The
bureau is supported by English, French, German, Belgian and other governments. and it is expected that it winl render great service to the commercial world. The foreign with the organization of the institution. Probably the most important feature of the bureau will be the publication once, or sev-
eral times, monthly of an international custom's bulletin, printed in the English, Ger man, French, Spanish and Italian languages,
and containing the custom's tariffs of the and containing the custom's
world, and other information.

AT Buffalo, N, Y., June 16, the flour mill esee street, was damaged by fire. The flames were confined to the top story. Loss, $\$ 40$,000 , of which about $\$ 4,000$ is on the building, and 3,000 contained 300 to 400 barrels of iour ruined by water. The heaviest loss is on
the machinery. The cleaning machinery was on the fifth floor. This and the large
amount of belting were ruined by fire. The
remainder of the machinery was ruined by water. is $\$ 11,500$. Fire also did $\$ 5,000$ damage to building and machinery at the works of the Barber Asphalt Company on Fourth street near the canal.
At Lancaster, Ky.. June 29, the granary elcnging to W. H. Kinnaird and operate by H. B. Marksburg, was burned. Loss $\$ 12,700$, located as follows: Building, $\$ 4,600$; property of Cogar \& Haas, Ianville, fully property of Cogar \& Haas, Danville, fully nsured; 3,000 bu. of wheat owned by Dud
dason Bros., Gilbert's Creek, policy o dason Bros., Gilbert's Creek, policy of
$\$ 4,000 ; 6,000$ sacks belonging to H. A. B $\$ 4,000 ; 6,000$ sacks belonging to H. A. B.
Marksburg, the manager, $\$ 6.000$; no insurnce. The companies in which policies were held were Liverpool \& London \& Globe,
North British and Mercantile, Queen, North British and Mercantile, Queen,
Royal, Springfield Sun, Mutual and Aetna Two gondola cars, property of B. \& O. Rail road, were also burned, with a loss of $\$ 1,000$ The fire is the work of an incendiary.
The following Milling Companies were inorporated during the past month. The Ravanna Milling Company of Ravanna, of arkeld County, Kans., capital $\$ 5,000$. Direc Bricker, Fred. C. Thomas and John Newhall Fairplay Milling Company, of Fairplay, Mo, capital $\$ 10,000$. Incorporators-H. D. Train Jas. B. Eisley, John W. Raynor, S. D. Strain
G. McAchron. The Progress Allianc Milling and Graining Company, of Pottsboro Tex.; capital $\$ 5,000$. Directors-Wm. By Reeves and John Beaty. Majorsville Millin and Mining Company Majorsville Millin grist mills, at Majorsville, Marshall county, grist milis, at Majorsville, Marshall county
Pa. Capital $\$ 7,000$ with the privilege of inreasing it to $\$ 20,000$. S. T. Alley and thi e incorporators.
of West Super or the chamber of commerce fter staperior, Wis., July 6, T. G. Alvord, eive a ring the object of the meeting to reto revise the operative methods of the Su perior commercial union, said: "I regret to inform the chamber that the meeting is being polluted with an element which must be expurgated." This refered to J. Adam Bede. Bede denied having lied about Superior. F. iven his choice of going quietly or being thrown down stairs. The motion was adopted and Bede was ejected.
The flour movement through the port of uperior, Wis., is holding out unusually Minneapolis mills. The presence of the larger class of lake vessels at Tower bay slip lock daily is an interesting feature of the changes in this port. The Northern Steamhip and the Eber Ward line are each goin ments of importance for local delivery.

## LIPPINGS FROM THE MILLER, (LONDON.)

Elevators in India.-The report of the Bombay Chamber of Commerce for the year 1890 contains an interesting orrespondence on the subject of grain elevators, and although the letters themselves date back as far as the latter end of 1889 and the commencement of 1890 , yet this question of grain handling and storage can never be out of season in connection with our great Eastern dependency. In September of 1889 a proposal was laid before the Govern-
ment of India by Mr. James G. Smith of Messrs. Richie, Stuart \& Co., Bombay, for founding an Indian elevator company, which should work in India on the lines of the great elevator companies of the United States. That is to say, this company was to undertake to clean, grade and store wheat, to deliver "grain receipts," which should be trans ferable, like their prototypes in Ameri ca; and also to issue "certificates," which it was suggested, should be countersigned by an official appointed by the Government. The promoters of the scheme held that a fair start might be made with a capital so small as $\kappa 25$, 000, but asked of the Government a guarantee of 4 per cent. for the first ive years', work, such advances to be repayable, without interest, from one half of such surplus profits as should exceed 6 per cent. The Government
was also asked for grants of free land for the company's purposes, and for a
sort of monopoly of the business for a erm of five-and-twenty years. Some of these claims certainly seem large, but the scheme was carefully considered by the Indian Government, and, as usual the opinions of experts were taken. Colonel Filgate, R. E., was strongly in favor of the enterprise, while that authority on Indian and other wheats, Mr. John McDougall, though advocating the establishment of grain elevators as a necessity for India, pronounced against the grant of any sort of monopoly to private firms, counseling the Government to take the scheme into its own received from Mr. John Marshall, the secretary of the Bombay Chamber of Commerce. Mr. Marshall, speaking on behalf of the committee and of other members of the Chamber, many of whom were reported to be up-country buyers and exporters, declared elevators o be unsuited to the requirements of the country, and to be financially impracticable. He pointed out with some orce the difference in the conditions of Indian and American agriculture. In the United Slates large tracts are sown with the same kind of wheat, and thus grading is a comparatively easy task. There are many railways, so that every means is at hand for quickly and cheapy taking cereal crops to central points, while the climate renders the storing of produce in warehouses a necessity All these conditions are, it is urged, absent or reversed in India. The wheats grown, are of too varied a character to be graded without much greater labor than is entailed in America. With the
still undeveloped railway system, facilstill undeveloped railway system, facillies for conveying grain to central points are few; while, on the other
hand, the cheapness of labor is calculated to take a large discount off the economy effected by handling grain on a large scale and by machinery. The heaviest objections brought forward by Mr. Marshall are based on the climate. He says that "for seven or eight "months of the year grain can besafely kept in the open air without expense "for either rent, fire insurance or other
"charges incidental to warehousing: while during the other four or five months the native system of storing "in pits is not only inexpensive, but "gives immunity from weevils which no mode of warehousing ensures. The loss in weight from this cause alone "during the monsoon would probably be not less than 5 per cent., not to "speak of the still more serious damage to quality which results; and for this reason alone, if no other objection ex"isted, the members of the Chamber "consider that elevators would prove Chamber appears to have formulated its judgment on results given by certain elevators of the old school, in which no aeration was secured. Air is a deadly enemy to weevils and similar insect lagues, and it seems probable that in unreservedly condemning all elevators, without reference to system, the Bomspoken too hastily.

Good goods and fair treatment will win every time. On this principle the Union Iron Works, of Decatur, Ill., are meeting with deserved success. In a recent letter to us they state that they are very busy, having all the work that
they can handle at present and excellent prospects for the future. Last spring they added considerably to their capacity, but the steadily growing trade is again crowding the limits.

## the millers' tracimg bureau.

$M^{\prime}$FRANK BARRY, the efficient secretary of the Millers National Association, has recently issued the following communication in regard to the Millers' Tracing Bureau, which is well worth careful consideration by millers. The circular reads as follows:
"At the recent annual convention of the Millers' National Association the
subject of the so-called 'Millers' League' subject of the so-called 'Millers' League'
or 'Tracing Bureau' was taken up for discussion, resulting in the adoption of a resolution: 'That the formulation of a Millers' Tracing Bureau be referred to the executive committee, with power to put the same in operation as early as practicable, it being understood that the expense of conducting said bureau shall be borne by its patrons. In compliance with this resolution the executive committee has prepared a plan, wbich is submitted herewith. As a preface your attention is called to the fact that, so far as all former plans for the organization of a tracing bureau (proposed by the executive committee of this association Dec. 20, 1890, and submitted first by Mr. A. M. Bailey, and subsequently through a circular issued by the association Jan. 25, 1891,) are concerned, the same are dropped, and the plan as
herein outlined substituted, and will be herein outlined substituted, and will be
put into immediate operation. It is put into immediate operation. It is
hoped that the snbscriptions heretofore made by members of the association to the guarantee fund will now be renewed and considered binding.
"It is proposed to form an organization to be known and styled as 'The
Millers' Tracing Bureau," which shall Millers' Tracing Bureau," which shall
be managed by the executive commitbe managed by the executive commit-
tee of the Millers' National Association, the function of which shall be to trace and hurry to destination shipments of flour made by members who may join this sub-organization.
"Any member of the Millers' National Association may become a member ing an application in which agreement is made to subscribe to the guar antee fund, for the support of said bureau, a sum not less than $\$ 10$ per unit,
of 100 barrels, of the daily capacity of of 100 barrels, of the daily capacity of
the mill or mills owned, controlled or operated by the applicant ; such guarantee to be payable in such amounts, and at such times as the executive committee may direct. Provided, that such application shall be approved by the The committe
The expense of operation of the bureau shall be borne by its members. A
fee per sack or barrel, will be charged for the service furnished, and monthly statements of accounts, rendered, to be
followed by sight draft. It is believed that the patronage secured will make it self-supporting from the start, and a small proportion of the call for but fund, to be used for of the guarantesing stationery and supplies, which amount may be returned to subscribers at a later
date. date.
"The bureau will be conducted under the direction of the executive committee until the next annual conciation is held, at which time a convention of the members will be called, and if desired, the organization may be perfected by adoption of a constitution and by-laws, and election of officers to manage the affairs of the sub-organization.
"For the present the service of the port flour shipments ; the charge to be made for such service to be one-sixth of one cent for 140 -pound sacks, and one fourth of one cent per 280 -pound sack or per barrel, on all shipments reported for tracing.
"Upon acceptance of an application for membership, the member will be
supplied with suitable blanks to be supplied with suitable blanks to be filled out complete, giving all information required thereby, which should be promptly forwarded to the secretary of
the Millers' National Association, the the Millers' National Association, the
information thus given to be held and reated as strictly confidential. At the start a representative will be placed at

New York City, who will have assis
tants at Boston, Baltimore, Philadel tants at Boston, Baltimore, PhiladelUnited States. Upon receipt of advice of a shipment to be traced, the secre tary will at once report the shipment to the representative at the seaboard who will be on the lookout for it, and, upon arrival, see that prompt transfer is made to the steamship, and repor any and all delays that may occur.
"Should there be a delay at the sea board which our representative there may be unable to promptly overcome an effort will be put forth from headquarters to correct the matter, and all members of the organization will be promptly advised of such troubles in order that they may avoid shipping via routes which do not furnish proper and prompt service. As the require-
ments and patronage of the bureau ments and patronage of the bureau
warrant, its field of operation will be enlarged, and agents will be placed a other important freight transfer points, such as Buffalo, Toledo, Chicago, St. Louis, etc. After successful operation in tracing export business, the bureau may extend its action to the field of domestic shipments.
An arrangement has been made with an efficient and experienced man o represent the bureau at the seaboard, and as soon as the proper blank forms can be prepared it will commence operation. Under this plan we can start with a smaller guarantee fund than we have heretofore thought necessary. Every member of the Millers' flour is Association who is exporting four is invited and urged to join in "We predict that ment.
We predict that the result of this movement will be of inestimable benefit to members, and trust that sufficient enterprise may be shown by the mem-
bers of the National Association to insure its ultimate success.

## emergency remedies.

$\xrightarrow{11120}$VERY man to his trade. A man is either a fool or a physician at forty. Here are two
dages which suggest a combination. Every trade has its special physic. This is true. In conversation a few days ago with a Recorder reporter, a New York surgeon remarked that few things gave more pain, attended with so much danger, as some particles of lime dust in the eye. A gentleman standing by quietly remarked "And yet such an accident is of daily ccurence, is attended with hardly any danger, and is most easily treated." "How so?" came a chorus of voices.

Well, I will tell you. I was brought up to the trade of a plasterer, a ceiling plasterer. You may not know that the final layer upon a good ceiling is almost pure lime. The plasterer stands upon a platform and lays on the paste. It falls upon him in every direction, and especially if he is a new hand, often a splatter falls right into his eye. When he gets accustomed to the work, the eyelid seems to get used to it, too, and seems to close automatically in self-defence. Directly such an accident occurs a fellow-workman takes a mouthful of water from the nearest
pail-and there is always a pail of water handy-opens the eye as wide as possible, and squirts with all his force the contents of his mouth against the eyeball. This immediately cools the lime and also drives it out of the eye. Simple remedy, isn't it, and eminently practical. But you see a man's eye would be burned out long before he could reach the nearest doctor's."
Immediately other gentlemen had something to tell. One was a wine merchant. "My cellarmen have a
funny way of stopping bleeding. They think nothing of a cut finger or hand, or even of a large wound. They passing it through the fuel, where it
run to the nearest spirit cask, or claret, drops fall on the wound. It acts as an immediate styptic. Then a big dusty old cobweb is taken from the nearest bottle or corner of a bin and clapped on tight over the cut or abrasion. Cobwebs are splendid healing agents."
"Sailors," said another, " are never at a loss under such circumstances; their favorite stypsic at sea is a bit of unravelled tarred rope. On land they will take the quid of tobacco from their cheek, or the lining of their cap, and its effect is astonishing. But I have seen a man wild drunk after such a quid has been tied over a wound. I suppose the nicotine gets into the blood and acts as an intoxicant."
"Carpenters," said another gentle man, "if they cut themselves pick up a handful of fine shavings and clap
them on to the wound, and joiners them on to the wound, and joiners
swear by a daub of glue, but one of the quaintest things I ever saw used was by an old farmer up in Chester County. He got his hand badly torn by a bit of old wire fence, and it bled considerably Without a thought he stooped down and dug up a handful of soil, spat on it and worked it quickly into a paste and laid it on the wound, and bound it up with his neekhandkerchief. In an astonishingly short time he was at work again as if nothing had happened."
"Can any one tell me the therapeutical value of fasting spittle?" asked q quiet man. "I know that old wives as the saying is, take great stock in it for warts, birthmarks, corns, bruises and even small cuts. Indeed, old nurses seem to believe that their saliva in the morning before taking fuod is a panacea for every kind of skin complaint. But did you ever hear of the nap of an old beaver or silk hat being used as a styptic? You will find it a capital one, and for burns and scalds, if placed over the wound in sufficient quantity to keep out the air, it will draw out the heat rapidly, as any hat nanufacturer will vouch.

We are getting a little off the track," said one, "when we talk of fasting spit tle; deep sea fishermen and fishmongers generally hold that nothing is bet ter than a piece of fish skin. Eel skins are commonly used to cure rheumatism, and are considered infallible by some. A negro minstrel once told me that nothing stopped bleeding and assisted nature's healing work so well as burned cork. Thus every trade and profession has its own emergency remedies, as the doctor called them just now, and doubtless the list might be extended to every trade known."

## SMOKE CONSUMER INYENTED.

A curious invention has been made by an engineer in Russia named A. Clausen. It is a smoke burner which is claimed to consume every particle of coal, even the worst soft coal, and it is based on a principle which is the direct upposition of the one that has been held for years to be the only one by which a complete smoke consumer could be constructed. It has been held that the cause why so much carbon escaped in the ordinary furnace in the form of smoke, causing at once an enormous waste of material and a pollution of the atmosphere, was that an insufficient supply of air was admitted, so that there was not enough oxygen to burn all the carbon. Smoke burners have been constructed with a view of admitting as much air as possible and passing it through the fuel, where it
wculd come in contact with the coal

In this way smoke consumers have been constructed that did their work tolerably well.

Mr. Clausen, however, started to solve the problem by first analyzing the matter that escaped through the smokestack, and claims to have found that a large part of it consisted of free oxygen. He concluded that the fault lay not with a lack of air, but, on the contrary, with too large a supply of it. He reduced the amount of air admitted to the furnace until he came to a point where he admitted air only through two little holes of the diameter of an ordinary lead pencil. When he attained this, he claims the combustion of the coal was complete. Reports come from Paris and London indicating that experiments on a small scale have been made with the new invention and have proved remarkably suc-
cessful. cessful.

## dangerous information.

How to speculate without brains is what every one that speculates should know. It is easy for one to know too much to be a speculator. There are certain data of an official character that are true and more that are untrue, or perhaps are estimates of uncertain value. To know all these that btar upon the values of a speculative commodity and not to know the relative bearing of each would be worse than to know nothing of them. It has been often noticed that the statistician, so called, "gets left" in speculating. It proves that it is dangerous to have just that kind of information in just that quantity that generally involves the one that is guided by it. If he knows nothing of these things and is guided by instinct or impression he is oftener right. In the present crop year the statistical position of the cereals, as to quantity and requirements, was officially promulgated from Washington from the agricultural department. We were limited by them in quantity for the year. The quantity is used but the year is not. Whoever knew all those official announcements and attached to them his faith and money needs sympathy. He and his money are parted, but he has the estimates. They may make him wiser but he is not so rich. Brains enough to know hat official data have only approximate values have speculative uses, but the less, they rely upon official reports the better.-Market Record, Minneapo-

## THE SLIPPING OF BELTS.

A multitude of opinions have been put on record as to the best means of preventing belts from slipping. A writer in an exchange, referring to this
question, says: Let me answer once for all-a little good common sense. If a man is drawing a hundred bushels of wheat to your mill and the wagon gets stuck, he must either take off part of the load or hitch on more horses. It is exactly the same with a slipping belt. You must either lighten the load or else put on a heavier belt. In ninety-nine cases out of a hundred the trouble will be entirely obviated by putting on a double belt. Rest assured that any kind of a daub placed on a belt will be a detriment instead of a help. The belt will run better for a few minutes, and then this stuff will collect on pulleys and in places on the belt, making it much worse than ever. The best dressing that I have ever seen for leather belting is a little castor oil. -The Tradesman.

## OUR LEGAL DEPARTMENT.

Specially prepared for The United States Mill
and Milling Engineer, from the latest
Compensation of Partner. - A part ner is not entitled, unles under some special agreement to any compensation for his skill, labor or services while employed in the partnership business. He owes these gratuitiously for the suc cess and accomplishment of the partnership operations. A managing partner, who employes his minor children, with the consent of the other partner, is entitled to compensation for their services.-Taylor v. Ragland, Supreme Court of Louisiana, 8 South, Rep. 467

Liabllity of Railway Company as Warehousemen.-In an action against a railroad company for freight alleged to have been lost while in its warehouse by its negligence, a charge that "if the company failed to deliver this freight, and undertook to deposit it in its warehouse, the liability of the railroad would be that of a warehouseman," is correct, as it submits to the jury the question whether the company delivered the freight to its agent to be deposited in its warehouse or to the owner.-Georgia Railroad \& Banking Co. v. Thompson, Supreme Court of Georgia, 12 S. E. Rep. 640.
Damages for Construction of Dam. -Where a company constructs a dam across a natural stream, which flows down through lands of another and discharges the water thereby detained in larger amounts than the stream will carry, causing the same to overflow the land, it is guilty of a trespass, and liable for the injuries caused thereby, though it was authorized to construct the dam, and the same was constructed in a proper manner.-McKee v. Delaware \& H. Canal Co., Court of Appeals of New York, 26 N. E. Rep. 305.

Alteration of Note After Signa-ture.-Where the maker of a note changes it after indorsement without the indorser's knowledge, by adding to his signature "\& Co." thus making it the signature of a firm of which he is a member, the indorser is discharged from liability, even though the maker had no authority to bind the firm. Where the note did not show upon its face any evidence of an alteration, the burden was on the indorser to show the alteration. But, where, after the alteration, the indorser with knowledge thereof, writes above his name an express waiver of protest, and notice, this is a ratification of the alteration, though no new consideration passes. A stipulation in a note to pay costs for collect ing on failure to pay at maturity does not destroy its negotiability.-Montgomery v. Crosswait, Supreme Court of Alabama, 8 South, Rep. 498.
Acceptance of Benefits Under Assignment for Creditors.-A creditor who has availed himself' in any manner of what purported and was intendto be an assignment made by his debtor, the instrument being defective on its face, or has obtained and accepted benefits to be derived therefrom, for example, by making and delivering proof of his claim to the assignee, and thereafter, although notified of its allowance, permitting it to stand as a proved-up claim against the estate, bars himself from taking any action which will defeat the purpose of the instrument as a transfer of the property of the assignor.-Olson v. O'Brien, Supreme Court of Minnesota, $48 \mathrm{~N} . \mathrm{W}$. Rep.
Payment by Deposit in Insolyent
justed and the amount due agree upon. The agent of the compan thereupon deposited in a local ban the amount due and notified the in sured to call and get it. The notice was received after banking hours, and when the insured went to the bank the next day, to get his money, the bank had failed. This did not amount to payment by the company. Had the insured delayed in calling for the money, or had he agreed that it should be left there for him, it would have amounted to payment, but in selecting this method of payment without agreement the company assumed the risk.Clemons v. Livingston County Mutual Fire Insurance Co., Supreme Court of New York, 12 N. Y. Supp. 433.
Right of Action on Dissolution of Partnership.-When a firm is volun tarily dissolved and under the terms of the agreement for dissolution one o the former partners desiguated to liquidate the affairs of the concern, a right of action in his favor immediately arises, against a retiring partner whose account on the books is overdrawn beyond what could possibly be his dividend under the terms of the dissolu-tion.-Gray v. Green, Court of Appeals of New York, 26 N. E. Rep. 253.

Diversion of Water From Mill.In an action for the obstruction and diversion of a stream, it appeared that a dam was built above plaintiff's mill, and a three-inch pipe inserted, through which the water ran to a tank. Plaintiff introduced evidence that since the dam was constructed there was never enough water to furnish full power to his mill, while theretofore there had been enough to run it 10 months out of the year, and that before the loss of water the rental value of the mill was $\$ 500$ a year, and afterwards nothing. Defendent introduced evidence that he diminution of the stream was not due to defendant's dam and pipe, but o a general drying.up, and that plaintiff was not injured. The question was properly submitted to the jury, and a erdict for plaintiff would not be disturbed, as they are the sole judges of the facts.-Marsh v. Delaware, L. \& W. Ry. Co., Supreme Court of New York, 12 N. Y. Supp. 376.
Fallure to Fulfil Contract for Saie of Grain.-In an action by the buyer against the seller for breach of contract for the delivery of corn, the measure of damages is, as a general rule, the market value of the corn at the time and place of delivery, less the contract price. In such case, when the seller, after his contract of sale is made notifies the buyer that he will not fill the contract, in the absence of any evidence on the part of the seller, that the buyer, after notice that the seller would not fill the contract, and before the date of delivery, could have purchased the corn in the market of the place of de livery, upon such terms as to have mitigated his loss, the measure of damages remains the same.-York Draper Mercantile Co. v. Lush, Supreme Cour of Kansas, 25 Pac. Rep. 646.

## camadian flour in jamaica.

1F an easy entrance to the markets of Jamaica is not secured for Canadian manufacturers and milers, it will not be for want of effort and enthusiasm on the part of Commission er Adam Brown. A fortnight since he addressed the Board of Trade in this city, dilating eloquently on this paradise without the snake, and pointing out especially the favor with which Cana-
dian flour is received by the residents $\mid$ Bros. \& Co., Galion, O ;; Upton of this tropical clime. Before Canadian Darby \& Son, Senion, Md .; Upton flour was introduced, he tells us, the Aberdeen Mill Co., Aberdeen, S. Dak bread of the natives was as bad as it Jackson Milling Co., Stevens Point, could be. After tasting that made from is. (2d order); W. V . Hartwell, Canadian flour the people of the island Plattsburg, N. Y.; Appelt Bros., Detroit, were demanding a better article and Mich. (2 machines); Benton Harbor are now clamoring for their bakers to Mill Co., Benton Harbor, Mich. (2 mabuy the product of our millers.
chines); H. J. Klinger \& Son, Butler
He would have the good reputation Pa .
of Canadian millers carefully main- THE Cockle Separator Manufacturing tained, and remarks: "The fact is es-
tablished beyond peradventure, that the flour of Canada, after the severest Co., of this City, have an order for 2 No. he flour of Canada, after the severest $\begin{aligned} & \text { Elevator, Chicago, Ill. } \\ & \text { test possible, has stood the climate of }\end{aligned}$
Jamaica, and what is good for Jamaica, is good for all West Indian Islands, South America and all the tropica countries. We have established a reputation for our flour in tropical countries by this exhibition, and we mus maintain it. Every miller who ha sent flour there knows what he has sent. Therefore if we desire to keep this reputation it must be seen that the quality and character of the flour shipped there is up to the standard.'
The Commissioner showed himself alive in meeting any unfavorable criticism that was passed upon the product of our millers. A circular from an American source was placed in his hands on April 23rd, questioning the keeping qualities of North-west wheat He immediately caused bread to be made from Manitoba wheat flour, which had been four months in the island It was as sweet as a nut. One hundred and fifty thousand pieces of bread bak ed from Canadian flour, varying be tween rolls,loaf bread and Scotch scones, were distributed among the visitors with the result, that "more, more," was the constant cry.
The Gleaner of Kingston, Jamaica, ed itorialy remarks: The direct and somewhat novel appeal to the minds of many, by way of that ancient receptacle, the human stomach, has finally settled the question. To-day, thanks to the push, speeches and indefatigable efforts of Mr. Adam Brown, the Jamaica market is open to Canada, not only for flour but for a host of things. That gentleman has done his part, it now remains for the Canadian millers to do theirs. Thie future of this breadstuff question lies in their hands, and a hint to them-A merican competition will be all the keener after the Exhibition. Finally it is asserted that the British West Indies consume three million dollars vorth per annum.
We have no fears but that our milers will practically demonstrate that as the markets of the world are further opened to them, they will with their usual enterprise, be prepared to meet with all the conditions required.-The Canadian Miller.

## tRADE NOTES.

The Superlative Purifier Manufact uring Co., of this city, have orders from New Era Scalpers from McMullen \& McCrea, Saltsburg, Pa.; J. Martin Trice, Blairsville, Pa.; I. J. Bolton, Sandford, Ind.; Boyes, Deane \& Co., Seward Neb.; C. Koontz, Dorchester, Neb. Jackson Milling Co., Stevens Point
Wis. (third order); H. Wambold, Wis. (third order); H. Wambold, Eagle Wis.

The Cockle Separator Manufacturing Co., of this city, have recently shipped Morgan Scourers to Brown Bros., Freeport, Ill., and Rail \& McGla shew, Clarksville, Ia.
The Superlative Purifier Manufacturing Co., of this city, have recently furnished New Era Scalpers to Plank

Morgan Scourers for the Minnesota
The Superlative Purifier Manufactaring Co., of this city, have lately shipped two round reels to Henry Pettil Kingston, Wis.; a bran-duster to Car man \&"Co., Petersburg, III., and a puri fier to C. W. Armstrong, O
The Vortex Dust Collector Co., of this city, report a very steady and good rade on their Dust Collector. They have received and shipped orders for 125 machines the past month.

Paris, Ill., Oct. 16, 1890
The J. B. Allfree Co., Indianaplis, Ind. Gentlemen:-Your favor of October 15 to hand and in reply will say, your machinery is perfect from top to bottom, and can cheerfully say that you have done us a fine job, which we are not ashamed to show to any miller or mill wright. Everything is running in firstclass order, and your rolls are perfect in every respect: also your other machinery is No. 1. We are doing a good business, much better than we expected. We wish you much success.

Yours very truly,
Carpenter \& Winn.
Perv, Ind., Oct. 17, 1890
The J. B. Alffree Co., Indianaplis, Ind. Gentlemen.-The thirty-barrel short system roller mill you built for us this summer is running full time and doing excellent work. Our flour has a ready market at home in competition with eight or ten old established brands that have been the pride of Peru for years.
We believe your machinery is first-class in material and workmanship, and for light running, unexcelled. We scarcely notice the additional fuel required to run it.

Yours very truly,
Smith, King \& Co.
German Operatives.-A Mecklenburg operative writes to a German contemporary to say that he and his fellow journeymen are quite content to work from 14 to 18 hours a day for a weekly wages of five or six marks, that is to say, between 5 s . and 6 s . This is supplemented by board and lodging, and the same operative who is a very Mark Tapley, remarks that the food and bed provided are perfectly satisfactory. On the other hand a miller details his experiences in an Alsatian mill. The date of this story lies five years back, but the narrator hints that the same state of things is still prevalent in too many districts. The mill was a roller mill, and the "spells" were of 37 hours' duration; the resting-time is not specified, but was evidently all too short for the worn-out toilers. It appears that the spells were timed to finish at seven in the evening, but before the three men whose turn it was to "take an evening off" were discharged from duty they were usually required to unload a wagon heavily laden with grain, and that with the shoulders sore from carrying heavy sacks of flour. Six weeks of this kind of existence sufficed for the narrator, who adds that for many operatives one day in this mill was Bank.-A fire insurance loss was ad-

## BABBITT BEARINGS.

ONSIDERA BLE has been written upon the subject of babbit bearings, and as the methods of different mechanics vary in babbitting a box, a variety of ways are presented to the reader. A writer in the Stationary Engineer gives his experience as follows: There are several things about babbitted boxes that have worried me not a little, for, although I have always got along with them fairly well, yet there were several things about them of which I craved more knowledge. My first effort to babbitt a loose pulley and get a satisfactory job of it extended through a couple of days, and one thing I learned was, that it was easier to melt out the babbitt than to try chipping it out. It was quite easy to melt it out by setting the pulley on blocks a few inches from the ground, so that the bore would act as a stack, and then building a fire of oil and waste under it. Dirty oil and dirty waste served the purposes, as well as saved time. To get a good fit on shaft or mandrel could be easily removed from the pulley, I found that good results were had if I first warmed the mandrel, and covered it with coating of soap and fire clay. This I did by mixing the soap and fire-clay to a consistency of putty, and rubbing it on the warm mandrel. This left a thick enough to allow the mandrel to be easily removed after the babbitt metal had become set. The fire-clay, being free from grit, would have no in jurious effect on the shaft, if a little of it should remain in the babbitt, but on the contrary it would assist in bring ing it to a smooth bearing. And, by the way, this thing of wearing a journal down to a good fit in a babbitted box so that it will not run warm, is sometimes considerable of a trick. If and not much weight on the shaft running at a low rate of speed, there is not much trouble in getting things to run cool; but when the shaft is run at a few hundred revolutions per minute a box must be in a pretty fair order even when there is plenty of bearing surface, if the journal is to run without heating. But in starting up with a newly babbitted box, I have found that the worry could be soonest ended grease and fine sulphur, supplied in unlimited quantities for an hour or more. The bearing is sure to heat when new, and this mixture, I hav found, would cure it just as soon as the heat of the journal became sufficient to melt the sulphur. Melted sulphur and oil when combined, as they will to certain extent, form a compound that produces a glazed surface on both journal and bearing, and this coating possesses considerable anti-friction qualbabbitting boxes to always wrap a sheet of paper around the shaft. This serves a good purpose in two ways. Paper is a good nonconductor of heat, so that the metal, when it is poured, is not immediately cooled by the journal, but retains the heat, and remains fluid much longer than that portion in contact with the box, so that the inside or wearing surface is left in a much smoother condition than when babbit ted on a mandrel, or after having been turned out, and the space left after the paper is removed serves a good purpose in permitting the oil to more readily flow under the journal.

The question as to the best style of kept six months. The ferment thus grooves or oil channels to cut in a box prepared is applied in the following is one that still appears to be in an un- manner: For baking six large loaves, settled condition; and judging from six handfuls of these balls are dissolved some of the elaborate patterns shown in seven or eight quarts of warm water; by the channels cut in some boxes that I have seen, the efforts of the workman must have been exerted toward providing as great an area for holding oil as that which he intended to be used as bearing surface. This, to me, appears all wrong, as I see no necessity for it, and more than that, it reduces the area of bearing surface to such an extent as to make it positively injurious. For distributing the oil what more is neces sary than a groove cut in the cap extending from the oil hole on both sides to near the end of the cap? This will allow the oil to be distributed the full length of the bearing-if the cap fit reasonably close-and the slight space left by the paper which was wrapped around the shaft when the babbitt was poured will allow the oil to work down under the journal. In whatever posi-
tion the oil hole may be, a single channel for the oil is all that I ever found necessary to obtain a free distribution. But if the top of the box does not come within a thirty-second of an inch or more of the journal, then the oil will not be distributed until it comes to the lower part of the box. Here the edges should be chamfered, with the exception of a small portion about one eighth of an inch wide at each end, to prevent the oil from flowing out at the ends of the box.

## mechanical curiosity.

What is there in a pile-driver or its operation, that stimulates human curiputting up and setting in operation of a pile driver anywhere is sure to imconsiderable portion of the people who compose it standing idly by to watch the monotonous repetition of the movement of the pile-driver's simple machinery and heavy weight, which is drawn up and then let go, to come down with a thud on the top of the unoffending and helpless stick of timber, driving it every time a few inches deeper into the mud. Wherever this operation is going on, you will see a crowd of from a dozen to one hundred and fifty men and boys, who appear to take as much interest in it as they would in a Punch and Judy show or dog fight. We do not understand where the curiosity-exciting element is. After one has seen the big thumper go up and come down once, he has seen all he ever will see of the mystery of pile-driving. Yet crowds of idlers are found hanging around the pile-driver's station for hours. Are these people really curious, or are they only lazy and loafing?-The Evening Journal (Jersey City).
hungarian method of making bread.
At Debretzin, in Hungary good bread is made by the following process, without yeast: Two large handfuls of hops are boiled in four quarts of water; this is poured upon as much wheaten bran as it will moisten, and to this are added our or five pounds of leaven. When this mass is warm the several ingredients are worked together till well mixed. It is then deposited in a warm place for twenty-four hours, and afterwards divided into small pieces about the size of a hen's egg, which are dried by being placed upon a board, and exposed to a dry air, but not to the sun; when dry they are laid up for use, and may be
his water is poured through a sieve into one end of the bread trough, and, after it, three quarts of warm water, the remaining mass being well pressed out. The liquor is mixed up with sufficient flour to form a mass of the size of a large loaf; this is strewed over with lour, the sieve with its contents is put upon it, and the whole is covered up and its surface begun to crack. This forms the leaven or sponge. Fifteen quarts of warm water, in which six handfuls of salt have been dissolved, are then poured upon it through the sieve; the necessary quantity of flour is added (after the water and leaven or sponge is well mixed), and the dough is then well kneaded. This is left, ored up warm, for half an hour. or formed into loaves, and left another half-hour to prove, before being placed in the oven, where they remain from one to two or three hours, according to their size. The great advantage of this kind of ferment is that it may be made in large quantities at a time for use, and would be found convenient for sea voyages, etc., or for persons living at a distance from any town, and where yeast cannot be readily procured.

## PRIMING of boilers.

Air or water, in moving from all sides to a common center, at which it escapes, does not move in direct lines, but approaches the center in spiral urents, the velocity of which will be proportional to the speed at which the fluid escapes at the center. Let the water from a bucket or basin escape hrough a hole at or near the center of the bottom, and the water in the vessel will form in a whirling current around a verticle line above the outlet. If the water escapes through a pipe so that there will be a downward suction, the velocity of the whirling current will be increased. A storm center or area of low barometric pressure is another illustration. Towards such an area all of the air currents influenced by it will move, the same as water in a maelstrom moves toward the center. Now the question is, will not steam escaping from a boiler directly upward into a dome or steam pipe act in the same manner as water does in escaping from a bucket or basin, or as air does in moving ed that a storm center is a point where the air is escaping upward, and that it is the escaping air which causes the water in the basin to form into a whirling current around the outlet.
It is well known that in the center of a whirling current the fluid, owing to centrifugal force, is rarefied, and the degree of rarefacation depends entirely upon the velocity of the whirling current; for this reason a whirlwind of sufficient velocity passing over the water causes a water spout. Now if the steam escaping from a boiler in the usual manner causes the steam in the boiler and in a small area below the outlet to form in a whirling current, the velocity of which will increase as that of the escaping current increases, what is to pre vent a waterspout in the boiler and a wrecked engine as the result whenever
the escaping steam reaches a sufficient the escaping steam reaches a sufficient
velocity, if the pipe connecting engine with boiler is of a sufficient area.Ward Stone in Scientific American.

Ameriean Steam Cauge 60.

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Boilers, and Boilers, and Instruments Inciden for Price List I.

## 36 Chardon St., BOSTON, MASS.

 Send for Catalogue $K$.$A^{\text {NY mechanic who feels like des- }}$ pairing, because the world has not gone well with him, should try, first of all, to figure out to what extent the world is to blame for his failure, and to what extent he himself is to blame. If he has not fitted himself for success, it is his own fault that success has not come to him.

A Traveler comes back from Mexico with a new idea which he hopes to utilize in the manufacture of flour. He notes that for centuries the Mexicans have been accustomed to parch their grain before grinding it, and claims to have discovered that the heat gives the flour a sweetness and a fragrance unknown in the flour of the ordinary brands and at the same time adds much to its powers of nutrition. Mills are to be equipped with apparatus for parching the wheat before putting it into the hopper, and we are told that the result will be a culinary revolution.-Chicago Herald.

Good Advice.-Never attempt to screw up bolts or nuts that are close to the cutter heads when the machine is running, says the Iimberman. Your wrench might slip and your hand come in contact with the knives as many
others have done and then you find others have done and then you find yourself minus a finger or perhaps a hand, it will be no light matter and you will then find that you did not look out. Whenever a bolt or nut in close proximity with the cutters needs adjusting, stop the machine like a sensible man and then you will take no chances. In setting knives and cutters always test every bolt and nut before you start, as you may possibly have omitted one, and if not attended to in omitted one, an
time, look out.
The Bread of Poverty.-Some time ago it was reported that a new disease had appeared among the peasants of the Government of Kazan and in the neighboring districts. The symptoms were acute colics, swelling of the limbs, and distension of the belly. It was fatal in many instances where medical treatment had not been promptly applied. Now, Dr. V. D. Orloff reported to the medical association that he believed the cause of this disease to be "the bread of poverty" which the famished population eats. For want of rye, wheat or potatoes they bake bread of acorns. The resinous substances contained in the latter are the cause of the symptoms of the so-called new disease. The doctor has studied the subject, and found that all that is required for the cure of that disease is a thorough cleaning of the bowels and a healthful diet for the patient.

## MANUFACTURING SITES FOR SALE!

The undersigned owns a few of the best manufacturing sites in the city of Milwaukee, adjoining those now occupied by the Milwaukee Car Wheel and Foundry Co. and the magnificent plant of the Fuller-Warren Stove Works which cover nearly ten acres of ground. Best of railroad facilities. Parties desiring a suitable location should investigate this. Address,
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ent excellent opportunity for conducting elevator
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To close out a parinership we offer for
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We want a good man as second miller general work in our roller mill. Capacity, 75
bbls. Must be a German, and a married man preterred. Steady employment for the or apply personally to Reddymann, JaEger \& Co.,

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 A good miller, in a 50 barrel roller and knows how to dress stones. For furthe particulars address,Care United S. A. P. Mitiles Miler, Milwaukee, Wis.
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125 -bbl. roller flour mill, 4 stories, frame with stone basement, including plenty water power for 4 water wheels. Flum , dam and mill in good condition. Frame warehouse and office close by, and long sheds for farmers' team*. The whole property in full peration 16 hours daily, doing profitable business. Has big grist business. City of flour, feed ion; two rail roads. Good trade with citizens, farmers and lo live, has good schools and churches, and close to other large citie.. Owner non-resident, which is the reason for selling. Address,
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Middling Stones; three Garden Bits and five Smith Puriflers; one Three Break Scalper and sixteen Flour Reels three Fitcher and two "Silver Creek" Centrifugai Reels; two Riehmond Bran Dusters; one Hughes
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the arkansas press, little rock, Ark.

## ENGINE AND BOILER FOR SALE.

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| :---: |
| ＇Tis twelve months since I came to America The fortune of me uncle to enjoy Bless his name ：shure he left me the whole av it， Aud in his will he said，＂Now Pat，me boy ${ }^{\text {Ye＇s }}$ ought to spind a solid year in thravelin， The great solghts av thls counthry for to see ， And sure me uncle didn＇t need to urge me much For thravelin is a trick that just suits me． |
| $8_{0} \mathrm{I}^{\prime}$ ve thraveled over all this moighty nation， From north to south and from the east to west； But shure the raliroud thraveling suits m And of ail the fine railronds in America， And meself shure has thraveled on them all， Is the Chicago，Milwaukee and St．Paul． |
| Both for aitin und for dhrinkin and for shlapin， Their equipment is most costly and complate． Their is sphlendor enough for old King Solomon， And dainties for his thousand wives to ate． O：r＇ve thraveled all up and down America， But there＇s nuthing can compare in sold comfort wid the Chleago，Milwaukee and St．Paul． |

## a member who saw it himself．

In the Wisconsin legislature of three
or four years ago there was a certain member who had been elected by the grangers with the understanding that he should vote against anything which partook of the nature of a monopoly， trust，or combine，and favor about everything which didn＇t．Certain par－ ties wanted to dam a certain stream， and certain other parties were bitterly opposed to it．Each had its lobbyist， and the opposition got hold of the granger member first．They stuffed him full of figures as to the acreage of land which must be overflowed，the financial less to farmers，and gave an estimate that the slack water would in－ crease the death rate along the stream 50 per cent．When the lobbyist for the mill dam got the ear of the mem－ ber he was very ungraciously received but he proceeded to say

I don＇t deny that our dam will raise the water and flood some land－ perhaps the 200 acres claimed．In summer time the slack water may also add a trifle to the sick list；but，sir， what inspires the opposition？

Public spirit for public good，I be lieve．＂

Does it？Have they made you be lieve any such nonsense as that？Can＇t you see through the gauze which veils their efforts？＂

Is there any－any trickery here？＂
Is there？Dead loads of it，sir，and I wonder that you haven＇t discovered it．These parties own a big cat－tai swamp half a mile above where the dam is to be．Our water will cover the swamp．They have discovered a way to mix cat－tail fuss and geese feathers together to make feather beds，patented the idea，and propose to bull the market and run one－half the geese of America out of the country

That＇s the scheme；and even while keeping it as quiet as they could enough has leaked out to boost the price of goose oil 30 per cent．

Why，it＇s a monopoly ！＇
That＇s what it is－the biggest kind of a monopoly－a corporation without a soul．Why，you can＇t buy a goose bone now for less than 25 cents，and
quill toothpicks will soon be a nickel apiece！＂
see－I see． The scoundrels Well，you shall have my vote and in fluence，and I thank you for setting me right．I might have played right into their hands－the wretches！＂

And he not only voted for the bill butworked for it and secured its passage and the opposition could never get his ear for any denials or explanations $-N$ ．Y．Sun．
＂CATALoGUE of Farm Lands，Coal Lands with full description，price and terms properties for sale on the line of Queen \＆ Crescent Route，＂The above is the title page of a very neatly gotten up catalogue，of
sixty pages，which is being mailed free to all persons who will make application to Mr．D． ©．Edward，the General Passenger Agent，at Cineinnati， 0 ．
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Cinelinnati，where conneetion tis made with Through Car Lines to
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Through Tlickets via the Big Four Route car $\begin{array}{ll}\text { o．a．murray，} & \text { D．B．mARTIN，}\end{array}$ einoinnati，o


This is not a puzzle，neither is it a theorem in
eometry it is merei intended to call attention t he fact，that the WISCONSIN CENTRAKL LINESS wruk the direct route between Chicapo and Min
Traine and the points named above．Through Fast
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only line running through reclining chai cars between Cincinnati，Keokuk and Spring field，Ill．．and combination chair and sleeping car Cincinnati to Peoria，IIl．，and the only di
rect line between Cincinnati，Dayton Lita rect line between Cincinnati，Dayton，Lima
Toledo，Detroit，the lake regions and Canada The road is one of the oldest in the State o Ohio and the only one entering Cincinnat ver twenty－five miles of double track，and rom its past record can more than assure it
patrons speed，comfort and safety．Ticket sale everywhere，and see that they read
$H$ \＆$D .$, either in or out of Cincinnati General Passenger and Ticket Agent，Cin－ General Pass．
cinnati，Ohio．

## fecent milling patents．

The following list of Patents for Milling nd Grain Handling Appliances，granted Nune，1891，is specially reported for the gineer by H．G．Lnderwood，Patent At－ orney and Solicitor of Patents．No． 107 wisconsin Street，Milwaukee，Wis．，who
will send a copy of any patent named，to any address for 25 cents．
No． 453.439, Bolting－reel
453．532，Fanning－mill，Thomas M．Bales， Doublin，Ind．
453．305．Grain－meter，Jacob O．Wyma Fargo，N．D．
453．413，Grain－shoveling Device，Allen
G．Mather，Milwaukee．Wis． ． 322 ，Milwaukee，Wis． 43.232 Grain－separator，Larkin G．Cald－
well，Sheblina，Mo． well，Shebina，Mo．
453，885，Dust－screen，Milton J．Farquhar Fiancis quarquar and
453．981，Grinding－mill，Jonathan D．
Mawhood，Richmond，Ind．assignor to Hhe Richmond City Mill Works，same

## place．

454，159，Grain－scourer，William B．An－ ． 454,065 ，Scalping－machine，James Pye ， 154 eap 130 ， 1 ．
454．130，Support for shaking sereens，
William D．Gray，Milwaukee，Wis，as
 same place．
454，131，Support for shaking screens， signor to the Edward P．Allis Company same place．
45t．132，Support for shaking sereens，
William D．Gray，Milwaukee，Wis，as－ signor to the Edward P．Allis Company， same place．
No．${ }^{\text {455，140；Combined }}$ Aspiratur，Abraham N．Wolle Aspirator，Abral
town，Pa．
．455，132，Grain－scouring Apparatus，Ju－ lius Szawinsky an
Braila，Roumauia．
454．931，Apparatus for testing grain，
Paui Heinsdorf，Hanover， Paul Heinsdorf，Hanover，Germany． 454，898，Grain measurer，John B．Bar－
tholomew，Des Moines，Iowa． 454.950 Combined scal per

Delos Sewell，Buffalo scal per and puritier ati．940，separator，John H．Driller，Los
Angeles，Cal． Angeles，Cal．

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 \begin{tabular}{l|l|l}
$\begin{array}{l}\text { BOSTON. } 52\end{array}$ <br>
BUFFALOMmer Sut. <br>
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Joun h. Cherver, <br>
J. D. Curever, <br>
\hline
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## Sixteenth Year.-No. 8 .

MILWAUKEE, AUGUST, 1891.
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## WHEAT FROM START TO FINISH.

THE following article by C. G. Williams was awarded the first prize of $\$ 25$ by the Practical Farmer among a number on ors grown by the farmer, wha is there that finds more ready sale a fairly good prices, taking into consideration the labor involved, than wheat? The seeding time comes at a season of the year when the rush of spring planting and harvest is over and the farmer has time to attend to it. Of course, if his rotation be clover, potatoes and wheat (a most admirable one), potato digging will make lively times for him. But the much less work needed to prepare the seed-bed of wheat, using disk harrow instead of plow, will make it an advantage after all, and will give a larger yield than can be secured in any other way. The old method of summer fallowing, while producing a good yield of wheat, is not as profitable. Better grow a crop of potatoes or sweet corn than have the growing season. In thin soils this may not be possible; circumstances will have to govern on the start. However, after a few years of clover-growing, one ought to be able to control circumstances. If wheat follows oats or clover, let the ground be plowed as early as possible I frequently start the plow in between the oat bundles, certainly want to a soon as the oats are removed. Then use harrow and roller alternately until the surface is made very fine. The rolling will give a firm seed-bed, and this with a fine surface seems to be the best possible preparation for wheat. In no case should the drill be started when the team will push 3 or 4 inches into the soil; more rolling in necessary. Starting the plow early in August or the last of July will give the land abundant time to settle and prevent this. Harrowing once a week will help the process and prevent growth of weeds. This can be done with the 10 or 12 -foot smoothing harrow at slight expense. A team will get over a good many acres in a day. In this latitude (about $41 \frac{1}{2}^{\circ}$ ), I get the best results one year with another, from drilling my wheat about the 1st of September. The 15th will do, and frequently later seeding is successful, but I prefer August 25 th to September 15th, unless I am seeding after potatoes or corn. I always endeavor to let the roller precede the drill, as one can see what he is do ing better after the roller than the harrow. It looks very unworkmanlike to see bare strips between the drill marks, and is a source of serious loss as well. I drill the seed about two inches deep. As to quantity, I use from a bushel and a peck to a bushel and a half of carefully cleaned seed; no chess or rye needed. In some soils perhaps a little less will do. As to fertilizers, I find that the best ammoniated super-phos-
phates are indispensable on my shale clay soil. I use about 300 pounds per acre, always with profit. It frequently, in bad seasons, makes the difference be ween a total failure and a paying crop On sandy soils I judge that results are not nearly so satisfactory. One wil have to experiment for himself, remembering that a cold, clay soil is more likely to be benefited than a sandy one After the seed is in the ground, unles the field is tile-drained, see that the water can run off at low places-an oc casional shallow ditch will save one a few bushels of wheat. About the 1st of March, I would sow six quarts of clover seed per acre. If sown by hand perhaps eight. I used to drill four to six quarts of timothy with the wheat, but in favorable falls this would get such a start as to crowd out the clover and spoil my rotation, so I dropped the timothy. I think we are ready for the binder now. Thanks to our inventors for giving us iron arms to hug the wheat bundles! Great care needs to be taken lest the wheat be hauled in too soon. Better let it cure in the shock than mold in the mow or stack. I wish I did not have to say stack, for I have seen too much wheat spoiled in the stack. I prefer to stack some hay and move it into the barn after threshing rather than stack any wheat out. I succeeded last year in growing and marketing my wheat at a cost of 60 cents per bushel, average yield being twenty-nine bushels per acre."

## the farmers' wheat combine.

1views of Hon. Ignatia Donner, T IS said that the Farmers' Alli ance Committee has sent out a million circulars to farmers throughout the country advising them to hold back their wheat and thereby to cause higher prices. It is a dangerous game to "monkey" with and in the following circular issued by Hon. Ignatius Donnelly to the Alliance organization in Minnesota he sounds a timely note of warning. Here is the circular: To the members of the Farmer's Alliance of the state of Minnesota
As president of your State Alliance it is $m y$ duty to see that no injury be inflicted upon the organization which 1 can prevent; 1 therefore take the liberty of issuing this cir-
cular letter. cular letter.
The editor of the State, of St. Paul, has is suced an interesting and valuable compendium of information, tending to show that the price of wheat is far below its real value, and must rise in the near future; and tha the farmers of the whole country should hold their wheat out of the market until the demand brings it to a proper level. Now while I agree with much of this reasoning, and do not impugn any man's motives, I nevertheess feel that it is my duty to say that the State Alliance of Minnesota has nothing to do with this movement; the executive committee has never been consulted about it:
neither, so far as I am aware, has the Nationneither, so far as I am aware, has the Nation-
al Alliance officially endorsed the scheme. It is Alliance officialily endorsedy an expression of individual opinion. That opinion may be just and right. I think it is; I hope it is; for I believe that the rarmors' products have been systematically de pressed in value for many years past by rings of speculators in Chicago and the other trade
centers. But I realize that when a few men
undertake, without proper pre-concert and consultation, to affect the price of a great
staple like wheat, and do it, either directly staple, like wheat, and do it, either directly
or indirectly, in the Farmers' Alliance, they or indirectly, in the Farmers' Alliance, they
are entering upon a tremendous and dangerous experiment, which may not only, in its ous experiment, which may nou on ly, recoil, crush them; but injuriously effect the Alliance itself. I desire, therefore, to hare distinctly understood that the State Farm ers' Alliance of Minnesota are in no wise re sponsible for this movement, or for any consequences that may flow from it. Thope the time is not far distant when the whole farming population of the United States shall to banded together for self protection and to
resist the the efforts of speculators to break resist the the erforts of specuators to do this thorough consultation and wise to do this thorough consultation an the es ablishment of some bureau that will direc the sales, otherwise some farmers would get hut at extravagant prices and others would be caught in the collapse of the boom. I see Mr. Pillsbury the great miller of Minneapo $M$. is, declares that wheat wit touch understand that the English syndicate owning the Min hat the English syndicato 00000 bushels of neapolis mis, wheat. If the price of wheac goes the new cents, undar ente hou would realize $\$ 3,000$ crop, those gent.
000 and get out.
In the meantime the farmers, who are hoping for $\$ 2$ a bushel, would be caught in the slump, and might have to sell in the spring at ruinous rates. And then every farmer in the state would turn upon and denounce the Farmer's Alliance, and our great organization would bedestroyed. And then the cry would go forth, "Why did not our president warn us of these lawyers? He must have sold out to the syndicate.
Therefore I say to you, use your own judgment when you will sell. Study all the facts submitted to you from every quarter. My own judgment is that wheat must rise. But I know too mach of the history of the wheat market in the past to prophesy as to the fu-
ture, or advise any man regarding so grav and complicated a problem, into which enter influences which no one can foresee. Where farmers can avoid rushing their wheat into market; they shoula do sopen, and do not become the tools of bulls or bears either. In any event understand clearly that the Alliance gives you no advice, and is not respon sible for the mutations of the future.
For the present the interests of the millers are identical with the interests of the farmers, in the great, secret and world-embracing battle which is now raging; and we should do what we can to help them in their efforts to advance the price of our great cereal. But this is a world of selfish interests and we must watch over our allies. The Great West showed more than a year ago, that there was a difference in the price of wheat, in Duluth and London, of 20 cents a bushel, after deducting every charge that could be made for its transportation and handling. This represented, on the total crop of Minnesota of forty million bushels, an annual loss to the farmers of nine million bushels or $\$ 8,000,000$ $\$ 9,000,000$. And this meant that ss of the tate; and a proportionate decrease of the prosperity of every business man in the state so that this robbery effects our entire popula tion. It becomes us therefore to do all we can to see that the producers receive a just price for the crop now about to be harvested Very respectfully,
ignatius Donnelly,
President of the State Farmers Alliance
Col. G, D. Rogers, editor of the Mar ket Record, of Minneapolis, an authority on such matters, in a recent interview said he was not favorably impressed with the scheme, holding that in the long run the farmer would come ou a loser. Besides, he did not think it was at all practicable. "The Alliance cannot do much when it comes to or-

I
ganizing the farmers." "There are too many who are compelled to sell, and too few to advance them money that they may hold. They may be able to do something to equalize delivery, but it is a question whether wheat will be any higher by equalizing than it has been. The history of the trade for the years of which the farmers complain, will show that wheat was not enough higher the ensuing year to pay the charges for holding. The holding of the crop would be an advantage to the railroad companies and to grain men, but as to its helping the farmer there is nothing in it. There would be if there was not money enough to pay for the wheat, but as money is always abundant the farmer gains nothing by holding, taking a series of years. He might by accident sell one year for a higher price, but many others would lose."

## FUNCTIONS OF OIRECTORS.

 GDGING by what I see and hear, the idea is quite prevalent that because directors of a corporation are called directors their duty is to oversee the corporation's business and to keep themselves informed of all its details. It is very much like the notion which children and simple minded people entertain of Queen Victoria. They fancy that she sits all day ong upon her throne in her royal robes, with a crown upon her head and a sceptre in her hand, as she is represented in pictures, hearing embassies and petitions, and giving orders for the government of her kingdom, whereas, the fact is that she occupies her throne scarcely once a year, and her government is carried on by her ministers of state, who consult her upon comparatively few of the measures taken in her name. Many boards of directors meet only once in three months, and have as little to do with their company's business as the Congress of the United States has to do with its executive affairs, and to expect more of them is as absurd as it would be to expect it of Queen Victoria.It is a pertinent question, and I fancy that it has by this time risen spontaneously in the minds of the readers: Why, if the functions of directors ex end no further than to the selection of a president and the appointment of an executive committee, are so much pains taken to choose as directors of institutions men well known to the public, and to parade their names in circulars and advertisements? My answer is that in nine cases out of ten it is for the purposes of humbug, pure and simple, and it is done by the promoters of companies in the beginning of their careers to inspire confidence and to attract business, and it is kept up to gratify the vanity and love of notoriety of men who like to see their names in print.-N. Y. Shipping and cannot do much when it comes to or- Commercial List.


## "PRiliv"

PATEIT IMPROVED

Immense incréade of trade without traveling agents. OUR COMPDITTORS GROSSLY ADVERTTSING and imitating Our STEEE REELS, we have decided to reduce our prices still more. Our Machines are working satisfactorily in the following

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Barber \& Son; Pillsbury-Washburn Flour Mills Co.-Anoka Mill; Minneapolis Mill; Holly Mill; Zenith Mill; Pettit Mill. IN MILWAUKEE:
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TO be sure of getting the best machine buy the genuine
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THE PRINZ \& RAU MFG, CO., MILWAUKEE, WIS.

##  <br> (0) (0) © © © @ MLAS CHOSEN.

WIITNESSETH:
THE BRADFORD MILL CO., Cincinnati Ohio:
AKRON, OHIO, September 23, 1890.
Gentlemen-Mr. Clark has just given me his order for the Dunlap Bolt, and wants it shipped as soon as possible. Make up and ship with the Bolt a Conyor as per enclosed sketch. * * * Respectfully,

FRANK E. NEAR

THE BRADFORD MILL CO., Cincinnati, Ohio
OfFIGE Of THE SEIBERLING TKILLINC CO
AKRON, OHIO, September 27, 1890 Gentlemen-Yours of yesterday received, and I wired you this morning "yes," as per your instructions. The sketch is all right. Make the Conveyor good and strong.

I told Mr. Near that he need not have cloth sent with the Dunlap Bolt, as I have the one here that was used in the test. I will use same numbers on the new machine.

Respectfully,
JAS. F. OLARK

## FARREL FOUNORY \& MACHINE COMPANY

 FNSONIF, CONN.ANSONIA ROLLS FOR USE IN ROLLER MILLS.
The general experience of American Millers unites in pronouncing these rolls the very best for Flouring Mill use.
These Rolls are now used in all Leading Flouring Mills Chilled Rolls for Paper Millis a specialty. Xostion that papor whan yon writo to ut.

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mail matter of the second-class. 1

MILW AUKEE, AUGUST, 1891.
We respectfully request our readers when they write $t$ ) persons or firms advertising in
this paper,to mention that their advertisement was sean in the UNITED STATES MTLLER AND THE MILLLING ENGINEER. You will thereby ob
vertisers.

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HERE were 8794 applications await ing action at the Patent Office at the close of last month. Most of these have been filed since the first of March. A CORDING to the recent report o the Collector of the port of Baltimore there has been a decrease from last year in the exports of corn, wheat and flour of the value of almost $\$ 12$, 000,000 .

F$\mathrm{F}^{\text {UNK }}$ and Wagnall's "Standard Dic tionary of the English Language will be issued shortly. Over one hundred of the ablest scholars are acting as editors of the various departments and it is the aim of the publishers to make the work more complete than any English dictionary now in existence, including all modern words. We have an earnest desire to see the complete work.

$D^{U}$URING the latter part of July a Chicago broker went "gunning" on 'change in Chicago for another one of the same ilk. Each party claimed that the other owed him money. This appears to be a new method of arbitration in Chicago. Had it been in some parts of "the wild and woolly West" the occurrence would have been more in order

WE had a very pleasant call during the early part of the month by W. B. Sheardown, the Eastern representative of the Duluth Imperial Mill Co. Mr. Sheardown was for many years General Passenger Agent of the Milwaukee and Northern R. R., but \& St. P. R'y he, like many other good men, lost his position. We congratulate the Duluth Co. in securing the services of such an able and affable gentleman.

$I^{T}$I looks a trifle "off color" to see tions acting as regular correspondents of any one milling paper, yet such is the fact and our north-western contemporary unblushingly "gives them away." We would suggest to the various state associations that they pay their secretaries to send to all the milling
instruct them to journals such communications as they would desire to see printed and to abstain from acting as

## T

 HE total loss by fire in the United States for the first seven months of 1891 is placed at about $\$ 80,000,000$ asagainst $\$ 62,500,000$ for 1890 and $\$ 75$,000,000 for 1889. The July losses for 1891 are placed at about $\$ 9,600,000$. The N. Y. Commercial Bulletin in commenting on these heavy fire losses, says:
"The fiery features of July were the lumber blazes at Michigan and the il
fate of risks partially equipped with
automatic sprinklers. automatic sprinklers. Losses on lumand the fire underwriters are anxious and know just what cause is responsible for them. The effect of the heavy for them. The effect of the heavy losses of the first half year is now be
ing felt by stockholders in several ing felt by stockholders in several of
the small fire insurance companies the small fire insurance companies
which have declared July dividends which have declared July dividends a percentages than her

## HOWES, ESQ., the veteran manu-

. facturer of grain cleaning machinery at Silver Creek, N. Y., is just out with his new catalogue. It is elegantly prinited. It has many illustrations, among which is a view of the Eureka Works in 1859. This is followed by exterior and interior views of his present large manufacturing plant which is building grain cleaning machinery that is sent to all parts of the civilized world. Mr. Howes has among his employes men who have been working for him for as long as twenty-five years. Any miller desiring a copy o the catalogue above referred to can obtain one free by addressing S . Hewes Silver Creek, N. Y.

A CABLEGRAM from London, dated July 21, reads as follows:
The new American steel steamer Charles W. Wetmore, Capt. Saunders which sailed from West Superior, Wis. during the latter part of June, arrived at Liverpool today. The Wetmore is an inland built steamer, and her cargo, which consists of 95,000 bushels grain, is the first grain cargo shipped from a lake port direct to Liverpoo without being rehandled. Her rout was down the lakes from Duluth, through the Welland canal and thence down the St. Lawrence river and across
the Atlantic. The success of the the Atlantic. The success of the voyage is evidence that the proposio be-
to establish direct communications be tween European and other ports and the port at the head of Lake Superior is entirely feasible."
Is it possible that the whale-back steamers and barges will revolutionize the grain carrying trade on the water?

THE Secretary of the U. S. Treasury in his report for June, says:
"Our foreign commerce of the last iscal year, when compared with that of 1890, presents a large and gratifying increase. This wis it is stated that the total value of the commerce of the fiscal year 1890 was the largest in the his tory of the Government, and exceeded
the total value of the commerce of 1889 the total value of
The total value of our imports and exports of merchandise during th last fiscal year attained its highest point, amounting to $\$ 1,729,330,896$ as against $\$ 1,647,139,093$ during and an increase of $\$ 241,797,869$ since 1889.

The value of our imports of mer chandise, also, during the last fiscal year was the greatest in the history of our commerce, amound
491 as against $\$ 789,310,409$ during the fiscal year 1890 , an increase of $\$ 55$, 595,082 .
The excess in value of exports over last fiscal year was $\$ 39,519,914$."

T has been estimated that Europe will be $400,000,000$ bushels short in wheat and that it will expect 200,000 , 000 bushels of the deficiency from the United States. The estimate of the wheat crop of the United States is placed at $540,000,000$ bushels which with $20,000,000$ bushels carried over
from last year would give us a total of $560,000,000$ bushels. For home consumption and seed for next year about sumption and seed
$360,000,000$ bushels will be wanted,
leaving us the $200,000,000$ bushels for

T
export to Europe which is probably a very high estimate of their requirements. If we demand too high prices to start with Europe will import very sparingly so long as the home grown wheat may last. By that time Amerian stocks will accumulate and down the price will go, giving foreign dealers a chance to load up at low prices. Of course we want to get every dollar we can for our wheat, but if we are too greedy at the start, we will simply overreach ourselves. This is the situation "in a nut-shell."

CONCERNING what is technically called "Available" wheat the Cin cinnati Price Current says:
It is not the quantity of wheat It that has any special significance. The main factors in the great breadstuffs game are the quantities produced and the export clearance. If the United States has $200,000,000$ bushels of wheat available for exportation during the year, of what particular importance is it as to whether the proportion "in store" advances this week, decreases next, and enlarges again the following week, due to the varying convenience of farmers in marketing, and to the caprice or interests of millers in reducing or enlarging their holdings for flouring purposes? The farmer who oolds whe and the warehouseman who holds wheat are alike speculators if they own the grain-and they don' agents for specula

HE reciprocity treaty between the United States and Spain is now an accomplished fact. It was brought about by the brilliant diplomacy o Secretary of State James G. Blaine and Hon. John W. Foster, special envoy of this Government. It will prove o immense value to the United States. Under its provisions in consideration of the admission free of duty of Cuban and Porto Rico sugar, molasses, coffee and hides into the United States, Spain admits all our pork and beef products, except jerked beef, free of duty. Lumber in every form, whether manufactured or otherwise, without paint or varnish, ice and mineral waters, and canned fish of every description, petroleum, manufactures of iron and steel, cotton seed oil, and certain grades of boots and shoes. The duty on flour is to be largely reduced on and after the 1 st of January, 1892. It will be one dollar on every 100 kilogrammes, or a fraction less than one-half cent per pound Heretofore it has been as high as two and one-half cents. This is an immense reduction, considering that the Spanish farmers and millers declared that American flour at such a moderate duty would drive Spanish flour out of the Cuban and Porto Rico markets. $\qquad$

$\mathrm{T}_{\mathrm{H}}^{\mathrm{H}}$HE Northwestern Miller since Mr, Edgar's return from Europe has evidently been badly afflicted with a severe attack of wind on its little stomach-a sort of billious colic as it were. In its splenetic mood it can hardly find words enough to condemn the Millers' National Association and its Secretary, Mr. Barry, in particular. To his morbid fancy it imagines " every bush an enemy" of his pet scheme to establish something which is already substantially established-that is, a new millers' national association and a millers' league. The first is in good running order and is doing all things necessary to be done; the second, the Mil lers' Tracing Bureau is already in op-
fully more practical work (tracing of flour shipments) during the past thirty days than the most sanguine could have expected and several of its subscribers are prominent millers in Minnesota and Dakota, a district which the Northwestern Miller has been supposed by some, to dominate, but which it don't by long odds. The animus of our contemporary against the Millers' National Association and its officers and the Millers' Tracing Bureau as expressed in its article and its caricatures is so plain that "he that runs, may read."

Mr. Edgar, the emotional editor of our Minneapolis contemporary attributes the authorship of an article published in the July number of the United States Miller to Mr. Barry, secretary of the Millers' National Association. Mr. Edgar has the reputation of being bright about some things but he is a poor guesser.

The Wisconsin State Fair will be held in Milwaukee Sept. 14-19. It will doubtless be the most important one yet held in the state and it is expected that the attendance will be very large. The departments of agriculture, horticulture, stock, manufactures, etc., will be fully represented. Railroads will provide transportation at reduced rates and every person in Wisconsin who can possibly do so should take this occasion to visit its metropolis. There are thousands of people within the boundaries of the state who have no idea of the progress Milwaukee has made during the past few years.

## foreign notes.

The Russian wheat crop is reported 25 per cent. and the rye crop 60 per ent. short of an average yield. If hese estimates are correct the outlook for American farmers and millers is good indeed.
The reduction of the French import ax which took effect July 1, will continue until June 1,1892 . The requirements of wheat by France during that time will be about $80,000,000$ bushels, a large portion of which will be drawn from the United States.
The Vienna correspondent of the Daily Chronicle, telegraphing recently, says:-Intelligence that has reached here from Russia states that everything that has been hitherto published respecting the famine and distress existing in that Empire is far behind the reality. In no fewer than seventeen governments, comprising upwards of a half of European Russia, the harvest is quite ruined, and the Government will have to provide the people with corn for food and seed purposes. A large number of villages are reported to have been entirely deserted, the peasants having migrated to the towns in the hope of getting work. All accounts agree in stating that an enormous amount of money will have to be expended by the Government if it is to mitigate the daily increasing distress, while it is added that Russia is going through a severe financial and economic crisis.

The Superlative Purifier Mfg. Co., of Milwaukee, Wis., have recently shipped New Era Sclapers to Du Quoin Mill Co., Du Quoin, Ill.; J. B. Stewart, Rushville, Itl.; Essmueller \& Barry, St. Louis, Mo.; Mayflower Mills, Ft. Wayne, Ind.; P. S. Masters, Chillicothe, Ill.; S. F. McDonald, Oxford Mills, Ia.; Fulton Milling Co., Fulton, Kas.

## CORRESPONDENCE.

| LThe following letters are all from our own special |
| :--- | corr spondents, and reflect their views and the views

of the trade in the location from which they write.

## OUR BUFFALO LETTER.

AST month I referred to the political preferences of President A. R. James, of the Millers' National Association, not knowing that an earthquake was about to shake the "Cleveland Democracy," the stronghold of that party in this city. All was apparently peace and quiet ness when the happy combination of "Grove" and "Lon" struck me as the best good old Yankee stock to represent this great and glorious nation on the Democratic ticket in the next campaign. The greatest Democrat since Jefferson and the chosen head miller of the United States!

President James is a business man, and beyond doubt the most convincing, persuasive talker to be found in this state. Plain matter-of-fact business ar gument, to the point, is what ninetenths of this world will listen to and remember when they cast their vote. On the occasion of the "ruction" in the ranks of the Buffalo Democracy referred to, Mr. James took the stand as one of the principal opposers of the "gag rules" passed by "Billy" Sheehan, who is Governor Hill's henchman in this State and one of the most unscrupulous politicians in it. Mr. James' speech was unfortunately not taken verbatim, but among the salient points was the following choice bit of rhetoric: "Long have we borne the yoke and answered to the swish of the goad; too long, my fellow Democrats. The time has come to use the weapons of defense handed down to us from the forefathers of this country against usurpers of the rights and privileges of its citizens. I stand for caucus repre sentatives elected by the people and not by a clique of "heelers." All men are born equal and I care not what belief, faction or nationality, a Demo crat may espouse ; I simply declare for an honest vote of the people at primaries. The root of all evil as far as Buffalo is concerned, is contained in the last sentence." This speech coming from the source it did, created the greatest enthusiasm, and Mr. James' name has been in the mouth of every honest citizen since.

To show what an interest is being taken in politics by our grain and flour men, the fact is worth mentioning that Mr. George Sandrock, President of the German-American Bank, and one of the best-known and highest-esteemed members of the Merchants' Exchange and citizens of Buffalo, was made temporary chairman of a meeting "packed" by the crowd which Mr. James so vigorously denounced the night previous. But Sandrock is a Democrat and for harmony, although, it is thought, his interests are with the "Sheeites."

The big break in the canal aqueduct near Schenectady has damaged the season's business on this great waterway almost irreparably. It is most unfortunate that politicians are put in places along the canal to guard against these breaks, who have never been in more responsible positions than making out pay rolls for the girls in a shirt and collar factory.
Mr. George Urban, Jr., and Mr. John Smith, of the Schoellkopf \& Mathews' mills, are in Europe, having sailed the latter part of last month. Of all the members of the Exchange who have visited the other side and returned with
the solemn intention of "going back next year," he is the first to stick to such a declaration. No better team than Messrs. Urban and Smith could be picked to "do" Europe from the milling fraternity in this city. It is safe to say that they will come home wiser respecting our trade relations with the old world and everything connected with millers and milling than the whole crowd who composed the recent excursion put together. The reasons are obvious.
The greatest wheat crop ever harvested both as to quality and quantity, is now coming forward in such proportions as will fairly fill our elevators to overflowing. There is no doubt about this. In my thirty-five years' experience in the grain trade, I have never seen such beautiful wheat. No. 1 Longberry red, which is far superior to the standard sample, and such a run of No. 2 red. The number of cars under this grade is not worth mentioning. Besides this there never was a year when old wheat would not sell at a big premium over the new except this. No. 1 Longberry sold at 96@97c, and No. 2 red at $93 @ 94 \mathrm{c}$ during the past two weeks. Sellers found no difficulty in getting these prices from city millers and the country trade seemed especially eager for a supply.
The receipts of grain at this port by lake for the season to Aug. 13th were:

|  | ${ }_{\text {23.707,768 }}^{189}$ |  |
| :---: | :---: | :---: |
| Co | 13,830.547 | ${ }_{31,119910}^{15.655,31}$ |
|  | 6.023,495 | 10.434685 |
|  | 225.001 | 1,075 |
| Flou | 509,045 | 2,213,667 |

The showing for this year is a poor one, lacking as it does fully $14,000,000$ of last year's receipts. The prospects, however, are most flattering in all other cereals except corn, during the next.fouremonths;and there isno doubt Buffalo's record of $6,214,980$ barrels of flour and $92,058,692$ bushels of grain made last year will be far outstripped before the close of navigation.

The shipments by canal show a woeful falling off, being $10,000,000$ short of last year. The figures are :

|  | 1891. | ${ }_{7}^{18909.562}$ |
| :---: | :---: | :---: |
|  | 1,990.591 | 14,268.546 |
|  | 74,980 |  |
|  |  |  |
| The railroads on the contrary have |  |  |
| carried seven million more than last |  |  |
| year from the opening of canal navi- |  |  |
| gation to Aug. 13th. The shipments |  |  |
|  |  |  |
|  |  |  |
| Whea | 10,027,4299 | 2,441,878 |
|  | - |  |
|  | 117,790 | 146,413 |

At present the railroads are about $10,000,000$ bushels ahead of the canal, but the outlook is decidedly favorable for the water route taking the bulk of the grain for the rest of the season, as cars are reported getting decidedly scarce, and the rush to get wheat to the seaboard as soon as possible nearly over.
Mr. M. L. Crittenden, now of Milwaukee, sent a handsome picture of himself, as a present to the Merchants' Exchange. Nothing could be more acceptable to the trustees, as Mr. Crittenden enjoyed the confidence and respect of every member of the Board. The picture will be hung in the secretary's room, and the eye of the old manager will now be on the new, ever prompting him to do his duty, in the performance of which he himself took so much pride.
The receipts of flour have been light during the past few days and with only fair receipts of other freight the ware-
houses are well cleaned up. I under-
stand the roads are contemplating large
improvements for the better handling of this class of freight, and that next ear will see the old Tifft elevator torn down and a big warehouse erected.
The Duluth Imperial Mill Company's house will hardly be finished this fall although every effort will be made to do so.

Messrs. Harvey \& Henry áre interested in a marl bed in this state, from which great things are expected. A hugh portion of what is declared to be the knee joint of the extinct American elephant, is on exhibition at their office, labled "Too large to go into the ark and was left out in the wet." The "tall millers of Buffalo" were always lucky and the present investment will be no exception to the rule.
The Chester mill at Lockport is being refitted with some new machinery after being idle for a few months. It will probably take six weeks to put things in running order. The work is being done under the supervision of Geo. T. Chester.
The wheat crop in this State is one of the best on record and country mills are being supplied with fairly liberal receipts from wagons. Mr. George Thompson, of the Thompson Milling Company, Lockport, says he is now paying 92 to 95 cents delivered. Several choice lots of Duluth wheat have been purchased in this market of late for the same Company.
"Could anything be more ridiculous," remarked a prominent miller last week "than the attempts of the manager of the Northwestern Miller to belittle the business standing and ability of the officers of the Millers' National Assocition? Singular that this man should wish to collar and drag the millers of this country into his way of thinking. Upon what meat does this Tzar of the Northwest feed that he has become possessed of the brains of the whole country. Is it necessary that he should berate us through his most valuable paper in the manner he does? If he has a new idea (which I question), why not carry it out and the millers will give him the necessary aid. I am not touched by his foolish procedure as I have never taken an active interest in the Association, but I detest such churlish methods in attempting to make a point. There is altogether too much of the "slangwhanger" style of writing of late about the Northwestern Miller, and I for one wish an equally good weekly could be started somewhere else."
It is simply wonderful to see the change in Secretary Thurstone after his long vacation. After twenty-eight years of steady hard labor with statistics and the numerous duties of a secretary, he was given about two months to enjoy himself and comes home as chipper as a boy. Why he does not look older than he did when he took the office, and I remember his appearance on that day as if it were yesterday. Mr. Thurstone was a "newspaper man" then and for years after was commer cial editor of the Courier. Assistant Secretary Daly is still at Mt. Clemens suffering from the old rheumatism.

Richards, of hopper scale fame, was in town lately, but the scheme lacks push and I fear will fall flat for want ot the necessary support. The railroads will be compelled to do this work themselves, as it is for their kenefit far more than the receivers. Car-service charges owing to competition is almost a thing of the past, and the sooner the railroads put up elevators to take care of this
business at a reasonable charge the better it will be for all concerned.
The demand for flour has been fairly active during the past week having: steadily improved since the new wheatcommenced to arrive. The undesirable accumulation has all been disposed of in one way and another sothat millers are now able to begin with a clean balance sheet on the new deal. Even the "Akron Falls" mills at Akron, N. Y., are going it again, according to"Clint" Newman, and when you hear him admitting such a thing you can bet the trade is lively. The Newman mills at Akron are always grinding feed, or flour is selling below cost of production when "Clint" is around. But the majority of his listeners pay little attention to his "poor-mouth" talk as they have heard the same thing for twenty-five years or more. However, flour is on the move and prices are satisfactory, which is one bright spot in the past two months' record of nearly all our mills.
Prices are far from steady except. possibly in the ease of the best spring patents, which are selling at $5.30 @ 5.40$ in lots with some "unknown" at 5.10@. 5.20. Winter wheat, old, is held at 5.00 and new from 4.60@4.75. Rye flour is going lower, although the price of that cereal has been advanced in this market from 74 to $78 \frac{1}{2}$ cents. Old rye is not offered at less than 5.00 and new at 4.70 to 4.80 .
Bran has steadily declined in price and the demand is limited. Coarse winter sold this week at 14.75 , and spring at 14.00 to 14.25 ; sacks 50 cents higher. Fine white feed is firm at. 23.50 to 23.75 per ton.

Hay is firm here at 17.00 for loose and 14.00 for baled, old ; new, $12.00 @$. 14.00. The prospects are for an advance of fully $\$ 2.00$ per ton as the oat harvest begins this week and the receipts will be very light.
The Urban mill is all under roof again and the place being put in order for the reception of new machinery.
The Attica mills are running night and day, turning out their full quota of what the people in that part of the State claim is the best all around flour ever made. C. J. Bork is pushing his best brands with all the vigor contained in the Bork family-and there is no more enterprising in the country. If Charles did not succeed he would be no son of his father Joseph.

Some very peculiar shortages and overruns are reported on cargoes received from Toledo. A number of vessels overran from 250 to 900 bushels, while shortages ranged from 80 to 350 bushels. Toledo has alwas been a troublesome port. Just how the matter of shortage will be settled is not known at present, but as some of the cargoes have been reweighed, two or three times, it is evident law suits will be in order soon.
"Clint" Newman bought the first car of new wheat which arrived here. It graded No. 1 red and cost him 97 cents per bushel.

Work on the Niagara Falls tunnel is going steadily on, and there is more faith, although less newspaper talk in the enterprise than ever.
Duluth wheat has been decidedly weak of late and sellers are anxious to unload in spite of the fact that the offerings at no time have been large. The pressure to sell seems to come from above. Hard was held at $14 \frac{1}{2}$, No. 1 Northern, $11 \frac{1}{2}$ No. 2, 8 over Chicago
be shaded one cent without much difficulty.
Mr. James W. Whitney, of Rochester, attended the races here last week.
Mr. F. J. Sawyer is still in the old country.

Mr. Riley Pratt is doing some great rustling in the wheat market here. Pratt knew nothing about wheat when he came, but corn is scarce and wheat plenty.

Business is very quiet at Henry Allen \& Co. (A. J. Wight). I learn from an outside source that the young man has compromised the trouble in the late firm of A. J. Wight \& Co. That special partner, Coon, was a little too wide awake. The best notice of young Wight's name will be in the case of Schoellkopf \& Mathews vs. A. P. Wight \& Co. That famous case is sure to come off in September. Every mem ber of the Exchange is anxious to have it settled, particularly as they are cer tain it will go against the Wights.

In addition to a large-sized scor which the members of the Exchange have to settle with A. J. Wight, there is one of late to freshen and keep the old grudge alive. It is generally thought that he is responsible for the order issued by the Western Union which deprived the Board of its Chicago quotation. These were furnished by Demary, Heintz \& Lyman, by means of a tube put in at considerable expense. This is claimed was objected to by
Wight, and while he was in Chicago Wight, and while he was in Chicago
the order to discontinue the dispatches was received. Mr. Wight has been furnishing certain papers with these markets and did not expect the free advertising he was getting for this service would be cut off, but it was. The Exchange is getting just as good quotation as ever, the Western Union on the floor gets no business, and the few members of the Board who were in-
clined to trade with Wight have gone clined to trade with Wight have gone over to Demary, Heintz \& Lyman
This is the story told on 'Change. This is the story told on 'Change.
Several of the elevators, which not elevated a bushel of wheat this season, have been ordered opened by the 15 th inst.

## Buffalo.

Buffalo, August 15, 1891.

## OUR ST. LOUIS LETTER.

jUST at present, and today especially, the wheat market is occupying the attention of both grain and flour men. Never before has the market caused so much excitement as today, and the losses and gains were never so quickly made. It seems to have been a good thing in many respects that today the exchange closed at 12 o'clock. This is the first
Saturday that the lately passed rule came into effect and its enforcement certainly proved very fortunate to many of the speculators. Such fluctuations as the market experienced today
have not been seen in a long while and have not been seen in a long while and coming so unexpectedly they had a most disastrous effect on many holders of wheat. One firm, John Tyson \& Co., were even forced to suspend and it is remarkable that not more were forced to do so. It is safe to say, however, that some firms are not as substantial, financially, as they were before the "break" in the market. As to prices I will quote them in my wheat report.
It is still a matter of wonder how the state can allow grain inspectors to be state can allow grain inspectors to be
appointed whose enly recommendation
is that they belong to the "granger and show 807,459 for this week and party." Their knowledge of grain inspection is not questioned; its total absence is universally recognized, yet they are allowed to impose upon the flour and grain men to the advantage of the farmer and to the disadvantage of St. Louis and her interests. It
seems almost too trite a subject to discuss again save that it but exposes the danger threatened not only to the St Louis buyer but likewise to St. Louis, as a business center. With the large export trade St. Louis has built up in the last ten years with France it is of he utmost importance that no occasion way from the St. Louis shipper's hands to those of other cities. For this reason it has been the custom to very careful in all shipments, both of grain and flour, to have the goods consigned, right up to par in every way. When the state decided to legislate on grain inspectors and appointed its own inspectors, and after the ability of these inspectors was tested and found wanting, St. Louis shippers recognized the great harm which might befall their foreign trade through the poor grain
inspection and for self protection hired nspection and for self protection hired wisdom of this policy was demonstrated this last month while a big foreign shipment was being made up. While loading a barge at one of the elevators a bin of wheat was opened which had been inspected as No. 2 by the O'Shea State inspectors. The private inspector marked it No. 3 and refused to let it be loaded on the barge. Later the binfull was sent to the East Side and there was inspected No. 3. Had it not been that a private inspector was on hand the poor lot of wheat would have been loaded onto the barge and sent to France, a country that can only use our No. 2 Red. Such a small mistake as that, of course Mr. O'Shea must overlook, but St. Louis shippers cannot and so the system of double inspection continues. Later I learn that another lot of grain for foreign consignment graded No. 2, was regraded No. 3 on the East Side
Speaking of foreign consignments, I see that the Sparks Milling Co. are about to press a suit against the rail-
roads for failure to fill their contract. The milling company made a contract with the railroad for the transportation and shipment of a lot of flour from St. Louis to Great Britain. When the flour reached the seaboard, however, it appeared that the ship in which it was to be carried, had room only for a portion, so the rest was held over for the next sailing. This delayed the flour so much that when it reached the other side the consignees refused to accept it, prices not warranting their doing so. The Sparks people hold the railroad responsible and intend to fight them for the loss.
Arrangements have been made for better shipping facilities from Galveston, due to easier quarantine laws, vessels will not be detained as long as formerly.
At a meeting of the Board of Directors Mr. C. N. Osgood was appointed to represent the exchauge in the approaching National Transportation Association's meeting. Mr. Osgood is the Traffic Commissioner of the Exchange and is selected to fill Mr. Craft's place, while the latter is absent.

## wheat.

Receipts foot up $1,289,815$ bushels for the present week and $1,298,434$ for last

633,313 bushels for last week. For export via. New Orleans 607,881 bushels were withdrawn from the elevators, while 324,484 bushels were shipped east and 47,390 bushels were used for home consumption. The No. 2 Red market was excellent all week, exporters buying up the whole market; No. 3 Red was also well in demand for shipment and home buyers found it hard to get any; No. 4 had a fair local market. Up to today prices were fairly quiet and while a stiff advance was in progress the pace was not too fast for all to keep up to it, today, however, the market "broke" completely and shot up from yesterday's closing quotation of $93 \frac{5}{8}$ cts. to $\$ 1.03$; No. 3 Red and No. 4 were also equal to the emergency and from 883 cts. and 82 cts. respec tivly, rose to 95 cts. and 91 cts. Quotations for the week are:

|  | No. 2 Red | No. 3 Red | No. |
| :---: | :---: | :---: | :---: |
| Monday. | . 86 | . 81 |  |
| Tuesday | . 8714 | . $8311 / 8$ | . $791 / 2$ |
| Wednesday | .921/8 | . 88 |  |
| Friday... | .921/2 | . 88 | . 81 |
| Saturday | $1.03{ }^{.98}$ | . 85 | . 91 | Thursday.

Friday...
$\square$ lour.
Receipts in flour amounted to 26,860 barrels, with 23,326 barrels for last week. Shipments were for this week 55,365 as against 65,394 barrels last week. Business is very poor and beyond a small Southern and local demand nothing is being done. A small export movement is reported, but nothing of importance. The output of the mills amounted to 82 ,600 barrels, a slight increase over the usual weekly output, aided somewhat by the starting up of the St. George mill which has been under repairs for sometime. Prices quoted at present are: Family, $\$ 3.20$ @ $\$ 3.30$; choice, $\$ 3.40$ @ \$3.60; fancy, $\$ 3.75$ @ $\$ 3.85$; extra fancy, \$4.10 @ \$4.20; patent $\$ 4.35$ @ \$4.45.

Walter Howard Bain.
St. Lours, Aug. 15, 1891.

## our london letter.

Hish Crop Conditions-Fallures in the Eng
Hat Grain rade-The Millers' Annual Con-vention-More Milling Syndicates Organized
-Nows From Russia-The Sucessful Trip

FOR some weeks past wheat has been slowly losing in value
what it had gained in March what it had gained in March
pril last, the immediate reason being the favorable weather for the crops. The rain during the past week with the very mild and close weather after the brilliant heat during which the wheat flowered, is just what the growing cereals required. Reports from all parts of the United Kingdom state that there are very heavy crops of wheat this year, and even in the sandy Surrey, the farmers say the wheat crop promises to be a full average. The wheat in many places is fast ripening and the golden hues of harvest becomes every day more apparent. It is therefore not surprising, that since April when the market price of wheat was at its highest point, the drop has been over six shillings per quarter, and the value now stands at the 40 s . level for the best wheats. It is a noticeable fact that all the unfavorable crop reports published, and there have been plenty have had little or no effect on the market, and this may have been mainly on account of America having offered her new crop most freely. Thus wheat on the market when its quality $\mid$ the existing business will be greatly wheat on the market when its quality the existing business will be greatly and condition is taken into account. developed, and that it will be the means The uniformity in the quantity of of Bringing into Newport for distribu-

Ameriean Red Winter is the cheres names of Newport and neighborhood
wheat and flour imported during the ten months of the cereal year ending June 30th last is remarkable. Thus in 1888-9 it amounted to $15,502,369$ quarters; in 1889-90 to 15,492,610 quarters and in 1890-91 to $15,763,168$ quarters. From private sources I hear that Russian wheat crop is much better than at first reported, and that Turkey and the old countries between the Levantine and Arabian seas have quite a bountiful stock for export. The fall in the Russian rouble encourages the export trade and there is little doubt that this fact will make the markets extremely weak. The suspension was announced on the 18th of July of Messrs. Edward Gripper \& Sons, of Winchester Wharf, Bankside, London, one of the oldest established firms in the grain trade, and this following so soon on the failure of Messrs. Alexander \& Co., the grain brokers of 40 Threadneedle Street, London, E. C., had the effect of making quite a flutter among the business men on 'Change. On July 7th, and three following days, the National Association of British and Irish Millers held their Convention at Northampton when Mr. Joseph Westley was elected President for the ensuing year. A paper was read by Mr. J. W. Lovibond on the Tintometer, and a very good discussion followed it on the question of the color of flour and the quantity and quality of gluten and its color effect. Three very good excursions were made and a banquet took place in the evening of the first day.
The Convention closed with a grand ball at which there were some two hundred ladies and gentlemen.
From the following half yearly report of the Sowerby Bridge Flour Society some idea can be obtained of what the condition of the milling trade in Great Britain has been for the first six months of this year. The Sowerby Bridge Flour Society sent out 148,599 packs of flour, and the sales of other goods brought up the total to 245,690 packs. The cash received for goods amounted to $£ 180,0439 \mathrm{~s}$. 1d., being an increase of $£ 4528$ over the previous half year. The gross profits, after allowing $£ 116610$ s. 9 d. for depreciation, amounted to $£ 24,04911 \mathrm{~s}$. 3 d . It was proposed to pay a bonus of 1 s . 8 d . in the pound; to add $£ 700$ to the reserve fund-making the latter $£ 7000$, to add $£ 300$ to the insurance fund; and to carry the balance of $£ 687$ to next halfyear's account. This period was the most prosperous in the history of the Society, but the prosperity of English milling for the next six months will not be so marked, if it is shown at all, in the balance sheets which will be made at Christmas.
The syndicate which has bought up the 22 mills in the Midlands will, it is stated, launch their project into the market for the public to invest their money in shares, during the coming week. The capital required is $£ 1,500$,000 , and it is to be hoped for the pubic's sake the company will not obtain the money it requires from "outside." Another amalgamation, this time between two milling and grain merchanting industries in Newport (Monmouthshire), at present working separately. The official announcement will shortly be made by the issue of the prospectus of the new company and the board is of the new company and the board is
tion in the West and Southwest of Wales and that part of England adjoining, the largest cargoes of foreign grain.

General Baranoff, Governor of Nijni Novgorod, Russia, has, I hear, informed the committee of the Exchange that he will expel any merchants or others who resort to speculation and the formation of corners in grain in order to raise the price and profit by the growing necessities of the population. Several merchants, says the indignant Governor, have already done this shameful thing; and he threatens to publish their names to the contempt of their countrymen, as well as to use the full powers which he possesses to inflict a well-deserved punishment. In view of the reported impending famine speculation in grain is severely interdicted.

On Tuesday, July 21st, the "Wetmore" arrived in Liverpool from Lake Superior with 300 tons of grain and was docked in the East Waterloo dock The "Wetmore," which is a "whaleback" ship, has a length over all of 265 feet, of which at least four-fifths is carrying capacity, her depth of hold is 24 feet and the beam 38 feet. As she steamed into the Mersey not more than nine feet was above the level of the water, and she carried a crew of twenty, all told. The portion which is above the water level is the hold which extends from the smoke stack to within 20 feet of the bow. In the latter place is merely a steel turret which covers the retreat of the crew to their sleeping quarters. In the stern of the vessel there are three turrets, one of which contains the smoke-stack, one rises above the engine room, and the third is the companion to the cabin and engine rooms. Above these turrets is an iron roof, which is inclosed on all sides, the space being used for the officers' quarters and the upper deck for quar-ter-deck purposes. The vessel has no keel, the bottom bulging downwards from the stem to the stern, no ballast is carried, and there are no watertight bulkheads. There is no cutwater, as is usual in steamers, but the vessel tapers from the center to the ends. If divided sectionally, the shape of the vessel is almost circular, with the exception, as has been intimated before, that the top is slightly compressed. As to the "Wetmore's" sea-going qualities, I am informed that rolling is reduced to a minimum. This is probably to be accounted for by the difficulty of any waves striking the beam by reason of the ship's low setting in the water. The main advantage commercially seems to be great carrying power, the gross tonnage being 1399.85 tons, and the net carrying power 1075, which means an actual capacity of 3000 tons. Another advantage claimed is that the top of the hold is unencumbered by any fixings, and there are nine steel hatches which are bolted down to the deck, all of which may be opened at once, and unloading or loading operations may be proceeded with from nine parts of the vessel at once. The speed is not great, but nine knots an hour may be considered as fairly satisfactory. The driving power is constituted in two steel boilers, and a compound condensing engine with two cylinders, 26 and 50 inches in diameter, with a stroke of three and a half feet, which are driven at a pressure of 125 pounds to the square inch. The "Wetmore" is licensed to ply on the Northwestern is built of steel throughout. X. Y.
London, August 7th, 1891.

THE correspondent of $I$ he American Machinist, probably the ablest general mechanical journal published in this country, re cently visited the works of the Edw. P Allis Company in Milwaukee and this is what he says in his paper: "Probably there are no more complete machine works working in a similar line in the country than those of the E. P. Allis Company, at Milwaukee. About fourteen years ago Mr. Edwin Reynolds became connected with this company, and as superintendent, and seconded by other members of the firm, he has buil up an immense business. The Company is the largest builder of Corliss steam engines in the country, and I believe the largest builder of milling machin ery as well. ${ }^{\text {E }}$. Some idea of the work done in building Corliss engines may be had from the fact that in the first 112 days of this year there were shipped from the works 97 engines, with an average diameter of cylinder of 27 inches. At this writing there are I am informed, orders on their books aggregating more than one million dollars. A large proportion of work done is of $\mathrm{a}_{\text {el }}$ very heavy character. One engine I saw under construction was for the Chapin Mining Co., of Iron Mountain, Mich. It was a compound with cylinders $50^{\prime \prime}$ and $100^{\prime \prime}$, with a strok of 10 feet; it is to raise water 1500 feet high. This engine has a fly wheel 40 feet in diameter, and weighing 150 tons Work of this character requires good facilities for handling, and the yards of the company are served with a Bald win locomotive, with cylinders 14 inches diameter, also with a traveling crane that can be seen almost any time moving along with a piece weighing from one to fifteen tons. Railroad track enter the principal buildings, where traveling cranes complete the outfit for for handling heavy pieces.
In the way of large tools I noticed two planers, each of which will plane ten feet square, and eleven turning and boring-mills. There is also a pit lathe that will turn a wheel 40 feet diameter and 11 feet 4 inches face. The heavy tools have been run day and night for past ten years.

Corliss engines are literally manufac tured. In all ordinary sizes a pattern goes into the foundry, not for one piece, but for, perhaps, filty, and in the machine shop all the parts are worked up in quantities, and kept in stock ready to be given out for erecting, a complete system of gauges and jigs being employed for keeping the parts standard. Special tools are, of course, extensively used in making the parts, one draftsman being constantly employed in carrying out the ideas of foremen and others in the way of improved methods.
I noticed a cylinder-boring and facing machine by Nicholson \& Waterman. To this additions were being made, which when accomplished, will enable a cylinder to be completed planed, bored for piston and valve seats -at three settings. New machines have been added to the plant during the past year, at a cost of $\$ 100,000$.
In the drawing room thirty draftsmen are employed. This room is large and light, and everything connected with it is well systematized. Track is kept of drawings by the card system, which is very highly commended. Fire proof construction, 16 feet square and
three stories high, provides for the safe ty of duplicate drawings, books, etc.
The foundry is $375 \times 128$ feet, served by two traveling cranes. Endless chains are employed for moving the trucks containing molds and large cores into and out of the ovens. In addition to this foundry, the company has another one, two-thirds as large, a few blocks away, as well as another plant for building milling machinery; the reason for this separation being that there is no room for building on the original ground of fourteen acres. Since Mr. Reynolds' connection with the works, the building ings on this ground have all been built anew, and then extended and other stories added, until the necessary yard room cannot be further encroached upon.
A good deal of high grade modern sawmill machinery is built in these shops. Amongst other machinery for this purpose are band-mills. For one of these mills, band-wheels ten feet in diameter are used. The upper wheel is comparatively light, while the lower wheel is heavy, to serve as a balance wheel. This wheel-the lower one-is made with a double set of arms, eight in a set, and these arms are staggered and cross each other. That is, the arms that spring from one end of the hub take hold of the opposite edge of the rim. These wheels have a surface ve locity of 10,000 feet per minute, and hence precaution must be taken against strains in the casting. This is done, in part, by separating the hub in casting, into two distinct parts-not splitting it longitudinally, as is sometimes done in the instance of heavy wheels, but di viding it at the center at right angles to the bore into two distinct hubs; the arms, as will be understood, from one edge of the rim taking hold of the opposite half of the hub. In cooling, the arms are free to draw the two parts of the hub closer together, or to separate them further. Then the hub is built around in the foundry, and a dis-tance-piece cast between the two parts, the whole being eventually held firmly together by eight bolts passing longitudinally through the hub and distance piece. The journals of the shaft that carries this wheel are ground true after the wheel is keyed to the shaft. I be lieve that this construction of a wheel is patented.
An amusing story is told by Mr. Rey nolds regarding one of these wheels. The parties who were using it melted the babbit out of the boxes, and in rebabbitting, by heat or in some other way, sprung the shaft. Then they discovered the loose piece between the parts of the hub, and the utility of the longitudinal bolts, and immediately concluded that the wheel was a patched-up affair, and complained accordingly.
A good deal of open hearth steel from Carnegie, Phipps \& Co., is used for such parts as connecting rods, piston rods, shafts, pins, etc. This steel is fairly easy to work, and when finished looks as fine as anything that can be seen. An immense crosshead - I should not be willing to hazard a guess as its weight-finished all over, was, I think, the finest piece of large finished work I ever saw. Then there were two finished shafts of this material, each 10 inches diameter and 40 feet in be about absolutely perfect. These were for the West End Railway Company, of Boston.
Large hoisting, winding and blow-
well as pumping engines-particularly triple expansion. This firm was the first in this country-if not in the world - to erect a triple expansion: pumping engine. This engine was a fore and aft compound, with a capacity of $6,000,000$ gallons, 150 feet high, in 24 hours. The guaranteed duty was $115,000,000$ foot-pounds for each 100 pounds ${ }_{\text {at }}^{\text {vi }}$ of coal; steam pressure, 80 pounds. It was built for the City of Milwaukee.
I noticed the lagging of cylinders with wood has been abandoned, steel being used instead; not thin sheet steel, but steel of sufficient thickness to resist all probable efforts at indentation.

## FOREIGN NOTES.

An estimate of the prospective wheat. crop of the world, based on official figures, is published in London, showing a probables.shortagel in supplies of 50 ,000,000 bush. The requirements of all importing countries are placed at 405,000,000 bush., and the surplus for exporting countries at $355,000,000$ bush. The probable crops and requirements or surpluses of the principal countries are given as follows: Great BritainCrop $64,000,000$ bush., requires an import of $150,000,000$ bush. FranceCrop $240,000,000$; needs $100,000,000$. Italy must import $40,000,000$. United States-Crop $511,000,000$; surplus 154,000,000 . India can possibly export $32,000,000$ bush. of the $255,000,000$ harvested this spring. Russia may be able to export $64,000,000$ out of a probable crop of $185,000,000$ bushels.
British bakers are earnestly protesting against the practice of washing dirty India wheat, which is quite common among English millers. They say the flour produced from washed wheat contains a considerable quantity of water, for which they have to pay four cents per pound. They demand that only clean wheats-such wheats as can be cleaned by cleaners without washing, be imported. In the meantime the jolly English miller goes right on washing his wheat and selling his combination of flour and water to the indignant baker, who in turn, in order to make a profit must add more water and turn out a very moist loaf of bread.
The President of Peru has issued a decree admitting free from duty into that Republic the following articles: Live sheep and cattle, dried meats, salt beef, dried, smoked or pickled fish, wheat and corn, potatoes, and all other vegetables, eggs, cheese, chestnuts, peas, beans, rice, rape seed, herbs and spices, and has decreed an export duty of twenty soles silver per head on cattle exported, and two soles per head on sheep exported. This action as announced in the decree, is in consequence of the scarcity and consequent high price of food in Peru caused by the floods that have followed the heavy rains throughout the country, and by the enormous demands for all forms of food caused by the war in Chili. The export of provisions from Peru to the armies of the insurgents along the coast of Chili has so reduced the stock of flour and meats that speculators have taken advantage of the situation and advanced the price of beef to 40 cents per pound in the Lima and Callao markets, where flour and bread are held at similar prices.

All persons desiring to reach the entire milling and grain trade of America, by circular or otherwise, should obtain a copy of Cawker's American Flour Mill and Grain Elevator Di-
Rectory for $1890-91$ FLeUr Mill AND GRAI
REGTORY For 1890-91.

NE W S. - Capt. J. C. Flynn
started up his new mill at Iowa
Bragg is the general manager and C. R. started up his new mill at Iowa Bragg is the head miller. The mill also has Park, Tex., July 18. The mill was built for Capt. Flynn by the J. B. Alfree Co., of Indianapolis, under the immediate supervision of Mr. Owens, an employee of the Company. The owner is so well pleased with the work that he has ordered the capacity doubled. Mr. J. C Loughry is the head miller. Bread was made from the first flour produced in forty minutes from the time of starting up. A Flo

## A Flour mil at Mosco, Colo.

The erection of a new flour mill at Grime Pa., has just commenced.

Henry C. Yaegers' Sons will soon star up their new mill at Waverly, Ill
The new flouring mill at Argus, Pa., will commence work early in August.
The Union Flouring Mills at Oregon City Ore., are adding a lot of new machinery.
The Baker City, Ore., mill is exporting a considerable amount of flour to China and Japan.
The Chatfield, O., Milling and Elevator Co., has been organized with a capital stock of $\$ 20,000$.
J. Himmelburger's mill with contents at Morehouse, Mo., burned July 30. Loss reported at $\$ 50,000$.

The Albany, N. Y., wholesale flour dealers have agreed to close up their places of business at noon on Saturdays.
E. P. Allis \& Co., of Milwaukee, have sold a complete outfit for a 50 barrel mill to Stewart \& Pitt, Primeville, Ore
At Brooklyn, Ill., July 15, the large flouring mill was struck by lightning and burnedLoss about $\$ 15,009$; insurance, $\$ 5,000$.
The large flouring mill at Brooklyn, Ill., was recently struck by lightning and burned. Loss about $\$ 15,000$; insurance, $\$ 15.000$. Horace Hitchcock, miller and dealer in agricultural implements at Mayville, $\mathbf{N}$. has failed. Labilies, Station and Lower Canton, Baltimore, Md Station and Lower Canton, Baltimore, Md. Heavy a
TeN more whaleback steamers are to be built by the Messrs. McDougall at Duluth, in addition to the two now afloat, for ocean
freighting. The flouring mill of G. A. Schoch, at New Berlin, Pa., is being repaired and fitted with machinery for the manufacture of roller process flour.
An elevator at Fargo, N. Dak., owned by the Fargo Improvement Co., was destroyed by fire Iuly 18 . Loss
tents not yet reported.
At Bolivar, Mo., Aug. 7, Blevin's saw and grist mill and gardening machine factory were burned. Loss on building and machiner $\$ 4,000$; on wool, $\$ 1,000$; no insurance.
Burned, July 21, the Swan Lake Milling Co.'s mill at Nicollet, Minn. Loss reported at about $\$ 40,000$. Well insured. The mill $I_{T}$ is reported that $\mathrm{Wm}, \mathrm{H}_{\text {, Reitz }}$ day. IT is reported that Wm. H. Reitz contem-
plates moving his mill from Somerset to Balplates moving his mill from Somerset to Balfor obtaining wheat and selling the mill's products.
The Michigan monthly crop report for July estimates a probable yield of wheat from this year's crop at $24,671,558$ bushels. The area is 1890 .
harvested in
At Carroll, Obio, August 8, the flouring mill of A. P. Kistler was burned, with a loss of about $\$ 25,000$. The principal loss was on wheat, which had been stored. The fire is thought to have been incendiary.
The Urban Milling Company, Buffalo, N. Y., has leased the Frontier mill at Black Rock of Schoellkopf \&. Mathews, and will run it till the Company's mill near the Chippewa market is in running order again.
David Bower, of New Bloomfield, Pa., has bou $\alpha$ ht the interest of Parsons \& Clouser in the flouring mill above town. The new firm, ach member of it owning a half interest, is
of Messrs. Bower and David Clark.
The Rio Milling and Manufacturing Comof seventy-five barrels of flour per day, ex pect to have their mill in operation by the first of August. Mr. Edward Corbett, of Washington, D. C., is the contractor.
DUncan Bros.' flouring mill at Baker August 4th. It is supposed to be the work of an incendiary. Loss estimated at $\$ 27,000$, with insurance of $\$ 17,000$. This mill is one of the leading mills in Eastern Oregon.
The Waynesboro, Pa., flouring mills ar running up to full capacity. Mr. M. Kiv a 50,000 bus
Herman Erb has sold Peter Heid's interest in the Heid \& Mory elevators at Appleest in the Heid \& Mory elevators at Apple-
ton, Hortouville and Van Dyne, to Charles Mory, of $\Lambda$ ppleton. Mr. Heid will probably not return from Europe, and the business will be conducted entirely by Mr. Mory.
At Greenville, Tex., August 8, a fire curred in the grain, hay and wool warebouses of Lowenstein \& Hunnicut. The buildings were of iron sidings and roofs, but the interiors, with their contents, were entirelv consumed. Loss, about $\$ 3,000$; insurance unknown.
The Northwestern Consolidated Milling
Co., of Minneapolis, is now fully organized, and business anced to be under the new management July 4. The consolidation includes the following mills. Columbia, Northwestern, Galaxy, Zenith and Crown Roller.
The Commercial Record, West Superior, Wis., says: The Freeman Mill Company are making good progress with their work, and rapidly as possible. rapidly as possible. The calls are being of the work owing to lack of means

Schaefer, Huebner \& Co. are building a four story stone flouring mill at Menomonee Falls, Wis., capacity 100 barrels daily, 75
barrels wheat and 25 barrels rye barrels wheat and 25 barrels rye. The fur-
nishings are from E. P. Allis \& Co. It is exnishings are from E. P. Allis \& Co. It is expected to be in running order on
The plant will cost about $\$ 20,000$.
John Green, a veteran miller of threescore years and ten, has been running a farm. saw and grist mill at Townsbury, N. J., for take a rest and has leased his property and started on a grand tour to visit friends and relations in different parts of the country
The Merchant Flouring Mills of A. Godshall \& Bro., Lansdale, Pa., after two months of stoppage for repairs and alterations, resumed running on July 7, with a full complement of new and improved machinery. The work was done by E. P. Allis \& Co., of Milwaukee, Wis. The capacity of the mills is now 250 barrels per day.
The Latrobe, Va., Advance says that dur\& Ellis, whe year the milling firm, of St. Clair Export flour, have had shipped Value and 60,000 bushels of grain, exclusive of the large purchase from farmers. The business of the firm has been growing steadily and rapidly, and the demand for their favorite brands of flour is increasing daily.
Thompson's feed mill in Minneapolis was crushed during the adjoining wall of the Star elevator under the enormous pressure of wheat. The loss to the mill is $\$: 4,000$ and that of the elevator company $\$ 25000$. There were sixty thousand bushels of wheat let out. Thompson's building is fully insured. No one was hurt.
At 4 o'clock A. M., July 15, an explosion took place in the shawmut mills, conducted by Whitney \& Wilson, Rochester, N. Y Rober Fulcher, the night miller, discovered that one of the spouts was clogged. In setting the spout in operation, the lantern which Fulcher carried set fire to the cloud of flour
dust and an explosiou followed. Mr. Ful cher was painfully, but not seriously burned in the face and hands. He was removed to his home and attended by a phy
damage to the mill was slight.
The oldest grist mill in Carbon county Pa., as far as known, is the one at Pleasant Corner, it having been built in about the and having been substantially is of structed it remains in its original shape and form, save as to the machinery, which has been renewed from time to time. Some thirty year ago it was owned by ex-Sheriff Jacob Hol ben, now deceased. It is still being oper ple of the surrounding neighborhood the
The following item has been sent to $u$ rom Chippewa Falls, Wis.: "Papers of pur chase have been completed whereby two large flouring mills and an extensive water power on Duncan creek became the property of the Consolidated Milling, Elevator and Power Company. The Company consists of Mayor Leinenkugel, Judge Marshall, A. B. McDowell, President; Lumberman's NaTonal Bank, D. Chisholm and H. C. McRae The latter will act as General Manager of me Company. Ground will be cleared immediately for the erection of a large grain ing mills and elevator establishments, if possible. Capital stock of the Company

## THE IMPROVED WALSH DOUBLE TURBINE

 WATER WHEEL.In view of correcting a mistaken idea generally prevalent regarding the construction and operation of the tight fittting cylinder gate of the Improved Walsh Double Turbine, the manufacturers, B. H. \& J. Sanford, Sheboygan Falls, Wis., submit the above cut and following explanation: The dark portion of this transparent cut shows the wheel proper, or runner, and the cylinder gate in its down, or open, position. The reader's attention is called to the fact that the gate passes down to open and is the reverse of all other cylinder gates. At half gate the cylinder passes down to the partition ring dividing he two sets of buckets, thus using the upper half of the wheel only, which virtually amounts to a single turbine


Wm. Walsh, Pontiac, Mich., has been building a new flume and placing a 48 -inch Improved Walsh Double Turbine, purchased of B. H. \& J. Sanford, Sheboygan Falls, Wis.
Wm. Seuer, Arcadia, Wis., visited the Phoenix Iron Works, Sheboygan Falls, Wis., recently and placed his order for a 15 -inch Improved Walsh Double Turbine water wheel.
J. W. Howard, Gilmanton, Wis., has ordered a 26 -inch Improved Walsh Double Turbine water wheel of B. H. \& J. Sanford, Sheboygan Falls, and will add other new machinery.
Wilson Davis, Galesville, Wis., is improving the power of the electric light plant by putting in a 32 -inch Improved Walsh Double Turbine Water Wheel purchased of the manufacturers, B. H. \& J. Sanford, Sheboygan Falls, Wis.
Andrew Kern, Plattville, Wis., is putting in a 20 -inch Improved Walsh Double Turbine water wheel, manufactured by B. H. \& J. Sanford, Sheboygan Falls, Wis., also other machinery and will soon be in operation.
Jacob Arimond, successor to Arimond \& Bowser, Dundee, Fond du Lac Co., Wis., is improving the power of the mill, by displacing an old water wheel with a 32 -inch Improved Walsh Double Turbine, manufactured by B. H. \& J. Sanford, Sheboygan Falls, Wis.
J. R. Sechler \& Son, Sechlerville, Jackson Co., Wis., have
wheel at full gate giving full percent-
age, a result not obtained by any other wheel.
At full gate the cylinder passes down oo the position as shown in the cut and orms a short draft tube. Another ad vantage gained by the introduction of this principle in operating the gate is his: Nothing can prevent the gat from closing perfectly tight, as sand or rubbish in the water will be carried upper edge of the cylinder clean to go up to the square shoulder turned in the crown plate, thus forming a gate hat is free from the danger of clog. ing and is absolutely water-tight when closed. This is a feature of materia importance where the water supply is imited and must be used with the best possible enconomy.

## spencerian business college.

utmost capacity the entire season. The pens its 29th year, Tueda, Sales of this company in Badger Luber 1, 1891, with a strong corps of Grease Cups have exceeded those of teachers, improved advantages and in- any previous year. Quality in this creased accommodations, both in the line is in more demand than formerly business department and in shorthand and the outlook for the Cream City's and typewriting. The courses of study trade is excellent.
and system of instruction and trainitg The Superlative Purifier Mfg. Co., have been revised and perfected and Milwaukee, Wis., have orders for New are the most complete anywhere to be Era Scalpers to be shipped to Nordyke found. The spacious, college rooms \& Marmon Co., Indianapolis, Ind., corner Wisconsin street and Broadway ( 6 machines); Minto Roller Mill \& Elehave been enlarged, renovated and re- vator Co., Minto, N. D.; Chas. Rodgers, decorated. A handsome illustrated St. Clair, Minn.; Aug. Wolf \& Co., pamphlet circular just from the press Chambersburg, Pa.; Nordyke \& Maris sent free to all who wish it and gives mon Co., Indianapolis, Ind., (one three much valuable information regarding sieve machine); Northern Milling Co., business education. Students of either Grand Forks, N. D.; Lake Park Roller sex may enter when the new year be- Mills, Lake Park, Minn.; Williams \& gins or at any term thereafter that Groat, Portland, Ore., (2 machines); W. may be more convenient. The Spen- B. Woodward, Horr's P. O., O.; J. F. cerian college supplies business houses Gandolfo, Dubuque, Ia., (4 machines and offices with trained help, male or female, to suit employers. proved Walsh Double Turbinch Im wheel to their entire satisfaction and have ordered a second one, 32 inches in diameter, of the manufacturers, B. H. \& J. Sanford, Sheboygan Falls, Wis. The Cockle Separator Mfg. Co., of his city, have orders for four cylinder Kurth Cockle separators from Minnesota Elevator, Chicago, and American Cereal I., of Cbicago, for their Cedar Rapids, Kurth Cockle Separator to Day \& Hoyle, Woodman, Wis.
Milwaukee has for some years taken front rank in the manufacture of fine grades of oils and greases. The trade so far this summer unusally heavy Oil and Grease Co are grades of fine oils and making all grades of fine oils and lubricants, and their factory has been crowded to its utmost capacity the entire season. The bricants, Mill Greases and Compression ease Cups have exceeded those of
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## the care of a boiler.

## BY D. RIVERS.

THE proper care of a boiler is one of the most important things about a steam plant, and yet less attention is commonly given to the boiler than any other part of the machinery. There bay be several reasons for this and one which shows up the most frequently, is that the engine with its finished parts and brass oil cups and steady running gives a better chance for display than does the boiler. The engine room seems to be the important part of the establishment and the place that receives the most attention, while the boiler is generally located as far out of the way as possible and receives the smallest amount of attention that can reasonably be given it. This is not the case in all plants, but in the majority of them the boiler is neglected, so that more time and attention can be given to the engine and its surroundings and it is usually noticed that whereever there is a fine engine on which a show can be made, the boiler room will be found quite dirty, most of the apparatus required therein in an uncleanly condition, more so than should be necessary from the amount of dirt and
dust usually made in such places. Where the engine receives the larger amount of the attention, the boiler must of necessity be neglected and usually is, to a considerable extent, and is nearly always the case where the engineer does his own firing. All engineers know that the boiler is the most important piece of machinery about the plant, or at least should receive the greater amount of attention Owing to the duties required of boiler and engine and the means employed for working them, it is understood that there is a possibility of accidents oc curring in a short space of time which may be the cause of the destruction of the whole apparatus. When an engine breaks down, the destruction is usually confined to the one room and is seldom disastrous, for such accidents rarely occur, while anything that may happen to the boiler, and the possibilities are many, may be the cause of a large amount of damage. We have no indicators for boilers that serve the purpose so fully as the steam engine indicator and the noises produced are practically indications of the condition of the engine, but in a boiler there is nothing which corresponds to this, for although braces may be loose or broken, rivet heads corroded and eaten off, boiler plates grooved or pitted, initial strains present from the too free use of the drift pin, necessitated by the low price at which the boiler was furnished, crystallized plates, produced partly from the same cause, may either one be capable of causing a terrible accident, which coming as it will, without warning, may make the results most terrible. All these defects have been found in boilers, in some cases before an accident has occurred but in others only from an examina tion of the wreck produced and of the fragment left, but in most cases their presence is unknown until the boiler is in a decidedly dangerous condition.
In plants where a fireman is em ployed a much cleaner fire room is usually found and, occasionally, the fireman takes sufficient pride in his surroundings to keep the boiler front and other parts exposed to view reasonably clean, and some go so far as to keep all the fittings bright, the ceilings and walls whitewashed, pipes, dome
etc., nicely painted a deep jet black and an air of tidiness all around. In such a place, it may be inferred from a casual view, that the machinery of all kinds has excellent care and that the inside of the boiler receives fully as much attention and as close examination as the outside parts which make the show, and this is as it should ke.
Some engineers have elaimed with a show of pride that they have not had their boilers open for over six weeks, two months or longer as the case may be, apparently considering that such things are complimentary to their ability as an engineer. In some cases it is all right no doubt, for any engineer that gives his boiler a careful examination and inspection every two or three months may be reasonably assured of its safe condition for that length of time, providing every thing ;was found as it should be when the last examination was made. The use of mechanical boiler cleaners tends to increase the length of time between which examination of the interior of the boiler is made, as some of these devices are capable of keeping a boiler free from scale for several months' time without special attention. But no boiler should be allowed to go so long without careful examination for a sufficient amount of corrosion can take place within the time to change the condition of the boiler from that which would be considered safe to that which might be positively dangerous and unreliable under ordinary conditions of usage A practical knowledge of the subject would indicate that every engineer worthy of the name, who had charge of a boiler would make a careful examination of both the inside and outside, at least, every month, closely examining all parts for signs of corrosion grooving or pitting, sounding plates and laps in joints for unusual and unsafe conditions.
The safety valve is a factor that cannot be ignored, and the usual practice of opening the valve or causing it to blow off at least once per day, does not really seem sufficient to be a guarantee that it will perform the duty required of it just at the time it should work to best advantage. A safety valve may readily stick, especially those that are constructed to prevent the steam blowing into the engine room whenever the safety valve performs its duly. A valve of this kind is usually fitted with a cap surrounding the stem through which it is intended to move without friction, and also without permitting an escape of steam around the sides of the stem, and for this reason there is great danger of its sticking, and that without any indications which will call attention. Valves of this kind, whenever inspected, will be found to have the stem thickly covered with mineral matter which has been carried off with the ${ }^{*}$ steam and finally adheres to the stem with such tenacity that it can only be removed by filing or sand-papering. Such accumulation enlarges the stem and a similar deposit in the cap ofteh produces such a condition of affairs that to start the valve from its seat, even when the lever is removed, requires considerable of an effort. Under such conditions the valve is not corroded to its seat as usually expressed, but the stem and cap are caused to adhere on account of the accumulation deposited from the flow of steam, which carries with it more or less water from the boiler, which in turn deposits the sedimentary matter carried over.

As near as can be judged from what we find, the water in a boiler while in a state of ebullition is covered with a scum formed from mineral and vegeand in some cases oil is also found which is brought in from the exhaust It is generally shown that when water is carried over with steam, a large amount of this sedimentary matter is carried over also, and frequently great quantity of it passes through the engine and out of the exhaust pipe, as may be noticed by the streaks of whitewash with which the exhaust pipe is marked. These substances when blown out through the safety valve are what causes such trouble, and to keep a boiler entirely free from such accumulation on the surface of the water would require the frequent use of a surface blow-off, or the constant use of a mechanical boiler cleaner. But as the proper care of a boiler requires a consideration of a number o points that cannot be given in a single article we will continue the subject in another paper.-Weekly Stationary Engineer (Chicago).

## A DEEP HOLE IN THE GROUND-WILL BE THE DEEPEST YET.

(0)L of the most important scientific explorations into the depths of the earth ever undertaken will be carried out near Wheeling, under the joint auspices of the United States government and the city of Wheeling. Some months ago, says an exchange, the Wheeling De velopment Co . began drilling a well near the city in search of oil or gas. It was determined to bore as far as possible. The hole has already reached the depth of 5,100 feet, within 500 feet of the deepest well in the world. In this distance a dozen thick veins of coal have been passed, oil and gas both struck but not in paying quantities, and gold quartz, iron and many other minerals found. The hole is eight inches in diameter, and the largest in diameter of any deep well in the world. Professor White, State Geologist, has succeeded in getting the Government geological survey officers interested in the exploration, and the result is that the hole will be drilled to the depth of one mile. Then the Government will take up the work under the direction of two expert officers of the geological survey, and drill into the earth as far as human skill can penetrate. The idea is to take the temperature and magnetic conditions as far as possible and by means of an instrument constructed for the purpose a complete record of the progress and all discov eries made will be kept and will be placed in the geological survey exhibit at the World's Fair.-The Mechanical News.

## BUSINESS IN BUSINESS.

A lithographing establishment in Buffalo recently received from a Western customer a circular note announcing the death of the head of the firm. It was given to the clerk with instructions to write a letter of condolence in reply, and this is what he supplied :
"We are greatly pained to learn of the loss sustained by your firm, and extend to you our heartiest sympathy We notice that the circular you sent us announcing Mr. -'s death is litho graphed by Chicago parties. We re gret that you did not see it in your way to let us figure on this job. The next time there is a bereavement in your house we shall be glad to quote you on lithograph circulars, and are confide
that we can give you better work at less cost than anybody else in business.
Trusting we may soon have an opportunity of quoting you prices, we remain with profound sympathy, yours truly."-Buffalo Courier.

## MILWAUKEE ITEMS.

The family of the late Edw. P. Allis will erect a beautiful monument to his memory at Forest Home cemetery. The monument is to be of pink tint Rhode Island granite and Tennessee marble, and will be in the form of a temple, 35 feet square and 20 feet high. It will contain eight catacombs below the ground surface and eighteen crypts above ground, in all, receptacles for twenty-six caskets. The design was drawn by Hanford White, of New York, one of the best monument architects in the country. The cost of the monument is not to exceed $\$ 35,000$, and, though there are more costly ones, the builders predict that it will be the best and handsomest one in the country
S. H. Seamans, Ese., the treasurer of the Millers' National Association has recently been blessed with an addition to his family of a handsome baby boy We congratulate Mr. and Mrs. Seamans on the happy event.
The Wilkin Manufacturing Co. have taken the contract to build and equip a $\$ 45,000$ addition to the Pfister \& Vogel tannery.
The employes of the Edw. P. Allis Co. had their annual excursion and pienic, Aug. 15. The employes with their families and sweethearts were conveyed by two special trains to Port Washington, a beautiful suburban village 25 miles north of the city on the banks of Lake Michigan.
H. Hoecker, the London representative of some Milwaukee flouring mills, was in the city several days during the latter part of July.
The British Baker, Confectioner and Purveyor in referring to the tendency of British millers to add baking plants to their mills, utters the following words of warning: "We contend that no man can be both miller and baker to his own advantage in both vocations. Each of these is such a true science and art that it is only by devoting himself to one alone that a man can reasonably hope to attain a complete mastery of the one or the other. The subdivision of labor whereby the baker is provided with the flour whence the bread is to come is wholesome and wise, and it is certainly to the interest of the consumer too. The advanced miller has quite as much as he can well do in these days to convert his wheat into merchantable flour, and there he should stop. He and the baker are correlative terms, and as such they must remain. It is monstrous for the miller, in our thinking, to put forth the hand of rapacity and to try to filch away the narrow profits of the baker. Let the miller bear well in mind the peril he incurs for himself and his class. Let the British baker be but once roused to a full sense of all that is meant by those hybrid anomalies of manufacturers, miller-bakers, and it will be perceived very quickly that the baker has a ready resource in the foreign flour salesman, who will never fail him, and by and through whom he can bring to bear on millers, disloyal to those whom they serve, a pressure which would soon be found to be irresistible. On the other hand, the miller will say to the bakers the words of the illustrious Boss 'Tweed, 'What ase vou going to do about it?""

## OUR LEGAL DEPARTMENT.

specially Prepared for The United States mille
Decisions. Fallure of Consideration Note.-
A note was given in consideration of forbearance from legal proceedings against a person, and when it was sued upon he set up a failure of consideration upon the ground that one of the chief motives which induced him to execute the note, was to keep the matter from his family and his church, and that it had become public, and therefore that he should be relieved from payment of the note. This is not sufficient to amount to a failure of consideration unless it appears that the person to whom the note was given agreed to keep the transaction secret and had failed to keep the agreement.-Swanson v.Griffin, Supreme Court of Mississippi, 8 South, Rep. 411.
Assignment of Patent.-A patentee assigned to a firm of which he was a member all his interest in the patent "for their full, free, and exclusive use during the life of the partnership." Said firm assigned to another firm, of which the patentee was also a member, all the assets of the former firm, and agreed that during the existence of the second firm no right to manufacture or sell under said patent should be given to any third person. The second firm only acquired the use of the patent during the existence of such firm.-Nichols v. Murphy, Supreme Court of Illinois, 26 N. E. Rep. 509.

Conveyance Not Fraudulent as to Creditors.-After a person has loaned money to a member of a firm for its use it will not be fraudulent for him, as against other firm creditors, to take a deed of the partnership property at a fair market value. Nor would it change the case if he knew that the partner had a fraudulent purpose in conveying it to him, so long as he acted in good faith. That when the real estate was transferred it was orally agreed that one of the partners should remain on the land, without payment of rent, to the conveyance was made, would not impeach the conveyance for fraud. It is also lawful for a person to purchase personal property of an insolvent, if it is done without knowledge of fraud, and creditors cannot have such a transaction set aside.-Strong v. Swafford, Supreme Court of Iowa, 47 N. W. Rep. 1023.

Creditors Must File Claim in Time. -Under the section of the Iowa Code, providing that in assignment for the benefit of creditors, "all creditors who shall not exhibit their claim within the term of three months from the publication of notice, shall not participate in the dividends until after the payment in full of all claims presented within said term, and allowed by the court," a non-resident creditor, say one in New York state, will have no right to participate with the creditors who present their claims within that time, if he fails to do it, even though there be equitable considerations for it, such as that he has had no actual notice of the assignment, because his name not appearing on the books of the insolvent no notice by mail could be sent to him by the assignee, as required by law.Carter v. Lee, Supreme Court of Iowa, 47 N. W. Rep. 1014.
Assumption of Agency.-To recover in a suit brought for goods sold and
delivered, it becomes necessary to prove that the person who got them and to whose account they were originally charged, was the son of the party sued. No express promise of the latter's to pay for them was shown. A letter written by the person who got the goods claiming agency would be no evidence of $i$. That it was shown to be the rumor of the neighborhood that he was a son of the person sued would be offset by the testimony of the latter that he was not. Such relationship ought to be established by better evidence than a mere neighborhood rumor. It must be proved to be a fact.-Sax $\mathbf{v}$ Davis, Supreme Court of Iowa, 47 N W. Rep. 990.

Intention Determines Character
of Fixtures.-Whether many of the articles necessary for the use of premises and attached by nails or otherwise are to be regarded as part of the realty will depend on the intention of the owner. That shelving and counters are nailed to cleets fastened to a house and are necessary for the use of the premises as a store, and have been so used for even so long a time as twenty years, does not constitute them a part of the realty. It must appear in order to make them such that the owner of the property intended that they should be regarded as a part of the realty. Therefore without proving such intention a person could not take them under a mortgage of the premises.-Johnson v. Moser, Supreme Court of Iowa 47 N. W. Rep. 996.

Death of Workmen in Hazardous Employment.-In an action for the wrongful death of a furnace employe who was caught in a trench by flowing molten iron that had escaped prema turely from a "boil" formed in the "run," and for the relief of which deceased and other laborers were digging the trench, it is competent for defendant to show that other well-regulated furnaces used "stock-house men," such as deceased and his co-laborers in the trench were, for the purpose of digging such trenches, although the ordinary duties of that class of laborers gave them no experience or training in respect to that kind of work. A charge that, however slight the negligence of deceased may have been, "if it was such that but for the negligence the accident could not have happened," there can be no recovery, is not erroneous where the only negligence on the part of the deceased consisted in not getting out of the ditch when ordered to do so, or when he saw or should have seen the molten iron flowing towards him, since such negligence, if it exists, is neces sarily the proximate cause of the in jury.-Holland v. Tennessee Coal Iron Railroad, Supreme Court of Alabama 8 South Rep. 524.
Delivery of Telegraph Message. In order to sustain an action for damages for failure to deliver a telegram, it must be shown that a contract, actual or implied, existed between the sender of the message and the company Where a man writes a message on a leaf of his note book, tears the leaf out and sends it by a messenger to the telegraph office, without paying for, offering to pay or agreeing to become responsible for the charges for sending it, no contract exists between the parties, and no recovery can be had against the company for failure to deliver.-Western Union Telegraph Co. v. Linddell, Supreme Court of Mississippi, 8 South Rep. 510.

## G000 IDEA.

 ECY Y REYNOLD Michigan State Millers' Asso ciation sent out the following circular to members, which we think might well be imitated by other state associations. We quote his circular letter in full:
"In the report of the poceedings of the which Meeting of the Association, a copy of Which is herewith enclosed, you will note a to reporting the Jobbing Prices of Flour and Feed in each month's local market and also a supplementary resolution introduced by Mr. Chatifield, defining my duty in regard to these reports. It was discovered upon comparison by members present, that a wide difference existed in local jobbing prices and some trouble has been experienced whe kets because the competing mill did not know the local members' price.
To obviate this difficulty and to aid each member to get as high a price as surround ing conditions will warrant, these resolu tions, after a full discussion, were without issenting vote passed.
Hereafter, you will give on the back of your regular report and in addition thereto bing trade, Straight and Patent Flour, Bra and Middlings, and the average price you paid for wheat for the week reported. Thi applies to all members.
My report will then read something like this, taking one town as an example under the head of
local jobbing prices.
 gained by the new rule. It will enable each one to see at a glance whether they are paying more for wheat or getting less for nour than their neighbors who are similarly situated as to wheat supply and transportation facilities and it will be notice to competitors what the local prices are, and if anybody should be so foolish as to give a
fictitious price his competitors will soon disfictitious price his competitors will soon discover the de
The time is fast going by when each member of a trade or business lies in ambush
with a club ready to cripple or kill every with a club ready to cripple or kill every other member of his trade or business. The exigencies of the times are forcing a broader view of things and compelling a closer union of personal interests, so much so that
the conflict is rapidly passing from the indithe conflict is rapidly passing from the indi-
viduals of a trade or business contending viduals of a trade or business contending elf, which standing as an unit, now takeup the fight for its rights with other trades nd kinds of business, wherever interest lash.
If the members of this Association will look at the situation today, as sooner or
later you will be compelled to ater you will be compelled to look at it, it would be monev in your pockets, and the cut-throat competition, which you meet at the sea-board and which is unnecessary kept
up at home, could be entirely eliminated p at home, could be entirely eliminated
from the home trade. Will you see it nne from the e"
or later ?"

## milling and mechanical notes.

Power and Transmission in an article entitled, "What a Boiler Should Be," says: "In the first place it should be safe. Then it should be simple, convenient to get at, around and into easy to handle and repair; compact; quick to steam, constant in its circulation, and steady, too; free from smoke, able to work with any kind of water, good, bad, or indifferent ; and dry steamer ; and, of course, economical of fuel. In order to be all these things, the heating surface must be so arranged as to best take the heat from the gases of combustion, and so as also to let the steam which is generated get away from those surfaces as rapidly as possible. It must be strong enough to stand any pressure that can be got in it by fair means; and should have a safety valve which will let off all the steam that can be generated in it, even if none is being drawn off. There must be no place where unequal expansion will make the boiler its own enemy. It must be saving of fuel, not only at some one rate of steam production, but at the regular rated capacity; an
while it cannot be expected that a boiler will do as well with bad fuel, bad water and bad firing as with all of these three good, it must be economical with all three bad."-

A correspondent of the American Machinist writes: "I want to enter a protest against the habit that men have of rying, in setting forth the merits of their own manufacture, to belittle what others do. I don't believe it helps the case a bit ; on the contrary, I believe it prejudices it. When I read a circular want to find out what a given machine will do; not what some other
machine will not do."
The different kinds of metals used for bearings produce different degrees of friction, while the same metals may produce different degrees of friction according to the lubricant used. It has been stated by some of the prominent authorities that under ordinary conditions the fractional resistance between two surfaces in sliding contact were equal to .25 of the weight pressing them together, but modern practice has demonstrated that with a good combination of metals and a good lubricator the friction may be reduced to less than one-half that amount.
Electric motors have been applied o upward of 140 different uses, and the number is still increasing. The sizes of the motors include those of from a mere fraction of a horse power up to one of 5,000 horse power, which is in operation near London, England.
Awkward Mechanics.-Mechanics are often addicted to what can only be called awkwardness. In getting at a new or strange piece of work, some men make so much fuss, and appear to such poor advantage, that surprise is expressed that such an incompetent man should be employed. Most of this awkwardness, or "fumbling," could well be avoided by the man if he would only see himself as others see him. His attention is too much taken up by some detail of the matter, and he does not comprehend the whole amount of his work. A thorough mechanic gives a thing a thorough thinking over before he proceeds to execute any work. If the awkward mechanic would learn to think more, he would appear to much greater advantage, and would be worth more money to his employer.
Some young men can make themselves into good machinists in six months, some in twelve months, some
in two or three years, and some will in two or three years, and some will never get there with the traditional seven years' apprenticeship, and had better do something else. But of all the different kinds, give me the six months man. He is the one who was "born a machinist," and he will continue to learn and become more valuable all his life.-James Francis in American Machinist.

Purchase on Futures.-Where a broker sues to recover commissions on purchases and sales of goods made for another, the customer can show that he understanding between them was hat the actual goods should not be delivered, but that a settlement should be made according to the difference in prices, and proof of this is a complete defense to the action for commissions, as such a contract is a wagering agreement and therefore illegal.-Hentz v. Miner, Supreme Court of New York, 12
N. Y. Supp. 474 .

宛
1 MILLERS' STRIKE IN 1552.
GERMAN writer observes that " strikes, and 'boycotts,' too, for that matter," by which term he persumably means "picket ing," were hardly less common in ancient times than they are today. He gives the history of a miller's strike in the imperial free town of Villingen in the year 1552. It is recorded that on the morning of Monday, October 6, the millers of the city, masters and men, struck work and left the town in a body, departing to Hafingen, where they maintained themselves at thei own cost. Their ground of complain is not made clear, but it is plain that they had in some way fallen out with the Town Council, who claimed supreme jurisdiction over all the city guilds, and were in their way as strict disciplinarians as our present master of Spring Gardens. The council proved fully equal to the occasion, for as soon as the malcontents left the city they brought four millers from Obern dorf, who were able to grind enough corn to keep the wolf from the citizens doors. The dissidents then began to be alarmed, and presently intercessors invoked the mercy of the city fathers on their behalf. It was urged that they had acted "heedlessly," but the council was in no hurry to relent. The situation of the strikers became serious at the end of eighteen days they had "eaten 40 gulden," and were as far from their end as ever. In those days Australasia was an undiscovered bourne and there were no benevolent Mel bourne merchants to remit large sums by wire to strike committees. Again was the city council approached, when it replied that if the millers had come to their senses they might return and take the punishment of "the city." Slowly and sadly the strikers retraced their steps, and on the evening of Saturday, October 27 , they were again in Villingen. Their exodus had lasted just three weeks. The contrite millers were at once summoned before the city fathers assembled in the council. All the strikers were there, except two of the fourteen masters, who, we are told afterwards came in. As a token of submission the millers were commandthis they did. Then eight of the culprits were committed to the city goal. Early on the Monday morning following the council were assembled and heard the pleadings of the prisoners' wives, who all appeared to beg for mercy for their husbands. Nor wer these the only intercessors; Count Fried rich of Furstenberg, and other noble men, came on the same mission, which is proof presumptive that the millers had acted under some strong provocation. At last the city fathers consented to let the strikers off with a fine, whereupon the Millers' Guild had to collectively enter into a bond to pay within two years a fine of 200 gulden. And so ended the great strike of the millers of Villingen in the October of 1552.
tadde papers and mechanics.

因INERESTING discussion going on in some of our contemporaries as to the interest taken in trade papers by our mechanics. Opinions vary in this as in all other matters of dispute, but are more or less coincident in the conclusion that the average mechanic takes but little interest in any paper devoted exclusively to his particular trade. If this is so, it is a matter of regret. It is a blind neglect of the most easily obtained and available means of trade education
which, in these progressive times, is be coming as much a necessity as ten quainted with current thought and the atest development of mechanics, and that of the best kind and at low cost would seem to be a desideratum so ap parent to the ordinary mind that any neans of supply would be eagerly monopolized. Facts, however, seem to verse this conclusion.
It is true that a trade journal is not dime novel; it is not devoted to fic ion. It may lack the spice of cheap iterature that smothers the odor of bad brandy with the aromatics of cloves or coffee, and it is not to be expected of men toiling all day ove forges, anvils or lathes, that what is eft of them at night should be spread ike a grease spot over a rehearsal on paper of what they have had enough in perspiration and backache.
change of interest is after all as good
for the soul as is a change of clothes or food for the body; but with this all admitted, it would seem to be simply matter of common sense, that mechanic with the opportunities of im proving under his nose should utilize he advantage in the interest of his pocket if not of his mind. The means o do this are cheap and plentiful They are in every man's reach, and he need not glue his nose to the pages of what he reads, or grind his mental rist exclusively on technical literatur to keep himself posted on what is
really the source of his bread and butter.
It is, however, a fact that with too many even of our skilled workers, heir interest is too often limited to so many hours a day and so many dollar week. There are, happily, many ex eptions, and it is from this class and ype that the leading men in the in dustrial world have graduated into mechanical leadership. It is a matter of surprise, and with none more than with those who have the best knowl edge of the facts, that the best-edited rade papers of the country have not a appreciation either of employer

## OIL IN BOILERS.

1T seems to be proved beyond doubt that kerosene oil has a beneficial action upon the interior of
team boilers in a section of country where lime water is used for feed. Some engineers open the boiler once a week and turn in from one to three quarts of either crude oil or kerosene Other engineers follow the practice of injecting a pint or so of oil every day Some men have rigged up special ap paratus for injecting oil. This is hardy necessary, especially where a power feed pump is used. There is, or should be, a small pet cock tapped into the barrel of every power pump. If a bit of rubber hose is squeezed on over his pet cock, and the end of the hose dipped into the can containing the oil, it is quite easy to open the pet cock during the suction stroke of the pump, and close it during delivery. This action for a dozen strokes will suck up all the oil and send it en route to the boiler.
When an injector is used a pet cock may be tapped into the water supply pipe just back of the injector. If the water supply flows through the instrument it may be necessary to throttle it slightly when oil is to be administered o the boiler. When this is done the ubber hose can be applied to the pet oock in a manuer similar to that de
the injector is working well turn on the oil and it will be quickly soaked int he injector and discharged toward the boiler: Care must be taken not to open the pet cock to its full exten
when passing oil through an injector $r$ the large body of oil acting differ ently from the water may cause the inector to " break." If this happens, the engineer may get a dose of oil and greasy water on his face and shirt front but no more serious action will occur The steam pump may be given oil in a similar manner, but it will not pay to harness up the air chamber pet cock for this purpose.-Paper Trade Journal.
Keeping Up Steam Over Night. An engineer has been telling a contemporary how to keep up steam in a boiler over night without banking. First, the damper is closed tightly and ashes drawn to the ash-pit door, mak ing it air-tight. Then the smoke-box door is opened a trifle, the result being that the engineer had 15 to 25 pounds pressure in the morning. With a set ing that is not full of leaks, i should be easy enough to keep up pressure over night without any fuss and if not, there is some leak some where that should be attended to. The leak may be of steam, through faulty connections or in a cracked setting, let ting the cold air come in contact with the boiler. Then some engineers have an idea that the top of the boile should not be covered, and here is an avenue for the heat to escape. I have let the fire under a boiler go out early Saturday afternoon, and on Sunday afternoon have found 25 pounds press ure, and nothing was done but close he damper, furnace door and ash-pit

The best practice is to bank the fire, but when this is done, there is more fear of a pressure too high than otherwise. Any one who has a steam pressure recorder will note that the pressure runs very high during the night, and passing through any of the city streets late at night, the hiss of steam escaping from safety valves heard, and leads to the ion that some may be in condition les responsive to the excess in the pressure allowed.
A Mysterious Art.-Three slices o bread shown by a Lewiston (Me.) flour dealer spoke for themselves. Placed side by side they shaded very abruptly into three strikingly distinct tints. One was of the hue of graham, and fell into your hand like a half-baked brick. Another was nearly white, and would be greeted with pleasure by hungry man. The third was so white that snow would have to be bleached to compare with it; moreover, it pos
sessed that spongy texture which is so sessed that spongy texture which is so gratifying to the eater, and a source of so much pride to the cook. It threatened to dissolve in one's mouth, and would tempt a gorged epicure. It would not be a strain to say one could distinguish between them in the dark. The flour dealer deposed that the three slices of bread were made by three women from one and the same kind of flour. The cook who produced the first slice was dissatisfied with the flour, while the woman who made the bread last mentioned said she could make good bread out of flour that didn't cost less than four dollars a bar rel. It is evident that bread-cooking is not one of the lost arts, but is an art which still contains sufficient mys tery to puzzle many and confound not a few of the angels who hover over our

## American Steam Gauge 60. Bourton fiteam Gaulges

WITH LANE'S IMPROVEMENT.
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 umarial pip sartit vimis For Locomotive, Stationary and Portable oilers; and Instruments Inciden-
tal to the use of Steam. Send for Price List 1 .

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 Send for Catalogue K.
## what a corn palace is like.

Only those who have visited the previous corn palaces at Sioux City can have anything like an adequate idea of he architectural possibilities of the product. In building the palace, a large structure is first erected of lumber of a shape that will carry and show to advantage the multiform decorations with which it is to be adorned. It is in form lofty, with broken lines, pinnacles, butresses, bridges, gables, ornamental windows, etc. Over every inch of this wooden surface is laid corn and kindred plants in architectural harmony and in a multiplicity of designs. Corn is employed in the stalk, the ear, the kernel, and even the husk has its decoative uses. The various colors of the cereal permit of a wide range of shading and coloring, while the artistic possibilities developed from year to year in building the palace admit of the production of effects that are as startling as pleasurable. The interior work is specially fine and elaborate, the kernel of the corn being largely employed and producing amazing and unique effects. Upon the walls are wrought pictures illustrating farm scenes, nursery tales, etc., with a fidelity surprising to those who have not before seen t one of the Sioux City Corn Palaces the varied artistic availability of the grain, and flowers, and frescoes, figures of persons and animals, and many ar istic and ornamental shapes make the palace a structure of unique beauty and imposing grandeur.
The great corn palace event of 1891 begins October 1st and continues until the 17th inclusive.

The Seattle, Wash., Telegraph, has reason to believe that R. Hunter Craig \& Co., of London. England, will soon erect a large fouring mill in that city. Mr. Craig has been investigating the matter thoroughly.

June, July and August.
The most charming Summer Resorts, of ocations, are to be found in Wisconsin owa, Minnesota, south Dakota and the the Chicago, Milwauke Nearly all are locate way and range in variety reached by raildress for dinner" to the flannel-shirt costume September and October.
The finest shooting grounds in the NorthChicago, Milwaukee tary to the lines of the crop of Prairie Chickens will be excentionIn Nood this year; also Ducks and Geese.
In Northern Wisconsin and the Peninsula of Michigan splendid Deer shooting is to behad GEO. H. HEAFFORD, Gen. Pass, Address, Chicago, Ill.

## MANUFACTURING SITES FOR SALE!

The undersigned owns a few of the best manufacturing sites in the city of Milwaukee, adjoining those now occupied by the Milwaukee Car Wheel and Foundry Co. and the magnificent plant of the Fuller-Warren Stove Works which cover nearly ten acres of ground. Best of railroad facilities. Parties desiring a suitable location should investigate this. Address,
E. HARRISON CAWKER,

36 \& 37 Loan \& Trust Building.
MILWAUKEE. WIS.

## stolen secrets.

One hundred years ago, before the day of protection by patents, what a man discovered in the arts and mechanics he concealed. Workmen were put on oath never to reveal the process used by their employers. Doors were kept closed, artisans going out were searched, visitors were vigorously excluded from admission, and false operations blinded the workmen themselves. The mysteries of every craft were hedged in by quickset fences of empirical pretension and judicial affirmation. There used to be, close by Temple Bar, in London, an old chemist's shop. The proprietor of it in days gone by, enjoyed the monopoly of making citric acid. More favorably circumstanced than other secret manufacturers, his was a process that required no assistance. He employed no workmen. Experts came to sample, and assort, and bottle his products. They never entered the laboratory. The mystic operations by which he grew rich were confined to himself. One day, having locked the doors and blinded the windows, sure, as usual, of the safety of his secret our chemist went home to his dinner. A chimneysweep or a boy disguised as such, wide awake in chemistry, was on the watch. Following the secret keeper so far on his way to Charing-cros, as to be sure he would not return that day, the sooty philosopher hied rapidly back to Temple Bar, ascend the building, dropped down the flue, saw all he wanted, and returned carrying with him the mystery of making critic acid. A few months after, and the price was reduced four-ifths. The poor man was heartbroken and died shortly afterwards ignorant of the trick by which he had been victimized.

## is another highmond in the field?

 REPORT from Chicago says that Phillip D. Armour, who now controls the provision trade there, is anxious to control the grain trade as well, and it is said he is now engaged in buying up the principal elevators in the Western country. Already he controls the provision pit on the Board of Trade, and now he proposes to fix the price of wheat. It is believed he can do it without much difficulty, for he can control more money than any man in the West.The pork king wants to change the manner of grain inspection, and this can only be done by his getting control
of the elevators. It is said he can secure all the elevators in the West except those in control of the English syndicate. They get good interest on
their $\$ 8,000,000$ investment. They $\left\lvert\, \begin{gathered}\text { FOR } \\ \text { Filling } \\ \text { SALE-One } \\ \text { property in }\end{gathered}\right.$ would have no objection, however, to going in with Armour, who would put prices on a firm basis. This scheme, which seems to be approaching a head, has been a favorite idea with him for some years past.

## THE WINONA MILL CO. A WINNER.

A Chicago judge has made an important ruling on insurance in a case in which the Winona Mill Company was the plaintiff. The company had insured its plant in thirty companies, through a single agency. The policies forbade further insurance on the property, but attached slips made an exception as to grain and flour on hand. The mill was burned, entailing a loss of $\$ 300,000$. After the fire the insurance companies discovered that the mill company had taken out $\$ 100,000$ more insurance, and refused payment. The mill company brought suit, claiming that the attached slips were substitutes for the clauses prohibiting additional insurance, and this was sustained by the court. The aim of many insurance companies seems to be not to insure patrons against loss, but to make them believe they are insured.
"Catalogue of Farm Lands, Coal Lands, Iron Lands, Timber Lands, Improved Farms with full description, price and terms, of properties for sale on the line of Queen \& crescent Route. page or a very neatis is being mailed free to all persons who will make application to Mr . D. G. Edwards, the General Passenger Agent, at Cincinnati, 0.

FOR SALE OR FOR RENT FOR SALE - The "PioneER MILLS,"
Washington, $D$. $\mathbf{C}$. This is a 500 barrel full roller mill, built according to the Edw. P
Allis system. Frrst-class water power Allis system. First-class water power.
Machinery of the most modern and improved Machinery of the mast modections first-class. For full particulars address AUSTIN HERR,

FOR SALE-A 100 barrel full roller stean Fouring mill, with feed, cornmeal a and buck Wheat roll, and with all the latest improved
machinery. Situated in an unexcelled wheat machinery, Situated in an unexcelled wheat
section in the Willamette Valley, Oregon, on section in the Willamette Valley, Oregon, on
the S. P. R. R., with elevator capacity for the S. P. R. R., with elevator capacity for
storing 150,000 bushels of wheat and 50,000 storing
bushels of oats and barley for feed. This
mill must be seen to beappreciated. For lnmill must be seen to be appreciated. For in
formation address F.BARN EKOFF,
142 Front street, Portland, Ore.

FOR SALE-The flour mill known as the
"MODEL MILLS," Rochester, N. Y., 200 ba MODEL Mrles," Rochester, N. Y., 200 bar-
rels, winter and spring wheat, roller and stone process, modern machinery in good repair, good water power, long cease
terms, good custom trade. Must beld to
en close an estate. Apply to C. D. Kiehel and
John H. Campbell, Executors, 803 Wilder John H. Campeell, Executo
Building, Rochester, N Y.
FOR SALE-Shakopee flour mill-must be sold. Daily capacity 300 barrels. Built
in 1886 . Brick, four stories and basement. In 1886. Brick, four stories and basement.
Mill is in first-class order and ready to run. Elevator 25,000 bushels capacity, crib work
veneered with brick. Large local and feed eneered with brick. fromge ocal andis. Ad-
rade. Twenty miles from Minneapolis. Ad
(ress
CHAS. G. HIN DS, Assignee, Water power. Price cheap and terms re
able. Address Myron, Iowa.

## SITU ATIONS W ANTED.

WANTED-A thorough miller and millnished if desired. Address,
MILLER \& MILLWRIGHT, Box 123, Nashyille, Tenn.

WANTED. $-A$ change by a competent miller with 15 years' experience in good mills.
Am a young married man, now managing a successful mill. One year in this position,
three years in last as foreman of a 150 barrel three years in last as foreman of a
mill. Have a complete kit of tools, and do mill. Have a complete kit of taois, and pondence solicited, from Nebraska especially. Address,
S. C. EARNEST, ${ }_{\text {ST. Joseph, }}$

WANTED.-A situation by an experienced miller, single man. Hard wheat country preat once. Address
W. A. PARK, Box ${ }_{\text {SUPERIOR, }}{ }^{73}$, Neb

## SECOND MILLER WANTED.

 We want a good man as second miller for general work in our roller mill. Capacity, 75 man preferred. Steady employment for theright man. For further information address or apply personally to
$5 t f$
Stf Reddymann, Jaeger \& Co., $\quad$ Danville, Wis. 6 6-1

11tf

## INTEREST FOR SALE.

 WILL SELL or take partner in a 100 est and lam flouring mill, fitted with the in the best wheat belt of Nachinery, situated very large exchange business. Has sidevery large exchange business. Has sideexcellent opportunity for conducting elevator business. Has a large cash trade, and is western Nebraska, Northern Wyoming an Southern Dakota. Address, KLOMAN \& ARNOLD
## FOR SALE-In Genesee Co., N. Y.

PIECE OF MILL PROPERTY, 25 acres, continuous, what This property is within a few rods of the West shore eraiiroad and in a great custom business vicinity. Will advance money to
rebuild on small payment. For particulars address,
T. CARY, 6-4t
bataivia, N. Y.

## A BIG SNAP.

To close out a partnership, we offer for
ale our 50 -barrel Richmond City Mill Works' sale our 50-barrel Richmond city Mill Works ville, Tenn., and enjoying good exchange thade. Two members of the firm engaged in other business is the reason for selling
Write for full description. Reduced R. R fare on July 4. Address,
W. H. BLAKELEY \& CO.,

Bowling Green, Ky

## FLOUR MILL FOR SALE.

|  <br> Following is A Iist or the machinery: One Schwartural Chaln Odell Holl; one $9 x 30$ Double Odel Roll Cocke $9 \times 24$ Double Odell Rolls, or breaks on Wheat; four $9 \times 22$ stone Rollis for Middlings, and three pair three Middiling Stones; three Garden Bitt and five Smith Purifiers; one Three Break Scaiper and sid oe Hughes Reels; three Fitcher and two "Siliver Creek" Centrifugal Reeis; two Riva Ton Platform Suspension Scale; Barnard \& Leus' Separator to Grain Bins. <br> The above machinery is all of the latest improved, and has been run very successfully. Capacity of mill, twenty-four hours, 350 barrels. Driven by one $18 x 42$ Reynolds' Corliss engine and one 180 H. P. Heine Safety Boiler. If desired, we will take pleasure in furnishing a more minute desoription, with price, terms, etc. The milis situated on Firt an on application. For further particulars address, the arkansas press, little rock, Ark. |  |
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## ENGINE AND BOILER FOR SALE.

A 25 horse-power Reynolds Corliss engine, with 40 horse-power boiler and heater and connections, all in frat-class condition and in use at present. To be delivered in July, 1891. A bargain for anyone in need of same. Reason for selling, more power required. For further information address,

RIVERSIDE PRINTING \& ENG. CO.,
218-220 Third street, MILWAUKEE, WIS.
ORQANIZATION OF MILLERS IN THE UNITED STATES.
THE MILLERS' NATIONAL ASSOCIATION.


## RECENT PUBLICATIONS

Portrairs of the emperor and empress of o The Century，accompany a candidly－writ en paper of personal interest，by Poultney Bigelow，on the German emperor．The pa－ per is also illustrated with sketches of the peror，the throne room，the white saloon in which parliament is opened，etc．A unique paper contributed by Gustav Kobbe deals with＂Life on the South Shoal Lightship，＂ which，year in and year out，is anchored 24 miles seaward of Nantucket．The artist Pennel contributcs another illustrated paper ＂n＂Play in Provence，＂the subject being ＂The Grand Arrival of the Bulls，＂and＂The Ferrade，＂in the neighborhood of Arles． Another artist contributor who supplies word－pictures as well as sketches is George Wharton Edwards，who in＂Moglashen＂ gives a humorous character－study，which is the first of a series of＂thumb－nail sketches．＂ William B．Farwell contributes a paper on ＂The Cape Horn Route，＂so largely employ－ ed by the Argonauts in the early days of 1849. There are four short stories，and，in addition， chapters of＂The Squirrel Inn，＂by Frank R．Stockton，and＂The Faith Doctor，＂by Edward Eggleston．＂The Press as a News Gatherer＂is the subject of a paper by Wil lam Henry Smith，manager of the Associ－ ated press．The literary feature of the num－ ber is a paper by the Rev．Henry Van Dyke ＂On the Study of Tennyson，＂in which he ncludes a very useful classification of Alexander Harrison＇s painting，＂Le Crepus－ cule，＂is followed by＂Open Letters，＂poems and editorials，which，with several other pa－ pers，make up a brilliant number．
The current number of Harper＇s Weekly ncludes among its many attractive features a series of ilustrations from instantaneous Boston．The very popular series of illustra－ tions relating to the Columbian Exposition continued，this number containing por－ raits of the＂World＇s Fair Committee．＂ The illustrated Supplement embraces an in－ teresting and exhaustive history of polo－play－ of spirited illustrations by Frederic Rem ington．
Harper＇s Bazar for this week presents， as usual，a rich variety of articles pertain ing to the fashions，domestic economy ousehold management，etc．，including Pattern－sheet supted by Colonel T．W．Hig icles are 1 Ours Mrs ． ginson，C．De Hurst，Mrs．Agnes B．Orms ＂Tess of the D＇Urbervilles，＂is continued， and Charlotte M．Packard contributes a short but entertaining story，entitled＂The Stranger at Hibbard＇s．
Harper＇s Young People for July 28th contains a story by Lucy C．Lillie，entitled ＂Tumble into a Fortune．＂J．Macdonald Oxley＇s entertaining serial．＂Dick of Dia－ Farm，＂by Sophie Swett，increases in in－ terests as the narrative progresses．There are also articles and stories by David Ker House．
y．Ross＂a novel by Mellen Cole ha just been issued by the publisher，J．S．Ogil of life in the mining camps in California．

## electricity by the quart．

few days ago a middle－aged man entered the office of the Pittsfield， Mass．，electric light station on business bent，says the Journal of that city．He produced a quart bottle and asked to have it filled with electricity．The genial manager of the concern soon discovered that the purchaser was in dead earnest，and further questioning revealed to the electrician，always on the alert for something new in his line that the middle－aged man aforesaid had discovered a new use for the mysterious and，as Webster calls it，＂subtle fluid． He with the bottle went on to explain that he had been told it was the best remedy known to remove lice from cattle，and that it could be bought in Pittsfield at the electric station for six cents a gallon．He only wanted a quart of it，and was anxious to get and be off．He was finally convinced that he had been imposed upon，bu did not express himself upon the sub ject of practical jokes．It is understoo that the imposee has left Pittsfield．

Naroanad，Cincinatil，Miango \＆St Loviir尺AITオベタ．
BIG FOUR ROUTE

## CHICAGO

INDIANAPOLIS
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The Only Line running the Popular Buffet
CHICAGO and CINCINNATI
The Only Line from Chicago running Soll Ventibule Trains into Contral Union Dopot，
CIncinunati，where oonneetion Through Car Lines fo

Through Tickets via the Big Four Route can a．murrar．

Traffic Manager
o．B．MARTIN，
oinoinnati，o．
$※$

This is not a puzzle，neither is it a theorem
geometry，it is merely intended to call attention the fact that the WISCONSIN CEENTRAL LINES
form the direet route between Chicako and Mil
waukee and the points named above．Through Fast
 Dining Cars．
For tiokets，Sleeping Car reservations，time tables，
ete．，apply at City Ticket Office， 99 W isconsin Ntree
＂THE FINEST ON EARTH．＂
The Cincinnati，Hamilton \＆Dayton R．R．
is the only line running Pullman＇s perfected is the only line running Pulman＇s perfected safety vestibuled trains，with chair，parlor，
sleeping and dining car service between Cin－ sleeping and dining car service between Cin－
cinnati，Indianapolis and Chicago，and is the only line running through reelining chair cars between Cincinnati，Keokuk and Spring－ field，IIl．，and combination chair and sleeping car Cincinnati to Peoria，Ill．，and the only di－ Toledo，Detroit，the lake regions and Canad The road is one of the oldest in the State of Ohio and the only one entering Cincinnati
over twenty－five miles of double track，and over twenty－five miles of double track，and
from its past record can more than assure its from its past record can more than assure its on sale everywhere，and see that they read
C．H \＆D，either in or out of Cincinnati，
Indianapolis，or Toledo．E．O．MCCORMICK cinnati，Ohio．

## RECENT MILLING PATENTS．

The following list of Patents for Milling and Grain Handling Appliances，granted June，1891，is specially reported for the United States Miller by H．G．Under wood，Patent Attorney and Solicitor of
Patents，No． 107 Wisconsin Street Min Patents，No． 107 Wisconsin Street，Milwau－ kee，Wis．，who will send a copy of any
patent named，to any address for 25 cents． 455，432，Grain Elevator，Benjamin Seide
Cokato，Minn 456，077，Minn．
Bartholomew，Philadelphia，assignor of one－half interest to David J．Waller
Bloomsburg， 455，997，Grain－separator，Charles Closz，
St．Ansgar，Iowa． 455，998，Grain－separating Screen，Charles 456，428，Elevator and Conveyor，Charles H．Phillips，Bostỏn，assignor
J．Seymour，Brookline，Mass． 456,518 ，Elevator and Conveyor，Charles
H．Phillips，Boston．and Charles J．Sey－ mour，Brookline，Mass．，said Phillips， 456，231，Milling Machinery Henry J．
Woolcott．Staten Island，N．Y．，assignor Woolcott，Staten Island，N．Y．，assignor
one－half to Benjamin B．Stewart，same place． 456，584，Flour－bolt，Orville M．Morse， bocker Company，same place． Jackson，Mich．，assignor to the Knicker－ bocker Company，same place．
456,810 ，Dust－coliector，John J．Gerard Minneapolis，Minn．i，assignor to Ed－
ward P．Allis Co．，Milwaukee，Wis． 456．667，Spout－alarm for Grain Bins，
Walter G．Adams，Racine，Wis．，assign－ Walter G．Adams，Racine，Wis．，assign－
or one－half to E．H．Pease Manufactur－ ing Co．，same place．Frederick H．C Mey，13uffalo，N．
＂Catalogue of Farm Lands，Coal Lands， ron Lands，Timber Lands，Improved Farms with full discription，price and terms，of Crescent Route．＂The above is the title crescent Route．＂The above is the title sixty pages，which is being mailed free to all persons who will mate application to Mr D G．Edwards，the Ganeral Passenger Mr．D at Cincinnati，

## THE CHICAGO AND NORTH－WESTERN

 RAILWAY Fast $\nabla$ estibuled．Trains

Pullman and WagnerSleepers CHICAGO to SAN FRANCISCO

## COLONIST SLEEPERS

 CHICAGO TO PORTLAND，ORE and SAN FRANCISCO．FREE RECLINING CHAIR CARS DENVER \＆PORTLAND，O
VIa Counoll BIuffs and Omaha．



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Fast Mail Line with Electric Lighted and Steam Heated，Vestibuled ${ }^{\text {Thetween China }}$ Traino，Milwaukee，St．Faul between chicalo，
and Minneapolis．
Trans－Continental Route with tibuled Trains between Chicago and Council Bluffs，Omaha or St．Paul and the Pacific Coast．
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For Mapi Timo rabee，rates of pasago and freight
 ROSWELLMI MER．A．V．A．OARPENTER，



Choice of 3 Trains

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Gentlemen-We purchased from you one large Empire Receiving Separator, which we have placed in our elevator and over which all of the wheat that is delivered into our mill passes to our stook bin, and thence the wheat is conducted to the Tnree Horizontal Close Scourers that we also purchased from you at the same time. The separation made by all of these machines is as perfeot as it can be, and the Scourers, in addition to making the separation, clean the grain perfectly; in fact, the grain, when passing through these machines and coming to the rolls, is in as perfect condition as we believe wheat can possibly be put. We also purchased one of your No. O Scourers, over which pass all of our soreenings, and the work done by this little machine is as perfect as that done by the three larger ones. We also purchased from you two of your Empire Horizontal Bran Dusters, which purchased in our mill after the other machines above referred to, and we
we find now that it has made a wonderful difference on our bran, there being very little flour, if any, left in the bran. We have therefore a full and complete line of your cleaning machinery in our mill, and we do not believe we have any class of machines in our mill that give us any better satisfaction than these, and we cannot speak too highly of the machines purchased from you. They are not only made in a very substantial and mechanical way, but the work done by each and every one of your machines is as perfect as machinery of this kind could do. We are entirely satisfled with the working of the machines, as well as our adopting your machinery, when we remodeled our mill. We can assure the milling fraternity in need of these machines that they can do no better than place these machines in their mills.

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## Sixteenth Year.-No. 9

## PROF. KICK ON MODERN MILLING,

1N one of his latest articles in Dingler's Polytechnic Journal, of the current system Professor Kick says:It is intelligible that in so composite a system of reduction and separation as we have in milling, with wheats of such differing characteristics, with trade conditions so many and various, which entail a corresponding variety of de mands on the part of consumers, diverse systems of mill building and operation should have come into being. In a general way, all we can say on this subject is that high grinding, though not, perhaps, in its fullest and highest perfection (as it is carried out at Pest), is still spreading more and more, and with it goes a liberal use of middlings purifiers. To obtain the highest possible yield of white flour is only practicable when a very gradual reduction is combined with a first-rate system of mid dlings purification, which must take into account the different sizes of the products. Here a completely automatic system is not attainable, because the work is too dependent on the changing quality of the grain. But even where trade conditions require, above all, a large production, and where there is less demand for superlatively fine flour, there is still room for systems not fully automatic, and many such systems have been brought into use. The working of some of the these mills is very rough. For instance, in cases where the products of one break roller mill are separated by the following scalper (siebcylinder) into only three sizes, that is, fine middlings (mehldunst), medium and coarse, and these middlings pass unsized into what is known as a sorter (sortirmaschine), which machine, working without a sieve, subjects all sizes of middlings alike to the action of one aspirating current of air, the necessary result will be that the current will mix up the finer middlings with the larger tailings, which are of less value. This mingling of products of diverse value is a very slovenly proceeding.

If again, as happens in one of the English systems, the first tailings of the semolina sorter (griessorter) of the second break are fed together with the purified middlings of the third break to the fourth break, and if in the same way we take in a lump to the fifth break the
second tailings of the second break, the first tailings of the third break, and the purified middlings of the fourth break, we pat together products which are essentially unlike in size and quality, proper reduction or to exercise that nice discrimination as to the qualities of various products, which is so desirable. In other words, our work is slovenly. There would therefore be little use in reproducing any programmes or flowsheets based on this system. They would either be merely examples of what ought not to he done, or they would
consist of incomplete information. The
same remarks apply to a milling pro- hoarding, upon which he draws only 11 gramme, for a mill of 30,000 kilos (the case of necessity. If he did not raise wheat kilo. is $2 \frac{1}{2}$ lbs.) capacity per day, which enough for his family, as a great many appeared in the Mühle of the current peasants in France have not this year, year (see No. 13, page 198). It is or if he is out of work, as many artisans called "A Simplified System of Milling in that country and Germany are now, with the Haggenmacher Plansichter." and more must be when the effects of the It does look very simple, but that the failure of crops are fully felt, be must go simplification is only apparent will be to his reserve for food. Out of the hidden made evident from the fact that this stockings which furnish a large part of programme for a daily grinding of 30 ,- the $\$ 200,000,000$ sunk in the Panama 000 kilos only includes two middling canal, there must come other millions purifiers. After this it will not be sur- to buy bread from this country, and the prising to find that the strippers (schrot- money thus spent goes back to the bankputzmaschinen) are wanting altogether, ers or capitalists who advance it. The inwhile two pairs of millstones are reckoned sufficient. To give closer criticism to such systems would be to rate superficiality too high.
The wheat-cleaning department is almost everywhere given plenty of
room and completely separated from room and completely separated from
the mill. This is also entirely automatic. Many of the modern mills adopted rolls as the only instrument of reduction. But this exclusive use of rolls has, agreeably to my repeatedly expressed views, not answered its purpose, and especially in districts in which commercial conditions have made it imperative that the bran should be carefully finished, millstones and disintegrators have been included in the plant. With regard to millstones, it may be observed that upper runners are by far the most generally-we might almost say exclusively-used. This is justified by the fact that in the case of under runners, the pivot has to bear the sum total of the weight of the stones and of the pressure, whereas the pressure on the pivot is much less with upper runners, which tends to keep the bearings in much better condition. Moreover, with upper runners the pressure can never exceed the weight of the stone. Hence, even with unskillful tending, damage is not likely to so occur. With respect to roller mills, it may be said that chilled iron rolls greatly preponderate, but that porcelain rolls still continue in use, especially for the treatment of soft and fine middlings.

## how to pay for wheat.

UROPE wants bread, but what can it pay? This is a not unnatural question, in view of foreign monetary needs early this year. Then $\$ 70,000,000$ in gold had to be secured, no matter what it was necessary to sacrifice. How can the same countries now spare $\$ 200,000,000$ for wheat? But the gold was needed to pay debts; the wheat will be needed to feed millions who will pay for it, and that makes all the difference. At first blush it may be thought that the money for settlements must come at last from the same scanty reserves held by financial institutions, which needed replenishing last spring, but in fact it does not.

Take the case of a French peasant or artisan for illustration. He has his litartisan for illustration. He has his lit-
tle hoard, as is usual in that nation of
dustries of those countries will go in the main, also, and if they do not send more to the United States, they will continue to sell much to other countries, taking pay in specie which must be sent hither for grain. Thus not the financial but the producing and hoarding class, is that from which money will have to come for supplies of bread. When bankers were compelled to settle for losses in Argentine securities, or to ship to Russia the millions that had been deposited with them by that Government, it was a very different affair.
Yet it is not to be denied that there will be a severe strain upon the financial markets of Europe, if they have in the first instance to furnish money for the large shipments of grain that are now expected. Last year they took from this country $\$ 100,000,000$ worth, and it is by many supposed that the grain they will have to take this year will
cost twice as much, and this will mean cost twice as much, and this will mean the consumers who are ultimately to pay for it. However, the requirements in this sense are used several times over during the year. If $\$ 20,000,000$ should be sent to New York in September, and the wheat should be received and marketed in ninety days, there would be the same sum in financial institutions to be used over again four times within the crop year. The operation of this principle is likely to restrict to a considerable extent large purchases abroad, and especially large purchases of a speculative character, and thus to spread the purchasing over the whole year, preventing the movement at exceptional prices.
It is also possible that foreign countries, which have to take from the United States larger quantities and values of wheat and corn, may buy less of other things on that very account. For instance, the poor family which has to pay more than usual for bread, may not unnaturally curtail its expenditures for clothing and illuminants a little, and also for meats. Smaller sales of cotton goods to consumers in Europe would mean smaller purchases of raw cotton from this country by European manufacturers. A smaller demand for petroleum and for beef and pork products might mean a decrease in exports

Europe will be comparatively poor this year, and a great many families will economize. If European purchasers of meats and oils and cotton are diminished by a few millions each, some part of the difference in purchases of grain will thus be balanced by products usually sent hither in exchange for those articles. As to cotton, especially, it is an important fact that the stocks held abroad are remarkably large for the season, so that the same consumption could ke supplied throughout this year without buying as much raw cotton as usual.
That class abroad which holds American securities most largely is not as a rule the class which will feel soonest or most severely the pressure caused by failure of crops. Most of the securities are held in England, where crops are not so much below the average as in France or Germany. Upon most of the security-holding class pressure will come only through the financial markets, but when money is scarce and hard to get, the opportunity to realize by sales of securities in New York may be remembered. Hence the future of the stock market here may depend more than usual upon the course of financial affairs abroad. If gold is drawn from Europe largely, so that banks are threatened with exhaustion,there will then be a prospect of some return of securities instead of gold. On the other hand, the movement of unusual crops to market, and the movement of unusual quantities to the seaboard for export, will help the earnings of the railroads, and thus will make their securities more attractive to American investors.-N. Y. Com. Bul letin.

## STOCK EXCHANGE IN JAPAN.

(3)F the dividends paid to the shareholders of the Japanese Stock Exchanges can be taken as any indication, operations in securities in Japan must be on a very respectable scale. At the recent half-yearly meeting of the shareholders of the Tokio Stock Exchange a net profit of $\$ 49,607$ was reported, in addition to the sum of $\$ 21$ carried forward from the last account; and out of this sum it was decided to place $\$ 2,500$ to reserve, to distribute $\$ 6,450$ to officials, \&c., to carry forward $\$ 679$ to the next account, and to pay the sum of $\$ 40,000$ to the shareholders in dividend, at the rate of $\$ 20$ per share, or 40 per cent. per annum At the half-yearly meeting of the shareholders of the Osaka Stock Exchange, a gross profit for the first six months of the present year of $\$ 25,058$, in addition to $\$ 513$ brought over from last account, was reported; out of which sum, after placing $\$ 5,000$ to the reserve fund, allowing for business expenses, officials' remuneration, and carrying over $\$ 141$ to next account, there was available a balance sufficient to pay a dividend of $\$ 10$ per share (of $\$ 100$ each), equal to 20 per cent per annum.-Bulletin, N. Y.


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MILWAUKEE, SEPTEMBER, 1891.
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## milwaukee amusements

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$\mathrm{H}^{\circ}$N. THOS. M. COOLEY, chairman of the inter-state commerce commission, has resigned his position owing to poor health.

GERMANY has at length concluded to allow the importation of American pork and hog products and the United States will receive German beet sugar free.

THE total loss by fire in the United States from Jan. 1, 1891, to Sept. 1, 1891, was $\$ 88,302,475$; during same period in 1890 it was $871,543,845$, and in 1889 was $\$ 86,460,350$.

$A^{1}$LL indications point to a car famine very soon. It is reported now that some lines find it impossible to get cars enough to transport the immense quantity of grain from the west to the seaboard.

THE Pennsylvania Association has been fighting the Detwiler gradual reduction patents for the past two years, with rather discouraging results. The suits entered under these patents will probably be turned over to the National Association for defense in the near future.

THE Michigan Millers' Association has not yet made terms with the manufacturers of flour sacks. They have, however, a proposition from a re liable house which it is thought will be accepted. Secretary Reynolds has labored diligently in this matter on behalf of the association.

T begins to look as if the construction of the much-talked-of Hennepin Canal was to go on after a while, as pro ceedings for condemning land have been begun in the courts. Congress has authorized the building of this canal which is to connect the Illinois and Mississippi Rivers. The plans call for a channel eighty feet wide and seven feet deep.
E. P. Allis Company's Works, has invented a new process of melting pig iron by means of electricity. It is claimed that the new process is 50 per cent cheaper than the old method and requires half the time. It is also stated thatiron melted by electricity is a great deal purer than any other. According to Mr. Dings, a dynamo of 200 horse-power is sufficient to operate one of the largest melting plants. A large apparatus will be built at the Allis Works as soon as Mr. Dings' patent is allowed by the patent office.

THE Secretary of the Millers' National Association recently attended the Annual Convention of the Pennsylvania State Millers' Association held at Altoona, Sept. 8th and 9th, and states that a largely attended and enthusias tic meeting was held. The same officers were re-elected who served las year. A large number of Pennsylva nia Millers placed their applications for membership in the National Association.
A dispatch from Duluth, dated Sept 14, says: Strong \& Miller, own ers of large mills and elevators on the Hastings and Dakota branch of the C M. \& St. P. railway, will build this fall in Duluth the largest flour mill in the world. It will have the capacity of 12 , 000 barrels per day. This firm feels the necessity of having more facilities for meeting the great foreign demand, and find no better place for that purpose than Duluth. Mr. Russell, a wellknown Minneapolis miller, has also taken a large interest in the enterprise. The name of the concern will be "The Russell \& Miller Milling company." Arthur Miller, of Valley City, N. D. one of the firm, will be general man ager.
THERE were 259 ships cleared with flour and grain from California in the cereal year of 1890-91. This is the smallest number in three years. There are some facts about these 259 vessels worthy of 'attention. In the first place there were just 200 iron vessels in the total, and of course 59 wooden ships. In other words, the proportions were 77.22 per cent iron to 22.78 per cent wood, or, to state the question in another form, out of every 100 ships loaded with flour and grain at San Francisco the last cereal year, 77 were iron ships. This is about the usual proportions. In fact the percentage for, the past three years has been uniformly 77 per cent, while four years ago it was 80 per cent. This ought to be considered conclusive evidence that iron ships have the call of this trade, and that they have come to stay. England long ago found out that secret, and has been acting upon that theory ever since. The only wooden ships built to fly the British flag are a few vessels for the deal trade constructed at Novia Scotia. They do not think of such a thing as building a wooden ship on the Clyde. If this country ever succeeds in dividing the carrying trade with England, we must build and sail iron ships as cheaply as England. That is the solution of the problem of a restoration of American supremacy on the high seas.

T will be gratifying to United States millers to learn that a new direct cable line has been established between this country and Brazil.
The new cable starts at Hayti, goes from Hayti to San Domingo, links together the islands of San Domingo and

Martinique, and from Martinique skips over to French Guinea, and from thence jumps to the adjoining country, Brazil, the terminal point of the cable there being the town of Vizew. The new cable is entirely controlled by French capitalists; it works in connection with the International Ocean Telegraph Co. and the Western Union Co. Connection with the United States is had by means of the already existing cable to Havana and the Cuban submarine cable between Cuba and Hayti.
To appreciate what the new cable means as an aid to commerce and the transmission of news it is necessary to understand what were the two circuitous routes on which merchants, shippers and newspapers have had heretofore to depend for telegraphic commu nication with Brazil and other countries on the east coast of South America. The first of these is what is known as the European route. The message from New York going this way was first sent under the Atlantic to England, thence to Portugal, and from Por tugal by cable to the Madeira islands, and thence to Pernambuco, Brazil. The alternative route was by means of the Mexican Telegraph Co. and the lines of the Central and South American companies down the west coast of South America to Valparaiso and across the South American continent by means of the Transandine line to Buenos Ayres, and thence by the cable of the Brazilian company along the east coast of South America.

$\mathrm{T}^{\mathrm{H}}$Secretary of the Miller's Nation al Associateon reports that the Mil lers Tracing Bureau is prospering beyond the hopes and anticipations of its friends. Over 200,000 sacks of Export flour have been reported for the service of the Bureau since it started,-less than two months since, and new patrons are coming into the organization quite rapidly. The efficacy of the plan has been clearly demonstrated to the Exporters who have tried it, and without exception, the members express perfect satisfaction with the results obtained. Flour Exporters have long been complaining of the delay suffered in transporting their goods, and now that the remedy is at hand, and the tracing bureau is in successful operation, there can be no reasonable excuse for continuing such complaints; In no case has any delay occurred in the forwarding of shipments traced by the Bureau, and phenomenally quick transit has been effected in several instances. The Association now has representatives at Chicago, Buffalo, Montreal Boston, New York, Philadelphia, Baltimore and Newport News, who are all experienced men and have proved very efficient in their work.
The plan of operation is very simple and effective. When the flour is shipped, notice is sent to the Seeretary of the Miller's National Association who records it and at once notifies the representatives at the points of transfer, who keep a sharp look-out, and report the arrival, transfer and forwarding of the shipment, which movements are recorded, enabling the Sectretary to watch the movements of the flour, and when a transfer is not reported within reasonable time, make inquiry as to the cause and hasten it forward. When the flour reaches the seaboard, the representative there reports the fact and uses every effort to procure its prompt transfer to the steamship dock and load ing on shipboard. When the shipment sails both shipper and consignee
are at once notified. The shipper is also kept posted as to the movements of his flour, thus enabling him to know exactly where all shortages or damages occur and to promptly and properly file the claim. This information and service costs him but one-sixth of one cent per sack, which is certainly but a trifle for the satisfaction and benefit derived. Every Exporter in the country ought to patronize the Millers' Tracing Bureau, and we cannot conceive why any one should decline to support and encourage this worthy enterprize, simply because jealous and silly enemies of the organization keep up the howl that the scheme is impracticable and impossible of accomplishments, while facts give the lie to such assertions. Those who do withhold their patronage are the losers, and deny themselves substantial benefits which they might enjoy, and which they will need, and be compelled to employ in some form when foreign flour buyers realize the advantages of purchasing the traced brands.

## milwaukee market notes.

The demand for money is active and the wants of business men seem to be ncreasing, which taxes the ability of some of the banks, though the discount rates remain steady at 7 per cent. per annum.
Grain freights are nominally steady on a basis of $3 \frac{1}{2}$ cents for wheat by lake o Buffalo, $3 \frac{1}{4}$ cents for rye or corn and 3 cents for barley. Ocean freights are firm.
Flour is steady and in fair demand at inside quotations, and local millers are increasing the output. Millstuffs are steady and held at $\$ 12.50$ and $\$ 12$,75 for sacked bran; $\$ 13.50$ for coarse middlings, and $\$ 15.60$ and $\$ 16.00$ for midd
fine.

Following are the latest quotations on No. 2 hard spring wheat patents, in bbls., $5.00 @ 5.20$, soft spring wheat patents, in bbls $4.80 @ 5.00$; export patents in sacks $4.50 @ 4.75$; clears, hard wheat 4.25 @ 4.50 ; soft wheat, 3.75 @ 4.00 ; straights, choice bakers' $4.50 @ 4.75$; export bakers'4.00@4.25; low grades, $3.00 @ 3.25$; winter, straights, in bbls., 4.60@4.80; rye flour, in sacks, 4.75@) 5.00 ; rye flour, in bbls., $4.80 @ 5.10$.

President Bacon of the Chamber of Commerce, has issued a circular to growers of spring wheat, in which he states that "the milling demand for northern spring wheat has fairly set in here, and millers are disposed to buy freely at 5 cents per bushel over prices ruling at Minneapolis for similar quality, subject to dockage the same as at Minneapolis, the dockage here, however, being determined away by actual test. Freight to Milwaukee from nearly all points south of the latitude of Minneapolis is in favor of shipping to Milwaukee, and from many points the difference is largely in favor of this market. That is, the additional freight o Milwaukee is less than the additional price obtainable for the wheat in this market."
Mr. Bacon also states that the milling capacity of Milwaukee is now about one quarter of the capacity of Minneapolis, and that about 40,000 bushels of wheat are required daily for milling purposes. Of late Milwaukee millers have been obliged to buy considerable wheat at Minneapolis, local receipts having been insufficient for their requirements.

## CORRESPONDENCE.

[The following letters are all from our own special correspondents, and reflect their views and the views

## OUR LONDON LETTER.

THE favorable turn the weather took at the end of May continued till the commencement of August, although towards the end of July the average weekly rainfall had increased. During August the weather had been against the crops all the time, for during the first part of the month the sunshine and water was not strong enough to forward the ripening crops in order that harvest could commence in real earnest as was expected in the middle of the month, and, during the second portion there was considerable warmth with an overcast sky, and a brisk breeze which developed into a downpour of
rain dur:ng the las ten days of August This deluge of water which went soak ing through the sheaves of wheat and oats standing in the fields and the swaths of barley must be regarded as a great and serious misfortune to the English farmers who were just commencing harvest operations, as it has stained a great deal of the barley and rendered wheat and oats unfit to cart until they have been spread out to dry in the
September sun. The result of this continual wet weather is the sprouting of some of the corn and the lessening of the yield from the English wheat crop by at least 15 per cent. The continental excitement in the corn trade created by the prohibition by the Russian government of the export from Russia of rye, rye flour and bran, and the bad fortnight in Great Britain, France and Germany, has been sufficient to raise the price of wheat on the English market seven shillings per quarter. The price for old English wheat of a good quality reached 50 s . yesterday, but 45 s . to 48 s . was the general thing. Some new wheat on Mark Lane yesterday fetched 42 s. per quarter, but it was somewhat out of condition. American wheat ranged from 42 s s. to 47 s . for quarter of 496 pounds and Indian wheat fetched 35 s . to 43 s . per quarter. Californian, Chilian, Oregon and Australian wheats were to be obtained from 43s. to 46 s. per quarter, and Russian (such as it was) wheat was held at 40s. to 48 s .
The English millers are not having such a good time of it now as they have had for the past two years, which is due to the keen competition among
themselves and the small margin between the prices they pay for wheat and the price they get for their flour. There are now in the Cnited Kingdom some 800 roller mills, which have a capacity for producing flour for the wants of the whole country, and when the English millstone millers are in a position to compete with their neighbors, some idea of what "cutting" prices means, can be obtained. This state of things
happens when there is an extra quantity of foreign flour on the market which enables the millstone millers to buy the manufactured article to mix in with their millstone flour at a price relatively less than the strong hard wheats used by the roller mills and which they are obliged to pass by without buyiug, and so they successfully compete with their great rivals-the English roller millers. There are a number of millstone millers in the United Kingdom who have suffered from the success of the Roller mills in this country during
the past two years, so that there is a certain amount of pleasure in their seeing the margin between wheat and flour narrowed down and also the presence on the English markets of a quantity of American flour, as it gives them the power by mixing-as they did a few years ago-to successfully hold their own against them with the roller mill machinery in their mills. Thus paying off an old score which has been growing during the past two years of the roller miller's luck.
The wheat after this wet harvest will require a lot of conditioning and it would be well for those milling engineers in your great country who have good wheat heaters or dryers, and would like to introduce the same into Great Britain, to put themselves in a position oo introduce such machines as soon as possible, for I can promise a good demand for " wheat conditioners" during the next six months. Such machines will be required and it will be the fault of the American milling engineers i they do not secure some orders or will be because they do not understand how to "get at" an English buyer, who is often too conservative, even when he knows
benefit
A well known character and one who knew better than any one else on the Mark Lane Corn Exchange, and the Baltic, the touch of the "pulse" of the market, has passed from our midst. Mr. J. F. Smyth, who died suddenly on Friday, August 21 st, was a member of the staff of Beerbohm's Daily Corn
Trade List and was universaly esteemed.
The new law as to the reduction of duties on wheat aud flour, is to the following effect
Act 1. Dating from the 10th July 1891, inclusively up to the 1st of June 1892, exclusively, the import duties on wheat in the grain, and on wheaten flours are reduced to 3 francs per quintal of wheat and to 6 franes per quin-
Act. 2. On the expiration of this
period, if no legislative action has been taken to reduce the above duties, the following duties will be levied: 5 francs per quintal of wheat and 8 francs per quintal of flour.
The preliminary report of the census of the 6th of April, 1891, states : that the total number of persons returned as living in Engand and Wales, at 12 p. m., on April 5th, 1891, was 29,001 , 018 , which is an increase of $3,026,579$ or of 11.65 per cent. upon the number returned at the previous enumeration of April 1881. Not only was this increase absolutely less than that of the preceding decennium 1871-81; but the rate of increase was lower than in any previous decennial period in the century, that is in any decennium, since the first enumeration in this country.

| Date. | Inhabited Housts. | Population. | Decenrial Riste of lu'rease. |
| :---: | :---: | :---: | :---: |
| 1801 | 1.575,923 | 8.892,536 |  |
| 1851 | 3.278.039 | 17927,609 | 15. 65 |
| 1881 | 4.831.519 | 25,974.439 | 14.36 |
| 1891 | 5,460,976 | 29,001.018 | 11.65 |

The decennial rate of increase in 1811 was returned at 14.30 per cent. and had the rate of increase remained as it was in 1871-81, the addition to the population would have amounted to $3,729,929$ whereas it was only in reality $3,026,579$ to the disappointment of many "market writers" who had based their calculations for some years past on the hypothesis that the preceding interscensal rate of growth had been maintined.
In conclusion, I should like to men tion that the number of bankruptcies
in England and Wales, gazetted during the month of July last was 380 as compared with 336 in July, 1890 and of which 5 were millers, against only 2 the millers for the seven months ending July, 1891, up to 16, as compared with 12 during the same period of last year.
London, September, 1891.

## OUR ST. LOUIS LETTER.

THHOUGH milling matters are in themselves somewhat dull yet one miller has had a decidedly lively time lately with a country mill of his. The story is as follows: Mr. John J. Mauntel, one of the most prominent exchange members, has had since spring a mill for sale. The mill is located at Evanston, Ill., and has a capacity of 300 barrels and is valued at $\$ 50,000$. Until recently Mr. Mauntel had small success in getting a purchaser. About a month ago, however, responded with Mr. Mauntel, in reference to buying the property; Mr. Cole had no cash for the mill, but wished to trade some Chicago property for it. After some correspondence the trade was made, without either party seeing what he was getting in return. Shortly atter the sale a Mr. C. F. Dayton, of Chicago, arrived in the city and called upon Mr. Mauntel. He told him he desired to buy the Evanston mill and was much disappointed to hear of its sale. Mr. Mauntel, wishing to accommodate the gentleman as much as possible, offered to begin negotiations with the then owner of the mill, E. E. Cole, about rebuying the mill for Mr. Dayton This was agreed on and after some correspondence a purchase effected. As a deposit of $\$ 3,000$ was necessary and as the prospective buyer had only $\$ 1,000$ Mr. Mauntel advanced the necessary $\$ 2,000$. That was the last Mr. Mauntel has heard of buyer, seller or the $\$ 2000$, until this week when he learned that Dayton and Cole were chums and worked together in Chicago. They are real estate men and pretended to make a specialty of selling city property for suburban land. Hearing this Mr Mauntel quickly realized that he had
been swindled and immediately se about having the rogues arrested. He has succeeded in catching Cole but Dayton is still "out of sight." Cole
claims that he was the one swindled and promises to make it interesting for all concerned when the trial comes up.
At present there is no small complaint against the American Biscuit Co. for their discrimination against the St. Louis members of that trust. It seems that nearly all the local cracker jobbers are obliged for their own protection to buy elsewhere than in St. Louis, as the rates are higher here than elsewhere; that is, that while the rate on crackers is the same at every factory of the trust, yet the discount allowed jobbers differs largely. In St. Louis the jobbers claim they get only 10 per cent off the list price, while buying at New Orleans, they get 30 per cent and 40 per cent off, and that too, when buying through agents' hands. As a consequence, St. Louis cracker factories are losing all their tre de, which is gradually being taken by the Southern companies. In fact nearly all the Southern St. Louis trade is gone.
Clinton, Mo., is having a slight
trouble with the railroads and as a con-
sequence the millers there are unable
shipment. It appears that owing to a competition of several railroads for Chicago grain trade, local millers are entirely neglected. The White Swan mill, owned by Meyer \& Bulte, of St. Louis, and the Tebo Mill and Elevator Co. are unable to secure any grain by rail and as a consequence are having some little difficulty in grinding.
In Kansas City, too, the grain shipping question is getting serious. Owing to the large shipments of grain to that city and the poor facilities for storing it the grain frequently stands several days in the cars before it is unloaded, as the scarcity of cars will not allow of any great number of cars remaining idle any length of time. The railroads have issued an order allowing receivers 48 hours to unload the grain, after that the railway company will do so themselves, storing it in one of their warehouses and charging storage until the grain is removed. This order of things goes into effect on Monday, Sept. 14, 1891.

Even St. Louis is having difficulty with the grain shipping; not that we don't handle the grain quickly enough but rather that the railroads cannot handle it as quickly as we want it. Much grain from Northern Kansas, lower Iowa and Missouri, grain which formerly went East via Chicago is now coming to St. Louis on account of better shipping rates. However, while the railroads are putting new cars into use every day, besides patching up and using old cast off cars, they still are behind in their work. River shipments, too, are behind; all the barges that can be found are being crowded into use and many barges formerly used only on the lower Mississippi are now coming up to St. Louis to be loaded; yet exporters are making no small complaint. Certain it is that St. Louis is enjoying more trade this fall than it has experienced for several years. This trade, however, is not confined to grain only. In the flour export business, St. Louis is getting quite a lot of orders rom Cuba and South American points. This new business is due largely to the nability of Spain*and France to supply he demand and as St. Louis and vicinty grind the same quality of flour it naturally takes such business as the wo European marts fail to carry on.

## wheat.

Heavy receipts continue footing up. $1,068,293$ bus. this week and 896,050 bus. last week. Shipments were 444,452 bus. as against 496,607 of the week previous. For city consumption only 54,396 bus. were withdrawn from the elevators, while 209,356 bus. were shipped for export via New Orleans and 221,294 bus. left the city by rail. No. 2 Red was in big demand all during the week, being bought up for shipment, while No. 3 Red was purchased entirely for the home demand, No. 4 was in good demand but was scarce. Despite the good market the prices on all grades, as on futures, fell slightly during the week. The following are the fluctuations of the three grades.


## LOUR.

Flour receipts were for last week 26 ,444 bbls. and for this week $28,229 \mathrm{bbls}$. Shipments amounted to 57,033 bbls. this week and 55,255 last week. Local demand was very quiet while the Southern movement was very slow. Export trade was reported from several
quarters. The output of the mills was ney and Gibson, who predicted ten days 4.000 bbls. less than the week previous, footing up only 80,000 bbls. Prices were much lower on account of the decline in wheat. Quotations are: Family, $\$ 3.40 @ \$ 3.50$; choice, $\$ 3.60 @$ $\$ 3.75$; fancy, $\$ 4.00 @ \$ 4.10$; extra fancy, \$4.30@\$4.40; patent, \$4.55@\$4.65. Waiter Howard Baing.
St. Louis, Sept. 12, 1891.

## our buffalo letter.

WHAT shall the harvest be? In the opinion of those best posted to figure out this great question it will far exceed the government estimate, and not fall short of $700,000,000$ bushels of wheat and $2,300,000$ bushels corn. The basis of these estimates, taking the underestimates of last year's crop of wheat into consideration, appear fair. Now if the Old Country is as short of bread crops as reported, there is no doubt, better prices will be secured by the farmersin this country until the demand has been supplied on the other side to some extent. After this will come a reaction. Instead of exporting a million bushels per day, as we must in order to relieve our groaning bins, the takings will gradually decrease, resulting in enormous weekly increases in the visible supply and reports from Europe that the masses have been fatted fit to kill and are now ready for another battle with king famine, starvation being one of those things to which they have been accustomed since childhood. That Germany will take kindly to corn, in spite of Col. Murphy's glib tongue, is entirely out of the question. You cannot persuade a Teuton to partake of "horse feed," in which class he places oats and corn, more than once. Jerry Rusk's idea in placing a man like Murphy in that field is also a foolish notion. Who ever heard of placing an Irishman to stump a Dutch ward; might as well send a negro to act as "packer" for an Irish caucus. Besides, this Murphy
is a poor "organizer." His last attempt to introduce corn cakes, which was a the Paris exposition, was a flat failure C. J. Hamlin, of this city, offered to furnish the syrup (glucose) for these same cakes, at his own expense, too! Murphy thought this magnanimous and made a great fluster over it. "Steve" Sherman was an enthusiastic believer in this corn boom. "Steve" always had queer notions. "Steve" and "Murph" worked hard to get something more than a few barrels of glucose out of Fifteen-million-dollar Hamlin, but that gentleman knew the value of his goods and also that a rat hole was without bottom. There may be money in this for Mr. Murphy, but you can stake your opinion on it there is none for either the farmer in this country or Uncle Sam. Hoe cakes be -
The wheat crop of this country is going to be sold, but it will not average above $\$ 1.00$ per bushel. It would therefore be advisable to warn the producer to accept whint he can get at the present high standard of values rather than run the risk through natural waste, loss of interest and the many enemies (including the Chicago sweat board) to which wheat is heir. As a speculator the farmer is not a success.
The sudden advance in December wheat in Chicago caused great excitement on 'Change here, although there were a more than usual number of
prophets that an after harvest advance was sure to come. Among them was Mr. C. H. Gibson, of the firm of Whit


#### Abstract

before the fluctuation that No. 1 hard


 would sell in this market within that time at $\$ 1.25$. He had the satisfaction of making a trade of 22,000 bushels and several smaller lots at that price.The high figures reached for spring wheat made a few Canadian owners de cidedly nervous to sell, and when this was discovered, buyers held off with the usual result-a break in the mar ket. Wheat which could have been sold without forcing it on the trade at equal to $\$ 1.22$ went begging at $\$ 1.16$ or $\$ 1.18$ and was finally cleared up at \$1.15. Although "hedged" in Chicago, the anxiety to sell cost the owners at least 8 c per bushel and the commission merchant here no little trouble.
The evils of the trade here are few but they are most dangerous to the welfare of the Buffalo Merchants' Exchange. The one that cries most loudly for reform is "doing business for nothing or for what there is in it." Scalpers of this class are growing smaller every year, but in number they do not depreciate fast enough to suit the honest business members who have spent many years to gain a reputation for straight dealing. Only $\frac{1}{8} \mathrm{c}$ is charged, and surely this is small considering the risk of heavy losses. Rebates from a few unscrupulous elevator men, insurance agents or canal scalpers make this up, but in the event of these means failing (to speak in plain words), they will steal as much as possible. Of course this firm is soon "spotted" by the Western shipper, but instead of paying a reasonable charge for doing his business here he picks out another barnacle, perhaps worse than the other, and in the end downs the whole Buffalo contingent, when in fact he has no one except his own measly self to blame. There is more to be made out of it even if you should pay a responsible firm here $\frac{1}{4} \mathrm{c}$ than by placing your business in the hands of a thief at what he can make and charge you nothing
An association never heard of here in Buffalo met two weeks ago at the Iroquois hotel to talk over matters connected with their especial business. The association claims not to be a combination, still prices of the commodity which is manufactured by them solely, is held far above its actual value. Yet let me say in parenthesis that there is no complaint against the charge for this prod uct. The association is known as the Y. G. A. M. A., or the Yellow Granulated Corn Millers' Association. It is composed of the following firms, the only manufacturers in this country, and all were represented at the meeting: Woodward \& Crawfoot, Chicago; Newell Bros. Cleveland, Ohio; The Schumacher Milling Co., Akron, Ohio; Fort Orange Milling Co., Albany, N. Y.; Jacob Beck \& Sons, Detroit, Mich.; Reliance Milling Co., Providence, R. I.; Pickwick Milling Co., Pickwick, Ohio. The only representative who remained in town after the meeting for any length of time, and his stay was only too short, was Fred Brown, of the Fort Orange Milling Co. Everybody on 'Change appears to be pleased when this gentleman puts in an appearance. His jovial nature is catching, and before he leaves the room the crowd is with him to a man. Society in Buffalo also has claims upon Mr Brown, and it is rumored that he is about to carry off to the wilds of his ancient Dutch burg one of our brightest and moss petted belles. How is that, Mr: Brown?
The latest distinguished arrival from out of town is Mr. Alexander Mann,
well known from Maine to California as the best all around story teller in the milling fraternity and therefore a good salesman. His appearance is always a signal for a hubub in the flour market, but this time it is announced that he has come to reside in Buffalo, also that he has left Boston for good. Just whether the Hub did not agree with his health or not is hard to tell. J. B. A. Kern \& Son will undoubtedly miss his services. Perhaps it was beans!
Macaroni manufacture continues to ncrease in the factory of Messrs. Oneto \& Terrelle. Not finding machinery suitable to their wants they have been compelled to import a special press from the old country which will in crease their capacity from 12 barrels to
16 barrels of flour per day. While 16 barrels of flour per day. While this favorite Italian food this firm cannot supply the demand. The works here are the best in the country, being kept scrupulously clean and no flour except the choicest made by our millers under the supervision of the firm is used. There are millions in it for this honest firm of American-Italians.
The gales which have been unusually prevalent during the past month did considerable damage to shipping on lake Erie, especially in wetting car goes from Toledo. These smal schooners are not water-tight and with the large fleet from Detroit and Toledo the wet-grain buyers have made a harvest this year. Besides this some Mr. Thomas Ryan, who has been reconstructing the old Clinton mill for elevator purposes, loses about $\$ 3,000$ on a tower which was carried away in a blow. Tom has been figuring on good business this fall but it is hardly probable.

Toledo continues to make some great blunders in weighing in grain cargoes destined for Buffalo. Think of a small cargo overrunning nearly 1,000 bushels, and another falling short nearly 500 bushels. Of course Toledo settles these differences but what kind of management must these elevators have?
Mr. Philip Houck has been in the Northwest during the past three weeks and returned yesterday filled with enthusiastic praises for the enterprise of the whole country and especially Minneapolis. It's the greatest town in the world according to Mr. Houck, and everbody allows he is as good a judge in that matter as he is of the financial standing of any of his customers. Philip would make one of the best mayors Buffalo ever had if either party could prevail upon him to accept the nomination. He is a thoroughly honest and capable man in all respects except one and that is he cannot "talk politics." What a man he would make though to " tell the truth."
The floating elevator barnacles are doing some work but in the opinion of the Association not making any money either for themselves or the vessels engaging them. The Cyclone takes out a cargo and then breaks a belt or has a mishap of some kind which delays the vessel anywhere from one to five hours, besides occasionally clogging, and losing a whole conveyor full overboard. Hefford's old coal elevator was also put into operation a few days ago and although working better than last year, its owner is only waiting for the Association to ask him to come in and take a certain amount of shares-which, by the way, they will not do.
Failure of the hopper scale system
was predicted in The United States Mileer long ago. The trade here will not take an interest in an enterprise to which they are expected to contribute one "demnition" cent of their own private purse, and that's an end to it. Mr. Richardson went home disgusted, after spending considerable time and money in attempting to introduce the improvements. As I said before, the railruads must undertake it themselves or charge car service, and this latter interferes with the personal comfort of the agents here so much that it has become a dead etter except in cases where a receiver abuses the privileges. Car service charges may be all right at other points, but here in Buffalo, where the railroads agree to ship freight promptly and then find themselves unable to do so for weeks after, a certain amount of forbearance is expected.
Agent Flatley, of the Duluth Imperial Mill Co., reports fair progress on the warehouse nearly ready for business. This work has been delayed greatly by those engaged to build the dock. Everything will be running smoothly for the fall trade.
The astonishing increase of railroad shipments over canal exports is causing great comment. Thus far the rail has taken 60 per cent more than the canal, and is keeping up the draft. Still, the scarcity of boats and not rates at present has considerable to do with this state of affairs. The fact is that the railroads are gradually killing the great water way. No new boats, or comparatively few, to the number almost daily going out of use, as grain carriers are being built and this is creating a gradual but sure loss of tonnage. The policy of the great roads leading out of Buffalo is to do away with canal competition, and the only way to do this is to meet the canal during its busy season and to advance 50 per cent when there is no other outlet except the rail. A loss to the rail of fully $\frac{1}{4}$ cent can easily be figured out in spite of the fact that cars have left Buffalo for New York and returned empty for another load in just three days from the hour of starting. The largest shipments have been made from the New York Central elevator, and next to them comes the Erie, which latter, however, has checked up to one-half its former capacity owing to rivalry between the two roads. The rates on canal grain are: wheat, $4 \frac{1}{4}$; corn, $3 \frac{7}{8}$; rye, 4c. ; to New York. No "fellow" can find out the rail rate.
Flour stocks in Buffalo have been reduced to a minimum, in fact at one time this month there was a positive scarcity in spite of what the millers say -that is, of Buffalo manufacture. To show that our brands are preferred at present, when old wheat patents are wanted, I will cite the case of our largest miller, who received a dispatch asking for prices on old wheat brands. The reply was sent, quoting a good stiff price, and in answer the miller received word that he could get it at fully 50 cents per bbl. less, but would prefer to accept the figures of the Buffalo miller as he would be certain of the quality of his purchase. Naturally the difference between the price of old and new is causing an unsettled flour market here, and it is difficult to quote either winter or spring. Sales lately in the face of a declining wheat market have been at $\$ 5.50 @ \$ 5.65$ for choice springs and $\$ 5.00 @ \$ 5.25$ for winters. Rye flour is quoted at $\$ 5.00 @ \$ 5.25$ for No. 1 , and no lower grades in market. All the mills are running full time and there will be no stop for the next month at least.

The rebuilding of the Urban mill is Mr. F. J. Sawyer is on his way home being done thoroughly. No haste is apparent, and it is doubtful whether a barrel of flour will be ground before the snow flies, although nearly all the machinery is in place. Mr. George Urban is not one to waste time by too much haste. The Frontier mill is making all the flour necessary to keep up the Urban mill at present, as it is run night and day.

The rye crop seems to be going through Buffalo this year. Shipments for the season have been $2,155,000$ bus. against $1,049,000$ for the same time last year.

Mr. Urban and Mr. John Smith are expected home by the 20 th of this month.

Mr. John Scatcherd, president of the Merchant's Exchange, was appointed State Committee man, at the Republican convention held in Rochester last week. The members of the Buffalo Exchange are "in it." There are more politicians this year than ever on the floor, but Clint. Newman remains the leader. It is wonderful how the inter est keeps up in him and what a "pull" he possesses among all classes.

Money is tightening up here already and the demand for the future is so great that bankers have declared their inability to fill it. Troublesome times are in store for our grain men.

The Noye's Manufacturing Company is fitting out a number of country mills in this section with machinery. They also have a large amount of the Urban mill under contract. The Kuhn mill at Williamsville, Wolf mill at Gatzville and the Prentice mill at Le Roy, besides a number in Pennsylvania, are all being fitted out by them.
Millstuffs are quiet and weak. Messrs. Heinold \& Rodebaugh, the only whole sale dealers here, report trade dropping off steadily and prices too high west to work much business through. Coarse bran is quoted at about $\$ 15.00$ and Spring $\$ 14.50$ bulk. Lake receipts of feed are also falling off. Pasturage has been too good this year for the feed trade.
Receipts of flour from Duluth are increasing rapidly. Cargoes of 20,000 and 26,000 barrels and sacks are grown again. The outlook this year is that last year's receipts will be exceeded by fully a million barrels.

A lively business has been done by brokers in this city during the past month. The Wright's have the bulk of the business and considerable money has been made by Artumus of that firm, nuder the guidance of "Bob" Newell. If it does not lead them into a hole soon it will be contrary to his former efforts in that direction.

Farmers in New York state are holding their wheat for better prices. Never have the deliveries at country mills been so light, or the crop so heavy and generally good. It looks as if the farmer is, as usual, " making an ass of himself" in this state at least, so says one of our ablest country millers.
Duluth wheat dropped suddenly last week especially old wheat, which was held at a premium of 8 @ 10 cents over new. Old hard was offered here on the 10th liberally at 11 and new at 5 cents, Old Northern, 6c. new at 1c. over Chicago, December. "We must get rid of this old whist," remarked a prominent dealer. "The Northwest says so." Heavy sales of C. i. f. New No. 1 Hard and No. 1 Northern were made here about the same to local millers and this no doubt, had the effect of freighting holders of the old sheet.
months.
Mr. Jas. R. Parsons of the Batavia milling firm of Parson \& Co., has re ired from the business.
The receipts of car grain one day last week footed up 249 cars, the largest since the inspection system was established here.
Barley dealers are beginning to wake up although the condition of the malt trade does not favor an early resumption of malting. There is a large amount of malt on hand, and there is no desire to add to the stocks here until the outlook for its final disposition is more favorable than at present. No. 2 Western is offered at 70 c . to arrive with no takers at 65 . The barley here is of poor quality as to color, but heavy in weight. There is some enquiry for Canadian at about 10 cents under the price for which it can be laid down. We may be able to do a little business with Canada in spite of the McKinley bill.
Mr. Charles W. Richards is up to his ankles in business again. He certainly should succeed as there is no darder worker in the building than himself, besides he has the reputation of being strictly honest in his dealings with shippers. A man's books will get out " whack" in spite of the best care, and that was all placed against him. He knows better now.
An attempt is being made to put John Campbell back on 'change again. The Attica mills have been shut down for the past ten days, workmen being engaged in placing in the new Corliss engine ordered some months ago. "Bork's Best" brand has enjoyed thing about the mill gives such promise of future success that Mr. Bork is warranted in making the great improvements now under way. Manager Gilles has proven himself a capable man, and the strict attention to his portion of the affairs of the mill has won the confidence of his employer as well as the merchants in Wyoming county. Two additional clerks have been put in the office to assist in giving customers beter service, and the office has been removed to more commodious quarters
over the old postoffice building. In fact, this mill has never succeeded as well since it was first built as it has under the present ownership.
The West Avenue feed mills in the same village, have shut down for repairs to boilers and some alterations in machinery.
Mr. C. S. Thompson, of the Star Mills, also in Attica, had the misfortune to break his left arm near the shoulder last week by falling from a train.
I see that the quarrelous old woman, who presides over the weekly teapot in the Northwest, is still addicted to the same chop. His language is perfectly awful, not to say disgustingly silly. It is time his friends should step in and prevent him from talking himself into more trouble than he can conveniently get out of.

Buffalo.
Buffalo, N. Y., September, 1891.

## Home Seekers' Excursions.

 Tickets at half rates will be sold by agents and 29 th , from Cincinnati and Lexington to and 204 , from Cincinnati and Lexington topoints in Kentucky, Tennessee, Georgia, Alabama, Mississi ppi, Louisiana and Florida Also at one and a third fare for the round trip to points in Arkansas and Texas. Excursion dates heretofore published bave been canceled and the above dates take their

## OUR LEGAL DEPARTMENT.

and Milly Prepared for The United States Mingineer, from the Latest
and Ming Engineer, fro
Decisions.
Delay in Delivering Telegram. A telegram was written on a night blank, which contained stipulations that the message should be delivered "not earlier than the morning of the next business day," and that the company should not be liable in damages unless a claim should be presented in writing within thirty days from the sending of the message. The telegram was paid for as a night message, but the agent of the company told the sender that it could not be sent that night, and promised that it would be delivered the next morning. On day messages the company allowed 60 days for the presentation of claims. The oral agreement did not alter the stipulation requiring a claim to be presented within 30 days, and that this limitation was valid; the damages resulting from delay having been as well known within three days from the sending of the message as after-wards.-Western Union Telegraph Co vs. Culberson, Supreme Court of Texas, 15 S. W. Rep. 219.
Assumption of Contract by Acceptance of Benefits.-The plaintiff having performed services for the Hughes Bros. Manufacturing Company under a written contract signed "Hughes Bros.," and the company having recognized the employment and accepted and paid for the services up to the time of an alleged breach of the contract, and parol evidence is admissible to show its adoption by the company.-McClintock vs. Hughes Bros. Manuf'g. Co., Court of Appeals of Texas, 15 S. W. Rep. 200. Effect of Usury Upon Contract. A sum of money belonging to two persons was loaned by one of them acting for both. The loan was made at the highest legal rate of interest, and the person making the loan accepted a valuable present from the one to whom the loan was made, as a further consideration for the loan. The effect of this was o taint with usury the portion of money loaned by the person accepting the gratuity, and while it did not effect the loan made by the other party, who knew nothing of the usurious transaction, it rendered the note and mortgage given for the whole sum void.--Henderson vs. Godsey, Supreme Court of Arkansas 15 S. W. Rep. 193.
Failure of Railroad Company to Furnish Cars on Request.-By refusing to furnish cars on request, a railroad company does not incur the penalty imposed by Rev. St. Tex. 1879, art. 279, providing that for refusing to ransport goods common carriers shal incur a penalty of not less than $\$ 5$ nor
more than $\$ 500$ to be recovered by the owner of the goods. Article 279 is repealed by implication, so far as concerns railroad companies, by Sayles' Civil St. Tex. art. 4,227, providing that, in case of the refusal of any such corporation to transport any property or to deliver the same at the regular time, such corporation shall pay all damages, and article $4,227 \mathrm{a}$, sec. 3 , that if cars are not furnished when applied for, the railroad company shall forfeit $\$ 25$ per day for each car.-San Antonio \& N. P. Ry. Co. vs. Bailey, Court of Appeals of Texas, 15b S. W. Rep. 203.

Use of Firm Railroad Ticket by Individual.-Where a person claiming the right to travel on a train of a railroad company as a passenger holding a commutation ticket issued by the agent of the company, on the alleged ground that he is one of the members of the
partnership named on the face of the ticket held, that he must show the conductor that his name appears endorsed thereon, in compliance with the conditions specified in the contract on the reverse of the ticket. In case the conductor of the train should decline to recognize his right to thus use the commutation ticket, and should eject the holder, and damages are judicially claimed therefor, the legal obligation is imposed on the claimant to establish by a clear preponderance of proof, if denied, that there existed such a partnership at the time, and that he was one of its members.-Grainer vs. Louisiana W. R R., Supreme Court of Louisiana, 8 South. Rep. 614.
Rights of Indorsee of Note.Where a note had been indorsed to the order of a stranger to it, and in an action to recover the amount it appears that the execution of the note was in fact induced by fraudulent representations, the holder must show by a preponderance of evidence that he became a holder of the note for value and without notice of the fraud.-Benson vs. Gerlock, Supreme Court of New York, 12 N. Y. Supp. 595.
Proof of Claims Against Assignee. -On an accounting by an assignee for benefit of creditors, the assignor, as receiver of a firm of which he was a member, presented a claim for an amount alleged to be due from himself to the firm. The only evidence of the assignor's interest in the profits of the firm, which was to be deducted from the amount charged against him on its books, was a mere estimate made by his co-partner, and acquiesced in by himself, without any evidence that in making such estimate the true value was placed on the firm profits. The claim was properly rejected.-Cheever vs. Brown, Supreme Court of New York, 12 N. Y. Supp. 607.
Liability of Partners After Incor-poration-Right of Broker to Commis-sions.-A broker was employed under a contract with a firm and the agency was continued after the firm was changed into a corporation having a similar name without his being advised of the change, nor anything being done which required him to look to any others than the members of the firm as his employers. He might recover from them for services rendered after the formation of the corporation. While acting as general agent of defendants for the sale of their goods, he was requested by others to negotiate an exchange of a farm for goods; the exchange was effected through him, on which he received a commission from the owners of the farm. The firm had no information that he represented the other parties oo the transaction, beyond a mere suggestion that the latter relied on his judgment as to the selection of the goods to be given in exchange. The broker was not entitled to commissions from defendants on the goods. Pending negotiations by the broker on behalf of the firm for an exchange of goods for a yacht, they wrote to him, that if he made trades on the basis proposed, they should expect him to wait for his commission until they could realize something on the yacht. He received this letter before the sale took place, but did not directly assent to the postponement of payment of commissions. It did not appear that the broker authorized the sale except on that condition. He was not entitled to commissions until the yacht was disposed of.Frankel vs. Wathen, Supreme Court of New York, 12 N. Y. Supp. 591.

## MANUFACTURING SITES FOR SALE!

The undersigned owns a few of the best manufacturing sites in the city of Milwaukee, adjoining those now occupied by the Milwaukee Car Wheel and Foundry Co. and the magnificent plant of the Fuller-Warren Stove Works which cover nearly ten acres of ground. Best of railroad facilities. Parties desiring a suitable location should investigate this. Address,
E. HARRISON CAWKER,

36 \& 37 Loan \& Trust Building.

MILWAUKEE. WIS.

## FLOUR MILL FOR SALE.

$\qquad$


 Barnard \& Leas' Separator to Grain Bins.
The above manhinery is all of the latest improved, and has been run very suceessfully. Capacity of
mill, twenty-four hours, 300 barrels. Driven by one $18 \times 42$ Reynolds Corliss engine and one 180 H. P. Heine
 THE ARYAN

## gROWTH OF DULUTH.

息CORRESPONDENT after visiting Duluth, writes as follows "Ten years ago Duluth was a small, unimportant village. According to the Government census her population was less than 3,000 . Only two railroads entered the town. Its lake traffic was small. It was not even mentioned among commercial cities. Little or nothing was known of the value of the iron mines in the vicinity and nothing had been done to develop them. Its bank capital was only $\$ 50$, 000 . The taxable valuation was less than $\$ 700,000$. There was neither jobbing, manufacturing nor trade of any consequence. The elevator capacity was insignificant. The buildings were straggling wooden structures and the 'streets were scarcely a grade in improvement above a common highway.' The great region to the West and Northwest was just beginning to awake from its sleep of ages and to develop the great wealth with which nature had endowed it. The village of 1880 is to-day the recognized key to the commerce of the Northwest. Its population, including the suburbs, which are practically a part of the city, is over forty thousand. The railrcads entering the city have a mileage of seventeen thousand miles, and all the railroads of the Northwest and of the Northern lake region are making Duluth an objective point. One hundred and twenty-four passenger trains arrive and depart daily. The banking capital is $\$ 2,000,000$, and the bank clearings aggregated $\$ 100,000,000$ for the last year.
"The facilities afforded vessels and railways for receiving and delivering cargoes can be classed only as stupendous. It is no longer an uncommon thing for a vessel to arrive at Duluth harbor in the morning with a cargo of from 2,000 to 2,500 tons of coal, discharge it, load with a cargo of 90,000 to 100,000 bushels of wheat and start baek for the East within the same day of twenty-four hours. Through a system of grain elevators, with a capacity of $21,000,000$ bushels, Duluth transacts the business of the greatest primary wheat market in the world. For 926 bushels of wheat, $2,589,227$ barrels
of flour, 2,749,748 bushels of oats and corn, 164,056 sacks barley and flaxseed, 870,848 tons of iron ore, and received 857,594 tons of coal. The total receipts and shipments of grain in 1890 a mounted to $35,537,348$ bushels, an increase of nearly a million bushels over the previous year. The receipts and shipments of flour for the year 1890 reached $4,957,661$ barrels, an increase of over a million barrels over 1889. The latter figures are significant, and indicate a growth in Duluth's flour trade which is of vast import to the future of the city."

## the flavor of bread.

The Australian Miller calls attention to the fact that the bread of the Antipodes lacks the flavor of the bread of England of some twenty years ago, and suggests that the bread of this country has also lost its flavor in these days of roller mills. There is no doubt that it has; but whether it is due so much to roller mills as to imported flour is a question worthy of in vestigation. The wheat products of
England are diminishing, and as it is England are diminishing, and as to home-grown wheat that the
chiefl miller looks for flavor, and that wheat is short in quantity, there can be no doubt that its absence accounts for the want of flawor. But it must not be forgotten that the elimination of the germ, and the kind of yeast used, have something to do with the absence of flavor our Australasian contemporary regrets.
the inventor of the flouring mill.
About the year 70 B. C. Mithriadates king of Cappadocia, one of the most in genious and able princes of the time, invented the first mill driven by water This triumph of his skill and ingenuity he caused to be erected in the imme diate vicinity of the royal palace. In he course of time the Cappadocian bakers became celebrated, and were in demand throughout all parts of th world as then known.
These mills were usually placed upon boats on the river, being so elevated and contrived as to be easily driven by the water, and the millers were thu enabled to move from place to place distributing the meal to their custom ers.-Detroit Free Press.

## ENGINE AND BOILER FOR SALE.

A 25 horse-power Reynolds Corliss engine, with 40 horse-power boiler and heater and connections, all in first-class condition and in use at present To be delivered in July, 1891. A bargain for anyone in need of same. Reason for selling, more power required.

For further information address,
RIVERSIDE PRINTING \& ENG. CO.
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218-220 Third Street, MILWAUKEE, WIS.

## DEALERS.

H. R. STROEMER, Grain and Provision Broker Macon, Ga.
CORHESPONDENCE SOLICITED. Reference, Ex-
change Bank, or any other bank in Macon.

## TREPAGNIER \& BRES,

Provisions and Western Produce 81 MAGAZINE STREET Near Poydras, $\quad$ NEW ORLEANS.
H. W. PARRISH, MONTCOMERY, ALA.
FLOUR, GRAIN, HAY,
GEO. W. PHILLIPS, Jr. commission merchant in
FLOUR•AND•GRAIN, 783 The Rookery,

OHIOAGO.
S. S. LINTON \& CO.,

Grain Commission Merchants, $\begin{array}{cc}42 \text { Board of Trade, } \\ \text { DULUTH. } & \begin{array}{c}46 \text { Chamber of Commeroe } \\ \text { MINNEAPOLis. }\end{array}\end{array}$

ROSS T. SMYTH \& CO:;
Grain and Flour Merchants,
17 Fenwick Street,
LIVERPOOL.

## C. CAESAR \& CO.,

 Grain Exporters, 30 North Front Street, PORTLAND, ORE.

WM. L. BOYD \& BRO.,
General Commission Merchants, Flour, grain and mile Feed, No. 208 Spear's Wharf, BALTIMOAE, MD
 far exeeeds the supply at all times. Millers having a
surplus would dowell in sending samples and con.
suiling us frrs, before disposing oo same. Liberal
advances made on consignoments. advances made on conslgaments.
REFERENCES: BALTIMORE BANKS.

ANTON KUFEXE \& CO., ANTON KUFEKE.
Liverpool.
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Flour Merchants.

## FOR SALE.

FLOURING MILL, at Volga City, Clayton Co., Iowa. Water power, Allis A rollers and other improved machinery. Reason for sell ing, old age of owner. God wheat MITE.
ant.

FOR SALE-In Genesee Co., N. Y. PIECE OF MILL PROPERTY, 25 acres,
wo houses, with a twenty-two foot fall of continuous, unfailing spring water supply.
This property is within a few rods of the This property is within a few rods of the
West shore Railroad and in a great custom business vicinity. Will advance money to
rebuild on small payment. For particulars. address, T. CARY,
FOR SALE OR FOR RIENT.
FOR SALE - The "Pioneer Mills," Washington, D. C. This is a 500 barrel lull roller mill, built
Alliis system. First-class Machinery of the most modern and improved patterns. Railway conneections first-class.
For full particulars address For full particulars address
AUSTIN HERR,

Washington, D. C.
FOR SALE-A 100 barrel full roller steam flouring mill, with feed, cornmeal and buck-
wheat roll, and with all the latest improved machinnery, Situated in an unexcelled wheat. section in the Willamette Valley, Oreaon, on
the 8 . P. R. R.. With elevator capacity for bushels of oats and barley for feed. This bushels of oats and
mill must be seen to be appreciated. For In-
formation address formation address F. BARNEKOFF,
142 Front street, Portland, Ore

ALE-The flour mill known as the "MoDEL MIILs," Rochester N. N. Y., 200 barrels, winter and spring wheat, roller and
stone process, modern machinery in good respone process, mor power, long lease on easy
pairms, good custom trade. Must be sold to
term cerms. goo castom Applye. to C. D. Kiehel and
close an estate.
John $H$. Campbell, Executors, 803 Wilder John H. Campbell, Executors, 803 Wilder
Building, Hochester, N. Y.
FOR SALE-Shakopee flour mill-must
be sold. Daily capacity 300 barrels. be so Daily capacity 300 barrels, Built. Mill is in frist-class order and ready to run. Elevator 25,000 bushels capacity, crib work
veneered with brick. Large local and feed veneered with brick. Large local and feed
trade. Twenty miles from Minneapolis. Ad-
dress.
CH AS. G. HIN DS Assigne NDS, Assignee.
Shakopee, Minn.
FOR
milling
SALE-ODe
property in the best pieces of
Northeastern Iowa. miling propery in Northeastern lowa.
$\begin{aligned} & \text { Water power. Price cheap and terms reason- } \\ & \text { able. Address } \\ & \text { J.C. MANN, }\end{aligned}$ $\begin{array}{ll}\text { able. Address } & \text { J. C. MANN, } \\ \text { Myron, Iowa. }\end{array}$

## SITUATIONS WANTED.

WANTED-A thorough miller and mill-
wright desires a situation.
References Wright desires a situation. References fur
nished dif desired. Address. ished if desired. Address,
MILLER \& MILLWT, RIGHT, Box 123, Nashiville, Tenn.
WANTED.-A change by a competent mill
er with 15 years' experience in good mills. er with 15 years experience in good mills. Am a young married man, now managing a
successful mill. One year in this position three years in last as foreman of a 150 barrel
mill. Have a complete kit of tools, mill. Have a complete kit of tools, and do
repairing. References furnished. Correspondence solicited, from Nebraska especially. pondence
Address,

WANTED.- $A$ situation by an experienced miller, single man. Hard wheat country pre-
ferred Reference, Guthrie Bros. Can go at onee. Address W, Guthrie Bros.
W. A. PARK, Box 73 SUPERIOR, Neb.

## MILWAUKEE ITEMS.

Milwaukee dealers anticipate a shor crop of corn and potatoes in Wisconsin. The Wilkin Manufacturing Company's plant in Bay View will be sold and the proceeds divided among the creditors. A committ
the books of the firm.
The E. P. Allis company has begun suit in the United States Circuit court of Illinois against the United States Sugar refinery to recover $\$ 10,000$ for machinery furnished.
W. G. King \& Co., flour commission men at Boston, have begun suit against Faist, Kraus \& Co., for $\$ 3,500$ damages.
They claim that the defendants failed to perform a contract for the sale of a quantity of flour.
The Cockle Separator Mfg. Co. of Milwaukee, Wis., have lately furnished Kurth Cockle Separators to E. P. Allis Co., Milwaukee. The J. B. Allfree Mfg. Co. Indianapolis, Ind., and The John T. Noyes Mfg. Co., Buffalo, N. Y
The millers of Milwaukee are preparing to inaugurate a system of dockage for dirty wheat samples of the new crop. Shippers in the interior will find it to their advantage to thoroughly clean their consignments for this market and thus avoid paying freight on dirt.
The Superlative Purifier Mfg. Co. of Milwaukee, Wis., have orders for New Era Scalpers to be shipped to Kaiser
Bros., Centralia, Ill.; Nordyke \& Marmon Co., two machines, Indianapolis, Ind., Kirk \& Wood, Ravenna, Essmueller \& Barry, St. Louis, Mo.
The Wilkins Mfg. Co. of Milwaukee, made an assignment for the benefit of creditors, August 20. John Barth, the assignee, gave bond in the sum of $\$ 400$,000 . The company employed about 700 men. It is reported that all creditors will be paid in full.

The Superlative Purifier Mfg. Co. of Milwaukee, Wis., have recently shipped New Era Scalpers to C. T. Hanna, Milltown, Pa.. C. T. Hanna, Meadville, Pa.; Williams \& Groat, Portland, Ore.; Loughry Bros., Monticello, Ind.; Oakes Milling Co., Oakes, N. D.; Nordyk
æ Marmon Co., Indianapolis, Ind.
What Constitutes a Car Load.-An amendment has been made to the chamber of commerce rules that unless
otherwise specified 30,000 pounds of otherwise specified 30,000 pounds of
wheat, corn, oats, barley, rye, flax-seed or other seeds; 28,000 pounds of feed in sacks, and 24,000 pounds of feed in bulk shall constitute a carload.
D. R. May, who has long been in charge of the St. Paul company's elevators here, has been transferred to St . Paul in charge of the company's elevators there, in place of George J. Osborn, who recently cemmitted suicide. W.
H. H. Dodman, who has managed the H. H. Dodman, who has managed the succeeds Mr. May in charge of the St. Paul company's Milwaukee elevators.
Upon the petition made in the circuit court by Receiver F. H. Magdeburg of the defunct firm of Mohr, Zinkheisen \& Co., the receiver was authorized to bring suits against the following firms for the various amounts alleged to be due : Edwin Cook, $\$ 256.27$; Kingsbury \& Henshaw, Antigo, Wis., $\$ 208.80$; W. F. Spiegelberg \& Co., Merrill, Wis., \$199. 20 ; Krueger \& Lachmann, Neenah, Wis., \$145.49.
Bruno Fink, secretary of the Asmuth
Malt \& Grain Co Malt \& Grain Co,, says: Wisconsin's 1891 barley is A No. 1, the finest in the land, the best in years. As in the past brewers and maltsters will stock up
heavily with it, and Chicago receivers who fully understand its merits, will strain every nerve towards obtaining good share of it, but Milwaukee, the natural outlet and prime center of this great barley producing state, will continue to lead the van, and her No. 2 barley will not only be a recognized standard all over the United States, but will be found to justify in the full sense all that has ever been claimed for it

## THE WORLD'S WHEAT AMD RYE CROP

目 HE London "Times" publishe the following details concern ing the summary recently cabled to this side at the beginning of the month: "The Hungarian Minister of Agriculture, in giving his annual crop returns, says the estimates are based on Consular reports, and the results turn out pretty much as expected. The returns for Roumania are consolidated in one estimate, whilst those for the Bavarian Palatinate and Weterau are given out separately. The estimates of the wheat crop of India are given at $6,842,000$ tons, and of the United States as $545,000,000$ bushels, whilst the maize crop is given as 2 ,$027,000,000$ bushels for the United States. The percentages of production with the comparisons of previous year's estimates are as follows
 At North Prairie, Wis., Aug. 16, the eleva Cor was burned, witb some grain. The owner $\$ 5,000$, with no insurance. It is supposed have been a case of spontaneous combustion Ar Colfax, Ind., Aug. 24, the grain eleva with about 500 bushels of wheat and a mal amount of other grain. Loss total, with an insurance of 83,000 . Supposed to be incendi-

The effort to enforce the elevator law in Nrith Dakota resulted in the issue of two Minneapolis \& Northern Elevator Company at Grand Forks to compel the storage of wheat.
The Northern Grain Company of Minnepolis, capital stock $\$ 60,000$, were filed at the of Aug. The incorporators are Llewellyn Christian, Charles E. French, James W. Hoit, Minneapolis.
Joseph Perrien, the Detroit (Mich.)
miller, who was abducted and held for ran miller, who was abducted and held for ran-
som last winter, has sued William and John Considine, Frank Kennedy, Ed. Kent and rank Griffin, for $\$ 100,000$ damages, alleg ing that they were his abductors.
Lester b. Francis, a non-resident, sues
the Millers' Mutual Inar 3,000 insurance on the Kinnieville Mills for Nova Scotia, Mich. The mill burned down on April 4, 1891. The plaintiff is a mortgagee the owner of the property being John Steller The new flour mill at Athena, Ore., began operation the fore part of this month. It was for only a 60 -barrel mill this season, but later it was decided to make it 100. The machinery is of the very latest patent, and it will be one of the most complete in that state.
The Knickerbocker Grain and Stock Exchange Company, the main office of which is in Albany, suspended Sept. 3. The concern did a large business in the northern and northwest sections of New York and in New England, having branch offices in Syracuse, Rochester, Elmira and other cities in the inRociester, Elima and other cities in the in-
terior, and in Montreal and in Massachusetts. Died, at Bay View, Mich., Friday, Aug. 28th, 1891, Mr. Oscar F. Clark, of the firm of Hart, Clark \& Co., Flushing, Mich. Mr. Bay View, July 29th, to take a much needed Bay View, July $29 t h$, to take a much needed
rest, but was not seriously ill until a week rest, but was not seriously ill until a week
before he died. This is the first member of before ene died. This is the first member of
the Michigan Millers'Assuciation to be called by death since the organization in 1890.
by death since the organization in 1890:
The Wall Street Journal says: With the increased yield of wheat in $A$ merica and in India the world's wheat crop promises to be about an average. The world's crop of rye last year was was $1,350,000,000$ bushels and the average is about $1,200,000,000$ bushels. The decrease of $4,000,000,000$ in Europe is about 30 per cent. from last year. Europe's loss of $608,000,000$ bushels of wheat and rye $\underset{\text { part. }}{\text { must }}$

That the St. Paul Road is after Duluth traffic is indicated by the fact that it has put into effect the same grain rates from Dakola por to Duth that apply to Minneapolis. As the distance to Duluth is just 155 miles greater than to Minneapolis, the Duluth grain men are very much elated. They think that sooner or later the Chicago Minwauk aaul \& Duluth line
The Menasha Wood Split Pulley Works were destroyed by fire Sept. 14, also James Jones Flour Mill at Menasha, Wis. The total loss is $\$ 82,000$, and the entire iusurance $\$ 40,000$. The loss to the Pulley Company is $\$ 55,000$; insurance, $\$ 22,50 \mathrm{P}$. The loss on the Jones flouring mill was $\$ 15,000$; insured for $\$ 6,000$. The C. R. Smith Barrel Company's \$12,000, fully insured. P. V. Lawson of the $\$ 12,000$, fully insured. P. V. Lawson of the
Pulley Company, says his works will be rePulley
built.
In the case of Carr vs. the National Elevator company, Judge Templeton quashed the writ of alternate mandamus and holds that elevators under the laws of North Dakota cannot be compelled to engage in storage business unless chey so choose; that the laws of 1890, under which grain inspectors are appointed, has no applicability to elevators at other than terminal points. The opinion of the attorney-general seems to be repudiated by the court, the work of the inspectors ended and the offizes practically abolished. The plainifi exteptand gave notice of appeal. David if. Haines, treasurer of the Haines Milling company, of Three Rivers, Mich. called on U. S. Commissioner Hoyne at Chicago, Sept. 7, to get information regarding spanish weights. The írst shipment of flour . Cuba under the new reciprocity treaty ith that nation will be made by this firm, Ir. Haines said his company was about to end large quantities of flour to Havana, but the Cuban dealers required the flour to be in acks of 200 pounds each, Spanish weight. He dian't know what the Spanish weights were and he was referred to the big import-

On May 15 little Thomas Stretch the -year old son of Miller Reeve A. Stretch of Lower Alloway Creek township, Tennessee, was seriously injured by being caught in belt at the mill, and would have been killed ut for the promptness of his father in stopping the machinery. He has now almost re overed from the effects of the accident, but few days ago a dark spot was noticed over his eye. It was opened with a lance and ound to be a grain of wheat, which sprouted. The grain was probably forced under the kin when his head struck a bin while he wa bing whirled around the shaft.
A lakge Chicago operator says: "When the bull fever exhausts itself, or, if there is any great damage to corn from frost, you want to sell St. Paul and Burlington. Sell St. Paul because it is high and Burlington because with the extensions which it has under way and the comparatively unproduc tive new mileage, the road must have a good corn crop in order to maintain its dividends at all. The question with the Burlington is not one of greatly increasing its dividends. It needs a good corn crop to keep up its pres ont dividend for a year or two to come. Af ter that, if its new mileage turns out well, the company will be in a different position, But this year it needs a big corn crop and needs it very much.
The success of Henry Allen in Wall Street has been enough to cause the other operators to gape. In bear times and bull times he has "called the turn" in the market.
"until took for much of a reaction," said The brokers now have more business than they can take care of. Men in the market who were worth $81,000,000$ a month now worth $\$ 1,500,000$, and this is due to appreciation in values. The improvement in values will extend into the general busin of the country. The Weat has not yetuess heard from. When it is the boom will re ceive an impetus that nothing can stop. People are going crazy on stocks, and their insanity will be the means of making money for them."

## A FAIRY TALE.

A famous woodsman once boasted that he could find his way through a wilderness and eturn by the same path
Being tested, he carried with him a slender hread, which should serve as a guide for the he lay drip. Reaching the end of his journey, the genius of industry and breathed his thread and changed it to two upon ribbons of steel. It was a railroad. Throng of people whirled past him in luxulougo and he read upon the train the mystic legend: "Wisconsin Central!"
For tickets, berths and full information
apply at Milwaukee City Ticket Office, 99

## LABOR PAST AND PAESENT.

 ROFESSIONAL agitators are prone to make contrasts of the present condition and status of labor with its condition and status in the remote past. They repeat incessantly the most astounding falsehoods. According to their statements, labor was never so badly conditioned, never occupied so inferior a status as now. They claim that in the past labor was recognized properly, rewarded abundantly and held in greater esteem than now. They assert that the laborer was ranked in ancient days with the ruler, that the smith the mason, the carpenter, the textile maker and the agriculturist divided the honors of the time and the profits of all enterprise with men whose names appear in history as kings, warriors, rulers, statesmen and tyrants. Laboring men of this prosaic nineteenth century must, if they believe the absurdities and falsities preached to them by their hired agitators, look back with regret to the "good old times" of which they hear so much that is utterly false, unreasonable and unhistorical, so far as labor is concerned.Students of history are not misled by these wondrous falsifications of these conscienceless agitators. Laborers who have not read history may be misled. Ignorance of the past may cause them to be unduly discontented with the present, and that is precisely what the agitators have in view in their misrepresentations. The business of agitation depends wholly upon discontent, and the agitators are not squeamish about the foundation of the discontent upon which they practice the fine art of making a living at the expense of others. All discontent, wise or unwise, reasonable or unreasonable, brings grist to their mills. To manufacture discontent is their main object, and falsification is their main weapon. The boldness of their fabrication is startling. Recently one of the prominent agitators, a "reverend" or "exreverend" quack, declared that "nineteenth-century labor in civilized countries is in worse condition than labor ever was in Pagan lands in the past." Others imitate this agitator, and American laborers are continually hearing that their condition is far worse than was that of their longdead heathen forerunners. Believing this they are ready to demand changes that shall give them a share in the benefits of advanced civilization.

What is the historical truth? Was labor in olden times better rewarded or held in higher esteem than in these times? So far as history is printed, it answers "No!" Labor in olden days and even in days not long past, was held as disgraceful. Back in the vaunted "Golden Age" there was no labor but slave labor. The few who did not work were the owners of the millions who did work. Labor did not control its own museles, did not set its own hours, did not fix its own pay, did not act in any way or particular as it can act in this age. The historical wonders of human achievements represent the work of labor that was a mere chattel, a brute foree controlled by caste and rank. The mighty pyramids, the great waterworks, the long aqueducts, the massive bridges, the endless walls to prevent in vasion by enemies, the deep mines, the wonderful towers, temples, grottoes, caves, sphinxes, mausoleums-what do these all represent so far as labor was concerned in the "good old times?" They mean the agony of slavery, the wastage of human blood and boue, the brutalization of millions of human be
ings. Can the agitators present a cor- were defeated. The captured ringlead
responding picture of labor in this age in civilized lands? The attempt to do so would be presumptuous. Labor then was not what it is now.
Agitators declare that strikes are a peculiar institution of these days, that it is only in modern times labor has found itself so badly circumstanced that it is forced to "rebel against its oppres sors." Again the agitators falsify Labor in all ages has revolted against its "oppressors." Ancient history is full of tales of "strikes" that were carried on on so great a scale as to make the most gigantic strike of these days seem tame in comparison. The Jewish nation was enslaved and converted into a mere ag. gregate of brute labor by the Egyptian ruler. Despite the coloring that may be given to their revolt, it is beyond doubt that revolt was in all essentials a "strike." A whole race "went out." The "walking delegate" was there. The prisoners refused to work, and their "strike" was successful. They ceased to make bricks, and the greatest "strike" in history ended. In Greece the mine slaves repeated the "strike" of the Jews on a smaller scale, but with a marked resul on the history of educated, powerful refined, civilized Greece. The"strikers" from the mines became soldiers and the personal and social status of labo
turned their swords against their masers and owners.
Roman history repeats the tale of the "strike" among the Roman slaves. Rome made all labor slave labor, set a tain upon toil, paid production with scorn and the lash, wrung life out of corpse" to the dogs and vultures. Labor was subjected to all conceivable indig nities, forced to fight with beasts in the arena, to contend man with man for the delight of a besotted aristocracy, to go naked, to live on the poorest of food, to stand outside of the social pale, to know nothing, to own nothing, to ven ture nothing, to live like brutes in human form, and to have no share or part as men in the world in which they found themselves linked with and reated as beasts. Roman times belong to the "good old times," but the Roman laborers did not enjoy the "good old times" so thoroughly as the agitators of these days assert they did. Roman labor "went out on a strike." How was he beneficent institution known as the strike" treated in the "good old times?" About 200,000 laborers went out on a "strike." Their number was nereased to 300,000 . Soldiers went against them to compel them to return to work. The laborers stole or made arms. They resisted. They fought stubbornly, but in the end their "strike" failed. The trained soldiers of Rome vanquished armed labor. The "strikers" ers, the conspicuous agitators, the walking delegates, 6,000 in all, were crucified "strike" came to an end
Nineteenth century labor has little in common with the labor of the olden times. To-day lakor has, in the United States at least, no social barriers to surmount, no ownership to strive with, no civil or political disabilities to weaken it. The laborer can enter any door which he may desire to enter, so far as external influences are concerned Everything, within certain natural limitations, depends upon himself. He may be a rail splitter, a shoemaker, a tailor, a blacksmith, or a canal boat man, but these externals do not prevent him from becoming the chief officer of the republic. He may be a telegraph operator, but that cannot prevent him from becoming one of the most famous men of his age. Labor has made wonderful advances since the days of naked slavery, all the agitators in the world to the contrary notwithstanding. Today it is the hand of labor that is opening the doors of the palace, not as the slave, but as the peer and the guest of he inmates of the palace. To-day labor is at the exact opposite, compared with
he personal and social status of labor

of the vaunted "good old times," and i will do itself a gross and uncalled-for wrong if it fails to comprehend its advance, bases discontent upon that failure, and surrenders itself to the mountebanks, who deceive and dishearten it for their own benefit. It is pleasant to contemplate the overthrow that has, after ages, placed labor in virtual command of the civilized world, and to believe that labor, emancipated, educated refined, elevated, self-reliant, will take no backward steps, and will rule justly wisely and liberally.-A. B. Salom, in Iron Industry Gazette.
the pioneer press bureau of claims alt valld Clat
Govern

THE enterprise and public spirit of the St. Paul Pioneer Press has never been more forcibly illustrated than in the establishment of what is known as the "Pioneer Press Bureau of Claims," with headquarters in St. Paul and Washington, D. C., hrough which claims of all sorts against the government may be pushed, at a minimum of expense, and a maxim'm of expedition and economy. Under the offer made by the Pioneer Press, any person living in Minnesota, Wisconsin, North Dakota or Montana, having legal business of any kind requiring attention at the seat of government, can avail himself of these advantages. In order to render it possible for the poorest of
mankind to make an intelligent and systematic effort to secure his just dues from the government, whose network of official red tape so often strangles deserving cases, the "Pioneer Press Bureau of Claims" proposes to make no charge whatever for service unless successful in whole or in part in its effort, and in such cases the fees will be more moderate than have ever obtained for like work in the past.
We are informed that in this enterprise the Pioneer Press has associated itself with those brilliant and progressive types of Western journalism, the San Francisco Examiner and Omaha Bee. With the idea of making it a national affair the entire country is to be divided up between a limited number of newspapers of the highest class. A special effort will be made to successfully prosecute pension, Indian depredation, land, patents, mining and postal claims, and with the assurances offered by the well known business, financial and political standing, not only of the Pioneer Press, but its associates in the new enterprise, it is easy to see that the work will inure to the benefit of hundreds and thousands of persons who therwise might be the victims of the numberless sharks who make the legal ways of our nation's capital a terror to everyone having cause to venture therein.
All communications or applications from any one living in Minnesota, Wisconsin, North Dakota or Montana, having a valid claim against the United States government should be addressed to the manager Pioneer Press Bureau of Clatms, Pioneer Press Building, St. Pauı, Minn.

## trade notes.

New Water Wheel Pamphlet. This new pamphlet is published by James Leffel \& Co., Springfield, O., Hydraulic and Mechanical Engineers, and makers of the celebrated James Leffel Water Wheel. It is elegantly printed, on finely finished paper, is handsomely illustrated throughout and contains a large amount of useful and practical matter to those improving water power. A great number of plans for placing wheels are shown, both upon upright and horizontal shafts. Entirely new tables of the Wheels are published, containing new features never before presented by any Water Wheel maker
This firm has been making the James Leffel Water Wheel for thirty years continuously, and its business is conducted by the same parties and managers that have been with it since its early history. They make 110 different sizes and styles, and have shops,tools and patterns designed exclusively for this business, and are turning out more and better work to-day than at any time heretofore. The new pamphlet will be sent free to any one applying to the above address.
R. H. Thomas, of Sheboygan Falls, has remodeled his mill and placed a 26 in. Improved Walsh Double Turbine Water-Wheel, manufactured by B. H. \& J. Sanford of that place.

Two Genuine Harvest Excursions Will be run from Chicago, Milwaukee, and other points on the lines of the Chicago, Milwaukee \& St. Paul Railway, to points in Wisconsin, Western Minuesota, Northwestern Iowa, South and North Dakota, Nebraska, Kansas, Colorado, Utah, Wyoming and Montana, at cheap excursion rates, on August 25th and September 29th, 1891.
For further particulars apply to the nearest coupon ticket agent, or address Geo $H$. Heafrord, Gen' Pass. Agent, Chicago, IIl. P. S. - ft will do your heart good to see the magnificent crops in South Dakota. They
are simply immense.

## a sGotch miller's view of the situa. TION.

THE opinion of a prominent miller in Edinburgh is that the advanced prices are due to the prohibition by Russia of the exportation of rye, leading to the conclusion that this extreme step could not have been taken unless there had been a bad harvest both of rye and wheat. He remarked that the whole matter was one of uncertainty, and that nothing could be definitely said as to the prospects of the trade, the only thing which could tend to the prices going back being a good home supply. Within the last three weeks American red winter wheat had risen from 35 s to 41 s and 42s, a rise from 6 s to 7 s per quarter, and other kinds of wheat had risen in proportion. Without stating so definitely he was inclined to believe that the millers here had a good supply in hand. A fair indication of the millers' position is given in a recent issue of the vague rumors have been current this week that Prussia would prohibit wheat exports, but these have not obtained much credence, and according to telegrams from St. Petersburg it is officially declared that there is no ground for them, the Government considering that sufficient to assure an adequate supply of food for the distressed districts, which seems doubtful when it is considered that the deficiency in the supply of rye is according to the Minister of Finance, 19 to 21 million quarters. With regard to wheat, not much is said of the crop which, however, has suffered from the same cause as rye, but in a less degree.
In the Southern parts the stocks are said to be extremely light, and the supplies of new wheat very small. The exports, nevertheless, have continued of fair extent. According to latest ad-
vices, however, holders were asking prohibitive prices, and fresh business was very difficult, although there has been a further decline in the exchange value of the rouble recently. This to last year's but this has evidently been at the expense of reserve stocks, which have seldom beratively speaking, as they now are. For the ensuing season it is very difficult to estimate the probable shipments, owing to the failure of the wheat crop; they are expected, in
any case, to be very small. The extraordinary high price of rye is naturally attracting considerable attention just now, inasmuch as if rye maintains for any length of time the position of being dearer than wheat, the latter must in the ordinary course largely replace rye for human consumption. In ordinary years rye is worth about 15 s per quarter less than wheat; to-day it is several
shillings dearer than the more nutritive article, wheat. Much depends upon qhe duration of the Russian order prohibiting rye exports; but in view of the extraordinary deficiency in the rye crop this year, one is not will give way materially. As far as Germany is concerned, the effects are rendered more serious, because the rye crop in that country is also very deficient. Germany in ordinary years consumes about 14,000,000 quarters of wheat and 32,000 ,000 quarters of rye, this season it is calculated that probably $16,000,000$ quarters of wheat will be consumed; in port 4 to 5 million quarters. There can be no doubt in any case that there

## Corner Broadway and Mason St. (Hathaway Building.) <br> Corner Broadway and Mason St. (Hathaway Building.) Seven Departments. Day and Eve

Popular Night School. Seven Departments. Day and Evening Sessions.

will be an extraordinarily large demand for wheat in Europe this year both on account of the deficient whea crop, and because wheat will be largely required to replace rye. Under these circumstances buyers have done, and will do, wisely to provide against these extra requirements, but equally serious, in its immediate effect, is the continuation of unfavorable weather for the har vests in England, France and Germany For every week's delay in the appearance of new wheat, these countries re quire extra aid in the shape of foreign wheat, to the extent of nearly a million quarters. In the United Kingdom, too the reserve stocks are so very limited that continued wet weather may be expected to lead to very active buying. Circumstances have, indeed, been lately combining strongly in favour of prices first there was the Russian rye export prohibition, which must produce so great an effect in Germany and other Continental countries; then the reports of a much smaller yield in France than was expected; and now heavy rains just at the time when sunshine was so much needed, have evidently determined everybody to lay in stock, in view of a probable further advancs.
the chamber of commerce before the revolution.
 the 5th of April, 1768, twenty merchants, convened for the purpose, established "The New York Chamber of Comnerce." The eminence of the men,
and of those who were afterwards ciated with them, is attested by the horoughfares which still bear many of their names. The growth of the corporation is marked by the northerly advance of streets honored by their patronymics. Desbrosses, Murray White, Franklin, Thompson and Van Dam are examples of the first class John Cruget was elected president, Hugh Wallace vice-president, Elias Desbrosses treasurer, and Anthony Van Dam secretary. Meetings were held a 6 o'clock in the evening, fines imposed for late arrival, and non-attendance excused only for "gout" or other valid reasons. Bolton and Sigel's tavern, still standing, at the southeast corner of Broad and Pearl streets, afterward known as Fraunce's Tavern, was the place of rendezvous. Thence, in 1769 hey removed to the Great Room of the Merchants' Exchange, at the lower end
of Broad street, where they remained until the outburst of hostilities in May 1775 , estopped further sessions.
Proceedings in the Chamber of Com merce were necessarily related to mate rials, instruments, tare, weight, and in spection of the provision trade, includ ing "cornel," or the unbolted portion of flour; relative values of Pennsylvania New Jersey and New York paper money and to bills of exchange. Inland and foreign commissions, fire and marine insurance, collection, brokerage, fish eries-for success in which bounties were paid-tonnage by measurement, count, or weight, and buoys for the safety of navigation, also engaged their attention. Normal weights and values of current coins were determined.
Up to the evacuation of the city by
the British and its occupation by the Americans, on the 25 th of November 1783, the New York Chamber of Com merce had had seven presidents, thireen vice-presidents, eight treasurers, one secretary, and 135 members. O the old members nine subscribed the f Nen to the legislature of the Sa charter. Seven were present at the re organization of the Chamber, and seven others were readmitted by ballot ; seventeen more were readmitted by resolution on Feb. 13, 1787. Since then the career of the corporation, under consecutive amendments to its charter, ha been one of ardent patriotism and wide beneficence.-"The New York Chamof Commerce," by "Richard Wheatley, in Harper's Magazine for September

## mILLING AND MECHANICAL NOTES.

Laying Concrete Under Water. A simple process of lowering concrete under water by means of what may be called the "continuous hopper," has been used in constructing the piers of the large railway bridge over the Loire. The difficulty was to prevent the contact of the concrete with water before deposition. A tube was suspended by a crab winch resting on the usual frame work, and while the lower end rests on the ground, is filled with concrete. It is then raised and part of the concrete allowed to run out and settle itself. This, which is the whole of the process, can be repeated at any part within the frame work. It has proved both more effective and cheaper than the old process of depositing by boxes. Neither concrete nor cement can be emptied in water loose with good results, but must be conveyed to place in boxes or bags.
The largest and most powerful whee in the world is a water wheel in operation at the Burden Iron Co's. plant at Troy, N. Y. It was constructed in 1851 by the late Henry Burden, and is an overshot wheel of 1,200 -horse power sixty feet in diameter, twenty-two fee in width, and containing thirty-six buckets each six feet deep, and is so practically constructed as to be readily controlled by a lever, whieh gives it any degree of power required. A whee thought to be the largest in the world but which will have to be acknowledged second at the best, was recently constructed by the Dickson Manufacturing Co. at Scranton, Pa. It is a $\operatorname{cog}$ wheel fifty-four feet in diameter, eighteen nches face, has a capacity of $30,000,000$ gallons of water, and 2,000 tons of sand per twenty-four hours, run at a velocity of ten feet a second on the inner edge of the buckets. It weighs 400,000 pounds. The journals are twenty-three inches in diameter and three feet and four inches long, and the total length of the shaft is twenty-three feet and six inches.
Remember, Mr. Young Mechanic hat the mechanic who studies and thinks, who seeks good society, who is cleanly in person, who is self-reliant, in dustrious, obliging and courteous, is the mechanic who is bound to rise in his profession. Remember, also, the re-

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verse, that the mechanic who never studies or thinks, who seeks low associates and indulges in vicious dissipations, who is slovenly, slouchy and unpleasant in person, who is shiftless and loaferish, discontented, discourteous and disobliging, is the future inhabitant of the gutter, the groggery, the almshouse and the prison, and the future occupant of the pauper grave in the potter's field. Which way are you taking at the start?-The Iron Industry Gazette.

## becent milling patents.

The following list of Patents for Milling and Grain Handling Appliances, granted in June, 1891, is specially reported for the wood, Patent Attorney and Solicitor of Patents. No. 107 Wisconsin Street, Milwaukee, Wis., who will send a copy of any patent named, to any address for 25 cents.
No. 457,146-Crushing and Grinding Mill, Thomas C. Cadwgan, Springfield O . ${ }^{\text {as }}$ as signor by mesne eassignents to the O. S.
Kelly Co., same place. Kelly Co., same place.
457.283-Grain Register and Sacker, John
Lukaszevig, Custer, Wis. Lukaszevig, Custer, Wis.
457.493-Dust Collector, Osbold Kutche,
Chicago, Ill, assignor by mesne Chicago, Ill, assignor by mesne assign-
ments to the Alington \& Curtis MIg. Co., of Michigan.
$457,652-$ Fumigator for Grain Bins, Thad.
deus A. Manahan, Young, Texas, deus A. Manahan, Young, Texas. 457.880-Grain Scouring Machine, Den-
nis E. Sibley, Chicago, Ill. 158.17-Dust Collecior 458,147 -Dust Collecior, Smith W. Kim-
ble, Denver. Col.. assignor to the Railroad Mica Lubricant Co., same place. o. Jackson, Mich., assignor to the K Kicker Jackson, Mic
bocker Co.
457,695-Grain Scouring Machine, Peter Provost, Minneapolis, Minn.
. 458.550- Process of and Apparatus for Separating Dust from Air, bswald assignments to the Allington \& Curtis
Mfg. Co .of Michigan Mfg . Co., of Michigan.
o. $458,305-$ Flour Bolt, Orville M. Morse, Jackson, M,
bocker Co.

## o. 458,327-Flour San Jose, Cal. <br> , Packer, Milan W. Lipe,

 stall, Sumner, Iowa.No. 458,495-Grain Scourer Hen 458,495-Grain Scourer, Henry H. Ring,
Lairdsville, assignor to Waldron \& Sprout, Muncie, Pa.
Lo. 458,494-Rotary Bolt, Henry H. Ring, Sprout, Muncie, Pa .

A New Business University.
Prof D. B. Williams opened one in the Hathaway Block on Sept. 1. The new Milwaukee Business University was opened in the Hathaway Building on Mason street, fifth floor. This institution will be in charge of Prof. Williams as president and a corps of able as-
sistants. Both day and night schools will be sistants. Both day and night schools will be conducted, at which all the modern business requirements will be taught, including shor hand and type writing courses, all the common English branches, penmanship, etc. President Williams for years conducted the prominent college of Los Angeles, Cal.; also a leading college at Detroit. He comes to
Milwaukee highly endorsed by the leading Milwaukee highly endorsed by the leading
ducators and business men of California educators and business men of Californil and Michigan. He expects to make the Min waukee Business University a permanent
first-class school of thorough business trainfirst

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[^8] pened its 29 th year, Tuesday, Septem. Along the line of the beautiful Quee teachers, improved advantages and in- eral business enterprises. A journal creased accommodations, both in the under the title, "Where Dollars are business department and in shorthand Made," is issued by the above line, conand typewriting. The courses of study taining a vast amount of information and system of instruction and training about the New South, and a topograph have been revised and perfected and ical map showing the location of timber, are the most complete anywhere to be mineral and cotton belts, etc. This is found. The spacious college rooms mailed free to any address on applica-

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We will send the Leatherstocking Tales, as above described, postpaid, and the United States Miller for one year on receipt of $\$ 1.40$. Order soon, as the offer may be withdrawn next month. Address,

## RAZORS, SAFETY PINS AND OTHER IN-

 VENTIONS OF 3000 B. C.THE Washington Star has been through the patent office in Washington in pursuit of inentions of antiquity and finds that not only were telephones used by the ancients of some thousands of years back, but several other alleged inventions of modern times are duplicated in the collection of remote antiquities at the Smithsonian Institute.

The relics exhibited in this collection are mostly of the bronze age, and from 2000 years B. C. to 400 B. C. Among them are razors of bronze, some of which nearly resemble in form the razors of the nineteenth century, while others are crescent shaped, with modern handles. They are not in condition now to shave with, though hardly less so than the tools employed by the astute barber upon the customer who never
pays a fee. Even more wonderful is the safety pin with which the Roman women in the time before Christ was born, fastened their garments. It was precisely like the safety pin of the year A. D., 1891, with the little coiled spring
at one end and the catch at the other Fish hooks in the bronze age were in shape precisely what they are now, with the same barbs and the same bends, o Shaughnessy types are merely copies. The ends of their shanks, to hold the lines, were either flattened or looped just as at present. In short, they were the same articles exactly barring the nature of the metal.
In the Smithsonian collection referred to are shown hat pins with big round heads more than twenty centuries old, day, though they may have been employed merely to bind the hair together. Also there are ordinary hair pins, equally ancient, like those sold at dry goods shops now, and likewise thimbles of bronze with the customary indenta tions, though such implements are generally supposed to have been invented in the Middle Ages under the name of "thumb bells." Tweezers and strainers, after the modern fashion, are included in the same assemblage of curiosities.
Others of the same epoch are woven goods from the Swiss lake dwellings that were built on piles, bronze beads from Rome actually plated with gold, bronze buttons made just like those of to-day, bronze chains with the same mesh precisely as is employed now by jewelers for watch guards, bronze mir rors, bronze awls, bronze bodkins, bronze needles and bronze sickles for cutting grass or grain, with wooden handiesthe originals of the McCormick reaper
One of the funniest things in the col lection is a small vase with a hinge a the top for the cover-just like the mo dern beer mug. It dates from before Christ. 'There are also stone moulds of the same epoch for casting bronze knives, spear heads, hatchets, sickles and other implements precisely in the manner followed now. An ancient Etruscan vase shows mending with rivets after the same method as is employed in this day. Even more extraordinary are poniards, covered in ivory perhaps hundreds of thousands of years ago by the men of the chipped stone for palæolithic ages, with reindeer and mammoths for handles.

All persons desiring to reach the entire milling and grain trade of America, by cirCular or otherwise, Grain Elevator Directory for 1890-91.

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Big Four Route
West and Northwest, South and Southwest,
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Tickets will be good tor 30 days returning.
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innati, Ohio. cinnati, Ohio.


JNITED STATES MILLER and MILLING ENGINEEB Milwaukee, wis.

## becent publications.

"The Century's" Life of Columbus. The Century Magazine will celebrate the 400th anniversary of the discovery of America by publishing a Life of Columbus written especially for that magazine by Emilio Castelar, the famous Spanish orator, statesman, and author. The work is written in Spanish, lar, whose interest in and admiration for America are well known, has made a careful study of the new historical material bearing upon the sulject, and it is said that his papers will be very richly illustrated. Other articles dealing with the discovery of America are in course of preparation for the same magazine.

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Steamers leave Milwaukee dally (except Satur-
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pany's office, g9 W isconsin St., and at dock, foot of
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M (2)
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The J, B. Allfree Cu., Indianapolis, Ind.:
Gentlemen-The "Crown Mill's" record yesterday and to-day is six barrels of flour per hour, first-clas known. Is it not the "Crown" of all the Allfree
mills. The mills? The above was accomplished with no apRespectfolly

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Is doing excellent work and coming up fully to the agreement
Hartington, Neb., Fibb. 11, 1891. The J. B. Allfree Co., Indianapolis, Ind.:
Dear Sirs-I have this day accepted your mill and
settled for it as per contrat. settled for it as per contract. The mill, under the
management of your W. M. Shook, is doing excellent work and coming up fully to the agreement. We were troubled with ice in such a way that we could not test the mill any sooner. W. H. Shook has put up a first-
class mill for me, and one that will do your company class mill for me, and one that will do your company
credit.
Yours truly,

Adimm, THE J. B. ALLFREE MFG. CO., 76 to 08 Smbly S. In, INDIANAPOLIS, INO.


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ROPP'S + CALCULATOR.

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Oldest and Largest Manufacturers in the Vulcanized Rubber Fabries FOR MECHANICAL PURPOSES.
Rubber Mats, Rubber Matting and Stair Treads.
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This book with its numerous tables, short cuts in figures, etc., is simply invaluable to Millers, Grain
dealers, Farmers and Business men generally, Prices post-paid, as follows: No. 1. Bound in waterproof
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slate and renewable account book, $\$ 1.00$, Address E. HARRISON OAWKER Publisher United States Miller, Miltoaukee, Wis.

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It contains: 1. A list of Flour Mills in each State, Territory and Province, with names of owners, P. O. and county; in thousands of instances giving their capacity in barrels per day, kind of power used, etc., also indicating such firms as are supposed to be worth $\$ 10,000$ and upwards. Total number of mills given, 17.145.
2. A list of miscellaneous mills, such as Corn, Oatmeal, etc.
3. A list of Millwrights.
4. A list of Grain Elevator Owners and Grain Dealers.
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The price is invariably Ten Dollars per copy, on receipt of which it will be sent, post paid, to any part of the world. The complete work only is sold. We do not supply lists for single states. These Directories have been issued every two years since 1878, and have been declared indispensable by the prominent mill-furnishers, flour brokers, millers, etc., of this country and Europe. Address,

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IT WILL BE MONEY II YOUR POCKET IF YOU DO.


(8)IEN this Scalper was put on the market three years ago, its success was immediate, and its merits were recognized by every practical miller who saw it in operation. Naturally other machines sprung up, which were extensively advertised as "just as good as," but they have proved a source of worry and expense to the user, and we can count up a dozen of them that are never heard of now. The New Era on the contrary has given satisfaction wherever used, and where one goes, others follow, as its merits become known. We have any number of testimonials of its merits from millers in all parts of the country. Draw your own conclusions.

PRICES ARE WAY DOWN.
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Known and recognized as the best Collector for all uses on the market.

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FIRST-CLASS
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GUARANTEED
To GIVE
SATISFACTION.
TRIAL ALLOWED.
PRICES LOW.



FULLY PROTECTED BY PATENTS.
IT INFRINGES ON NO OTHER MACHINE, AND WE GUARANTEE INDEMNITY AGAINST

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$7{ }^{\mathrm{HE}}$ merits of this Collector are shown by our con$\int$ stantly increasing trade among both millers and mill furnishers. No inferior machine could show such results after three years of trial.

FOR CIRCULARS, PRIOES, ETC., ADDRESS
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- Both Upright and Borizontal Machines, manulactured with or without Shoe.

THIS machine has always been recognized as one of the most thorough, durable and reliable Scourers built. The only objection ever raised against it was its price. This objection is now overcome, as we can offer prices as LOW AS THE LOWEST. Consult your own interests and get a first-class machine, especially since it costs no more than the inferior scourers.

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IF you want a Cockle Separator, write us. We can sat1 isfy you both as to style and price. We build machines with reel or shaking graders, and with steel or zinc cylinders, as desired. Also in connection with Richardson's Dustless Oat Separator Attachment.

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$W^{E}$ are manufacturers of Perforated and Indented Metal, and solicit orders for anything in this line, which we can fill promptly.


Sliteenth Year.-No. 10.
MILWAUKEE, OCTOBER, 1891.
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By most approved roller process, guaranteed the best and purest rye flour manufactured. WE invite correspondenoe from cash buy mis.

## WONDERFUL DIFFERENCE

## TESTIMONIAL.

MANSFIELD, OHIO, Aug. 4th, 1891. THE RICHMOND MFG. CO.. Lockport, N. Y.

Gentlemen-We purchased from you one large Empire Receiving Separator, which we have placed in our elevator and over which all of the wheat that is delivered into our mill passes to our stock bin, and thence the wheat is conducted to the Tnree Horizontal Close Scourers that we also purchased from you at the same time. The separation made by all of these machines is as perfect as it can be, and the Scourers, in addition to making the separation, clean the grain perfectly; in fact, the grain. when passing through these machines and coming to the rolls, is in as perfect condition your No 0 S possibly be put. We also purchased one of your No 0 Scourers, over which pass all of our screenings, and the work done by this little machine is as perfect as that done by the three larger ones. We also purchased from you two of your Empire Horizontal Bran Dusters. which we placed in our mill after the other machines above referred to, and we find now that it has made a wonderful difference on our bran, there being very little flour, if any, left in the bran. We have therefore a full and complete line of your cleaning machinery in our mill, and we do not believe we have any class of machines in our mill that give us any better satisfaction than these, and we cannot speak too highly of the machines purchased from you. They are not only made in a very substantial and meohanical way, but the work done by each and every one of your machines is as perfect as machinery of this kind could do. We are entirely satisfled with the forking of the machines, as well as our adopting your machinery, when we remodeied our mill. We can assure the milling fraternity in need of these machines that they can do no better than place these machines in their mills.

Yours Truly,
THE HICKS-BROWN CO.

$\therefore \quad$ Compression Grease Cups and Badger Lubricants are used.

Fine Cylinder and Engine Oils.
Extra Roller Mill Oil,
Mill Greases,
Magnolia Babbitt Metal
and Cotton Waste.

## WIDEAMS OIL \& GREASE CO.

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From Heavy Patterns and of $\mathbf{U}$,
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## "WESTERN" mill sheller.

The most Compact, Durable, Best Sheller and Best Cleaner.
Takes up but little room. runs at low rate of speed, requires no attention. It is in
Best Sheller ever offered to the Public.
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UNION IRON WORKS, - DECATUR, ILL.
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## Corn $\cdot$ and $\cdot$ Feed $\cdot$ Rolls

FOUR SIZES: $6 \times 12,9 \times 14,9 \times 18,9 \times 24 .-2$ Breaks Each.


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Fast Grinders. * Fine Grinders. * Io Stone Dressing.

## they save power, time and attention

T. O. Kilbourn, of Spring Valley, Minn., says:
"I am using a 9xı8 Allis two break roller mill for corn and feed grinding and can grind 85 bu. of feed per hour by the watch." HUNDREDS OF OTHER USERS SPEAK AS HIGHLY! WFITE FOR OATALOQUE AND PRIOES.

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# Riverside Cable Code 

More copies of this work are in actual use to-day than of all other Flour Cable Codes combined.

Send for circular, giving scope of the work and names of many prominent firms using it, in America and Foreign Countries.

A proper discount will be made to parties ordering one dozen or more copies.

## RIVERSIDE PRINTING CO. MILWAUKEE, WIS.

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AND THE TMILLING ENGINEER,

Sixteenth Year.-No. 10.

## M. N. A. MATTERS.

Office of the Secretary. \} Milwaukee, Sept. 25, 1891. $\}$ To Members of the Millers' National Ass'n.

原QUARTERLY session of the Executive Committee of the Millers' National Association was held at Chicago, Ill., Thursday, September 24th, the following being an abstract of the proceedings:
In regard to complaints and suits heretofore acted upon, report was made in the claim of Barney, De Moss \& Co. of Roscoe, Ohio, against the Pennsylvania Railway, for loss of a car of flour at the time of the Johnstown flood, that the Railway Company had produced satisfactory evidence to substantiate the assertion that this flour had actually been destroyed, and had not been consumed by "sufferers" after the disaster; therefore, the question of liability hinges upon the point, whether the loss was occasioned through any negligence, or was owing to the action of the elements of nature, and beyond the power of man to prevent. As legal advice regarding the claim is now pending, further action by the committee was deferred.
In claim of the Gem Milling Co., of Milwaukee, vs. Anchor Line, arising from unreasonable delay in transporting a shipment of export flour, contracted to sail by a specified steamer, it was reported that suit for damages had been entered against the Anchor Line with excellent prospects of successful issue.

Regarding the patent suit of Russell vs. Kendall \& Co., under the terms of an alleged contract, giving territorial rights to manufacture and vend machines under the Geo. T. Smith patents, the Committee on Patents reported that this case must come up for trial during the fall term of the court, if at all. Defense has been carefully prepared, and with the evidence in the hands of this Association, obtained during former litigation of these patents, it is believed there will be no difficulty in defeating Mr. Russell's claims.
Threats of litigation under the Mechwart claims on gradual reduction patents, referred to at the last meeting of the committee, have taken no definite shape. Though warning circulars are still being received, no suits have been commenced against members of this Association, nor is it probable that there will be any.
It was reported at the last committee meeting, that the drawback of duty on exported burlap bags was again being tampered with, but investigation proved that the anticipated trouble had not been realized, and millers were receiving the full benefit of drawbacks as provided by law.
In regard to the question deferred from last meeting, whether this Association shall publish a list of names of dishonest or irresponsible flour buyers, dishonest or irresponsible flour buyers,
based upon the allegations of members,
careful investigation has proven conclusively to the Executive Committee that this cannot be done, except in direct violation of law, and upon the certainty of subjecting members of the Association to innumerable damage suits. The Association has repeatedly invited its members to place in the hands of the Executive Committee, as provided by the constitution, complaints of this nature. If it is found that any imposition or dishonest dealing has been perpetrated at the expense of a member, the Association will bring the offender to justice, and in all such cases our members will be fully advised as to the facts in the case. Further than this, no plan for publishing the names of tricky flour dealers seems practicable.
The work of the National Transportation Association, of which body this Association is a member, was reported as progressing satisfactorily. An informal conference recently held with the Inter-state Commerce Commission, upon the subject of a uniform bill of lading, to be used by all railroads for both domestic and export business, under which the carrier shall be bound to perform the duty of a common carrier as prescribed by the Common Law and Statutes enacted by the several states, leads to the hope that the efforts to secure national legislation to regulate such matters will be championed by the Commission.
The secretary reported five applications for membership, with an aggregate daily capacity of 8 units ( 800 bbls .) which were approved by the committee, with instructions that membership certificates be issued.
Under "New Business," a complaint was considered by the committee, on the part of Bernhard Stern \& Son, Milwaukee, against Wm . A. Green, of Providence, R. I., alleging unjust and unreasonable cancellation of an order. After due investigation of the merits of the case, it was decided to be one which this Association should take in hand, and instructions were given to enter suit at once to protect the interests of the member.
It was reported that the Pennsylvania State Millers' Association had for the past two years been defending a patent suit, brought against Jos. Bosler, of Ogontz, under claims of the Detwiler gradual reduction patents, with rather unsatisfactory results, and at an expense of $\$ 10.00$ per capita, thus far, to
the members; that it had been stated at the last meeting of that Association they would appeal to the National Organization and probably place the case
in its hands. As the papers had not n its hands. As the papers had not mittee could take no action.
A number of communications upon various topics were read and acted npon, completing the business of the National Association proper, after which were
taken up the affairs of The Millers' taken up the affairs of The Millers'
Tracing Bureau.

The secretary's report stated that, of the original subscribers to the guarantee fund, when the ten per cent. as sessment thereon was called, but three had withdrawn; the aggregate subscription of these being but $\$ 225$. Three other subscribers had, in declining to remit, intimated a desire to await developments, and to see whether the $\mathrm{Bu}-$ reau proved successful before they joined. All others had promptly fulfilled their obligations. Eight applications for membership in the Millers Tracing Bureau were presented and approved by the committee.
During the first two months the Bu reau has furnished tracing service upon 219,308 sacks of export flour. The average time, from date of forwarding, from points west of Indiana, to date of sailing from the Atlantic port, has been 17 days, and this average shows a steady and marked decrease as the work of the Bureau is becoming systematized. No serious delays have occurred. The transportation lines have shown uniform courtesy toward the representatives and have, thus far, freely furnished desired information and assistance.
The agents of the Bureau have proven capable in their work, performing their duties promptly and in a satisfactory manner. Representatives were, at the start, placed at Montreal, Boston, New York, Philadelphia, Baltimore and Newport News, and recently arrangements have been made to place men a Chicago and Buffalo which will greatly improve the service.
The patrons of the Bureau have without exception, expressed unqualified satisfaction with the results at tained. Extracts were read from a number of letters, written unsolicited Among the number were the following:
"The reports from our shipments are very satisfactory. The shipments have been made from the sea-board in less time than for many years past."
"We are pleased to note the care and attention bestowed upon shipments. It is something entirely new and novel to have our export stuff looked after in such careful fashion-Good for the Bureau!'
"The Bureau 'seems to be very prompt, and we are very highly pleased ith the success so far."
"So far, the services of the Bureau in this direction (North Dakota) have been very satisfactory to us, and we notice a marked improvement in the time given us by the transportation companies. We hope the Bureau will receive the support of millers generally."
The results thus far attained by the Bureau and the amount of patronage it has received proved very gratifying to the Executive Committee. The organ ization is now successfully accomplished, is proving of the full benefit hoped and anticipated and there can be no valid reason why it should not receive hearty support from all export-
ers of flour. Complaints been flour. Complaints have long
the injustice and damage suffered through the poor service furnished by transportation lines. The Millers' Na tional Association has provided an ef fective remedy for such troubles and it is now at hand. The tracing Bureau is in practical and satisfactory operation, and it needs now only increased membership and patronage to make it all that it should be; it is within the power of the members to develop and extend its work according to their desires. The Executive Committee has successfully started the movement and can see no reason why exporters who believe in the benefits of organization should hold aloof, or decline to participate in its development and progress. Those who do so, deny themselves the benefits of the service, and are the losers personally; besides, by withhold ing their support, they work an injury to the cause of organization among flour manufacturers, which is to be re gretted. Respectfully,

Frank Barry, Sec'y.

## SMUDGING WHEAT.

言HAT smudge business," said Ex-sheriff Benton, of Fargo, North Dakota, "is a new deal for our northern farmers and they are taking kindly to it. They have been practicing the smudge in Manitoba for some years, but our American farmers rather sneer at it as an English fancy and put no faith in it. But there is no question but that the smudge has now become a permanent institution in northwestern wheat farming. It has been tried and found effectual.
"The way they go at it is this: During the day previous to the night that a frost is expected, or perhaps many days pevious, loads of old straw and hay are dumped by the careful farmer in the various places about the grain fields. In that latitude a frost can readily be determined. They generally follow cloudy and wet weather. If it clears up towards evening with very little wind, a frost is imminent. The smudge is an all night job for the farmer. The frost, invariably, does not come until between 2 and 4 o'clock in the morning. At 10 o'clock in the evening all hands turn out and a row of straw heaps, about the size of an average hay cock are placed about two rods apart on the windward side of the field. If the straw is dry, a lot of grass and weeds are cut and piled on top of the heaps. The wind ceases almost entirely when the frost begins to descend and it can plainly be seen and felt. Then the straw piles are fired and the thick white smoke settles like a pall all over the field and the frost can do no injury.
"The smudge does its work perfectly and will cover a large area. It is not expensive, and affords lots of fun for the boys and girls. It promises to take the place of the eastern husking bee, been heard from millers in regard to and is an all night affair.


## ＂PRill＂

 PATEIT IMPROVED COCKLE MACHINESImmense increase of trade without traveling agents．OUR COMPETITORS GROSSLY ADVERTISING and imitating our STEEL REELS，we have decided to reduce our prices still more．Our Machines are working satisfactorily in the fol－ lowing

BIG MILLS IN MINNEAPOLIS
Christian Bros．Mill Co．；Minneapolis Flour Mfg．Co．－Standard；Washburn Crosby Co．－ ＂A＂Mristian Bros．Mill Pillsbury－Washburn Flour Mills Co．－Palisade；Sidle－Fletcher Holmes Co．－North－ western Mills；Stamwitz \＆Schober－Phøenix；Hinkle，Greenleaf \＆Co．－Humboldt；D．R． Mill；Zenith Mill；Pettit Mill．IN MILWAUKEE：

The Phonix Mill；the Jupiter Mill；the Gem Mill；the Daisy Mill and the Duluth Mill．
＂PRINZ＂IMPROVED STEEL COCKLE REEL．

## THE PRINZ \＆RAU MFG．CO．，MILWAUKEE，WIS．

# THE $\div$ DUNLAP：BOLT <br> 澡 <br> 澡 <br> EOUES SHEATES． <br> 洆 <br> 涼 

．．．．．．．．．．IT IS NOT A CENTRIFUGAL REEL．．．．．．．．． ＋IT IS A BOLTER AND DRESSER．＋

BROOKLYN，N．Y．，Aug．11，＇91．<br>THE BRADFORD MILL CO．，Cincinnati，Ohio．<br>Dear Sirs：Please Ship as soon as possible， 4 Dunlap Bolts the same as the last one．This is abont the＂Boss＂Bolt after all and we will want more of them after awhile．Yours truly，

BUNKER HILL，ILL．，May 28，＇91．
THE BRADFORD MILL CO．．Cincinnati， of your No．3 Dunlap Bolts to reduce our Patent and Bakers．Have been of your No． 3 Dunlap Bolts to reduce our Patent and Bakers．Have been running a week and find we can make 50 par cent Patent， 42 per cent Extra Fancy and 8 per cent Low Grade．Our mill was rebuilt two years ago an
it has never given satisfactory results until now．Youry very truly， it has never given satisfactory results until now．Youry very truly，


## MANUFACTURING SITES FOR SALE！

The undersigned owns a few of the best manufacturing sites in the city of Milwaukee，adjoining those now occupied by the Milwaukee Car Wheel and Foundry Co．and the magnificent plant of the Fuller－Warren Stove Works which cover nearly ten acres of ground．Best of railroad facilities．Parties de－ siring a suitable location should investigate this．Address，

## E．HARRISON CAWKER，

36 \＆ 37 Loan \＆Trust Building．
MILWAUKEE．WIS．


FARREL FOUNORY \＆MACHINE COMPANY
HNSONIF，CONN．
SOLE MANUFACTURERS OF THE CELEBRATED


ANSONIA ROLLS FOR USE IN ROLLER MILLS．
The general experience of American Millers unites in pronouncing these rolls the very best for Flouring Mill use．
These Rolls are now used in all Leading Flouring Mills
Chilled Rolls for Paper Mills a Specialty．Koation thata papor when yon writo to us．


THE IMPROVED WALSH munile Turine Whater Mreal


B．H．\＆J．SANFORD
SHEBOYGAN FALLS，WIS， EFFor special igures mention this paper

United States Miller
and the milling engineer.

## E. HARRISON CAWKER, Publisher.

PUBLISHED MONTHLY.
omge, 36 \& $3 t$ Loan \& trust bldg., Miwaukee. subscription price-Per Year, in advange. To American subsoribers, postage prepaid. Foreign subseriptions..
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MILWAUKEE, OCTOBER, 1891.
We respectrully request our readers when they write to persons or firms advertising in this paper, to mention that their advertisement
was seen in the UNITED STATES MILLER. Was seen in the UNITED STATES MILLER. but the advertisers.

## MILWAUKEE AMUSEMENTS.

AVIDSON OPERA HOUSE-Every evening, Satur day and Sunday Matinees.
BIOU THEATER-Every even
day and Sunday matinees.
day and Sunday matinees.
CADEMY OF MUSIC-Every
matinees.
matinees. THEATER-Every ever matinees.
PEOPLE'S TH
matinees.
matinees.
Wednesday, Friday and Sunday evenings.
LA YTON ARTGALLER Y-Free Tuesdays, Thu and Satuirdays. A
days and Fridays.
PUBLIC M USEUM-Open daily. Exposition buld
Visitors to Milwaukee in either summer or winter

TIE total shipments of breadstuffs from the United States for the month of September amounted to $\$ 11$,462,000 , against $\$ 7,199,000$ for the corresponding period in 1890.

$\mathrm{A}^{\mathrm{T}}$the recent meeting of the North Missouri Association at St. Louis several matters of importance were discussed which are set forth in our St. Louis letter in this issue.

WE have received the August number of the Australian Miller, published at Melbourne, Victoria, Australia. It is a good paper and the only one in Australasia.

THE Millers' Tracing Bureau has had 60,000 sacks of export flour placed under its surveillance since October 1. Now that its efficacy is established, interested shippers can not have the excuse of "waiting to see how it works" before patronizing it.

THE Oatmeal Trust is now supposed overs of that mucilaginous compound known as oatmeal porridge, will probably have to pay more for the dyspepsia producing food or go without it. It would require no great effort of will power to do the latter.

THE Michigan Millers' Association are taking active steps to keep its members informed of tricky, irresponsible and dishonest flour buyers. In short a confidential black list will be probably placed in the possession of each member. Secretary Reynolds evidently believes in the adage, "an ounce of prevention is worth a pound of cure."

TPennsylvania Millers' Associa1 tion had a good business and social meeting at Altoona, Pa., Sept. 9. Over fifty members were present. The Detwiler patent case was discussed and turned over to the Millers' National Association for defense. Geo. T. Ingham read a paper on "Mill Fires." Mr. Frank Barry, secretary of the Millers' National, was present and made an
interesting address. Cyrus Hoffa, of sacrificed. We have been informed, Lewisburg, was re-elected president, through many sources, that famine to and Landis Levan, of Huntingdon, the extent of starvation existed in secretary and treasurer. Several pa- Russia, and yet the manufacturers of pers of an interesting and valuable flour and grain speculators in that nature were read, and taken all in all, country were shipping all they posit was one of the best meetings yet held sibly could to other countries, unby Pennsylvania millers.
F LSEWHERE we chronicle the death L of our esteemed friend, M. H. Escott, secretary of the J. B. Allfree Mfg. Co. of Indianapolis, Ind. We have known Mr. Escott for years, and wen. He was a bright, honest busi
men. ness man, a genial companion and a day staunch friend to all those worthy of his friendship. His company will painfully miss his active service and sound advice. His family, though sorely afflicted, will find comfort in the
fact that his memory is honored wherfact that his memory
ever he was known.

THE losses by fire in flour mills and T grain elevators, amounting to $\$ 10$,000 and over, during the month of September were as follows:

Flour mill, Cape May, N. J.. Flour mill, Union City, Ind. Elevator, etc., Hastings, Minn Elevator, etc., Hastings, Minn. Elevator, Morris, Ill. Flour mill, Portland, N. D Elevator, etc., Minneapolis, Minn, Flour mill, Greenville, Ill. Flour mill, st. Lonis, Mo. Oatmeal mill, Rockford, Ill. Elevator, Morris, Minn. Elevator, Danbury, Conn Elevator and flour mill, Wilmington,

## Total. .

$\qquad$ .$\overline{\$ 914,500}$
THE Department of Transportation ffered the Columbian Exhibition is of the early days of railroading in this country, and will doubtless stcure it for an exhibit. The old locomotive "Samson," built in England in "the thirties" by the celebrated Timothy Hackworth and brought to this country in 1838, is still in existence and in working order. Accompanying it is a quaint old passenger car built in imitation of a stage coach, both standing on some of the old scolloped or fish-belly rails. The engineer who first ran the locomotive is still alive, and if still living at the time of the World's Fair may accompany the venerable engine.
H. RUSSELL, of Washington, D. - C., called on us recently and infmith Middlings Purifier patents for Wisconsin, he was going to sue every miller in the state that had used or was using a Smith purifier for royalty. He says he has able and abundant counse and will fight matters to the bitter end unless the millers individually come to a compromise. He estimates his royalty oo be worth $\$ 1$ per barrel for every barrel of patent flour made in the state for the past fifteen years. We have been informed that he has had a conference with the officers of the Millers' National
Association. If any conclusion should be arrived at it will probably be one that will exempt members from prosecution.
$T^{\mathrm{HE}}$ E "almighty dollar" seems to be ever uppermost in the desires of humanity throughout the world. There is no question as to its being a desirable article to be possessed of, but when affairs come to a point between actual want of life-sustaining articles and the "filthy lucre" there should be no ques-
$\begin{array}{r}. .810,000 \\ 10,000 \\ \hline\end{array}$
10,000
10,000
150,000
20,000
20,000
20,00 20,000
167,500 125,000 245,000

## 40,000 50,000

20,000 7,000

## A

Member of the Michigan Millers' Association procured insurance of a Mutual Insurance company, doing a general business and which issues a yearly casit policy taking the regular cash premium in advance, and the
parties so insured were under the impression that as they signed no premium note and paid the full cash premium in advance, they were in effect getting a straight cash policy, incurring no liability beyond the premium paid at the ime the insurance was effected.
It appears, however, that the policy issued by this company contained the following "contingent liability" clause, viz: "The insured heretofore named by accepting this policy, thereby be comes a member of this association, and agrees to pay them the premium annually, during the life of this policy and in addition thereto such sum or sums, in no event to exceed in the aggregate five times the amount of said cash premium, at such time or times, in such manner and by such installments, as the directors of said association shall assess and order pursuant to its charter and by-laws and the laws of the state of Illinois."
The company in question has made an assessment under this clause of its policy for once the amount of the cash premium, which in the case of the member referred to is $\$ 30.00$ on a $\$ 1,000$, making the insurance 6 per cent for the year instead of 3 per cent, as was supposed the cost would be. The company not having been authorized to do Cusiness in Michigan, it is doubtful if payment of this assessment can be enforced, unless service can be gotten in Illinois, but their right to collect it there is unquestioned. Secretary Reynolds, of the Michigan Millers' Association, has issued a circular to the members warning them to examine carefully all policies before accepting them, and thereby perhaps save both tion whatever-the latter should be money and trouble.
mILWAUKEE MARKET NOTES.
The stock of wheat here, October 14, reported at 356,858 bus., against 301,947 bus. the corresponding day last year and 631,609 bus. in 1889.
Wheat opened firm and higher at $94{ }_{3} \mathrm{c}$, but soon became easy, selling down gradually to 93 cic. Cables were better and the reported serious damage in Dakota to grain in stack by excessive rains caused a bullish feeling and brought some buying orders into the market. There seemed to be many traders willing to supply the most urgent wants at the opening, and prices declined in sympathy with other markets and liberal offerings. Receipts are heavy, but not proportionately as large as the exports when compared with last year's figures. The market is fairly steady at present figures, and should the unfavorable weather conditions in the Northwest continue, may go higher.

The close was easy. December, $93{ }_{3} \mathrm{c}$. October ruled 2c under December, and May $6 \frac{1}{2} \mathrm{c}$ over.
Sample wheat easier; No. 2 spring on track, $92 @ 93 \mathrm{c}$; No. 3 do, $86 @ 92 \mathrm{c}$; No. 4 do, $84 @ 90 \mathrm{c}$; No. 1 Northern do, $98 \mathrm{c} ;$ No. 2 do, 95 c .
The following table shows the closing prices of wheat and coarse grains on 'ehange, Oct. 14, as compared with those of preceding day and the same day of 1890 and 1889:


The following table shows the reeipts and shipments of flour and grain during 14th inst. as compared with those of the corresponding day of 1890 $\qquad$
Flour is less firm but in fair demand and choice spring wheat patents in bbls . are readily sold at $\$ 5.00$. Quotations: No. 2 hard spring wheat patents, in bbls. $\$ 5.00$ @ $\$ 5.20$; soft wheat do. $\$ 4.80 @ \$ 5.00$; export patents in sacks $\$ 4.50$ @ $\$ 4.75$; clears, hard wheat, $\$ 4.25$ @ $\$ 4.50$; soft wheat, $\$ 4.00$ (a) $\$ 4.25$; straights, choice bakers' $\$ 4.50$ © $\$ 4.75$; export $\$ 3.75$ @ $\$ 4.00$; low grades $\$ 3.25$; winter straights, in bbls. $\$ 4.70$ @ $\$ 4.90$ : rye flour, country, in sacks, $\$ 4.50$ @ $\$ 4.75$; city, in bbls. $\$ 4.75$ @ $\$ 5.00$.

Millstuffs are in fair supply, selling at $\$ 12.50 @ \$ 13.00$ for sacked bran and $\$ 13.75$ @ $\$ 14.25$ for middlings.
The Directors of the Chamber of Commerce propose a number of changes to the rules of grain inspection, and the matter will come up for action by the members on Wednesday of next week.

The Supply of money at the disposal of Milwaukee bankers continues large for this period of the year, when usually the wants of borrowers are in excess of available funds, yet the supply of prime paper offered is slowly increasing. The discount market is fairly easy at 7 per cent. per annum. The currency movement to the interior is moderate, country bankers being well supplied. Business generally is active, and the outlook for the coming winter encouraging. Bank clearings here, Oct. 14 , were $\$ 1,260,705.48$, and balances $\$ 124,032.70$.


## CORRESPONDENCE.

[The following letters are all from our own specia
correspondents, and reflect thelr views and the view correspondents, and reflect their views and the views
of the trade in the location from whileh they write.

## OUR ST. LOUIS LETTER.

MLLING matters in St. Louis have been decidedly more
active during the past they have been for some time, and I have several interesting items for my monthly letter. The most important one is that of the late meeting of the North Missouri Millers' Association held in this city. This Association is one of the largest in this section of the country, and has on its membership role every miller of prominence in North Missouri. It represents over one hundred mills, and consequently controls a very large output of flour. At its St. Louis convention some twenty delegates were present,
among others being President Pollock and Secretary Wayland, J. P. Craig, G. E. Brice, W. H. Sparks, W. L. Woods, M. F. Dunlap, Geo. Milbank, A. M. Harrison, F. C. Stein, J. H. Hackmann, Williams. At the convention several important subjects were discussed, notably the present grain and flour trade and export business. It appears that owing to the large grain crops, Missouri will not be able to handle all the grain usually tributary to her, and on this account much wheat is moving south to Kansas and Texas points. flour will also be too much either for the local or eastern trade; as a result the millers see but one course left on which to act, and that is in foreign
shipment. The question of foreign business was fully discussed and it was finally agreed upon to choose some one for a St. Louis agent, and through him ship their surplus abroad. As the grade of flour turned out from this
section of the country is much better than even the St. Louis brands, there is little doubt of a ready sale of all the surplus. In fact, as a protection, the Association intends to adopt a set of grades and brands of its own, and to that purpose will meet soon in Mexico,
Mo., where Mr. Richard Perry, the president of the St. Louis Board of Flour Inspectors, will meet them and fix on the brands. At this meeting too, definite arrangements will be made towards making foreign consignments.

The case of the Inter-State Commerce Commission against the Kehlor Milling Co. and the Wabash R. R. was acted on this month, and while the court explained to the jury that in the present case the shipper was as guilty as the railroad company, the jury brought indictments only against S. B. Knight, general freight agent of the Wabash, Milton Knight, general traffic agent, and H. B. McClellan, eastern agent of the Lehigh \& Wabash R. R. Speak ing of the Kehlor Milling Co., I see that George Updike, the former part ner of Kehlor in the Greer Commission Co., has entered suit against Mr. Kehlor for $\$ 80,000$. This is but a sequel of the recent trouble between the partners of the Greer Commission Co., which I reported in the letter of that date, and needs no further comment.
Probably the most disastrous fire St. Louis has experienced in the past six months occurred on Sept. 27. On that date the mill of the George Plant Milling Co., situated at Chouteau and Main streets, caught fire and was totally destroyed. The fire started about 4 o'clock P. M., and when the fire depart-
ment arrived all of the fifth floor was in a blaze. The fire had such a start before the engines arrived that it was never under control and the whole mill was burned. The fire, it is thought, originated from the fires left by the tinners, who were at work on the roof the day before. The loss was estimated at $\$ 250,000$ and was fully covered by insurance. The mill had a capacity of 10,000 barrels. It will be rebuilt. On the same day the Mansur-Tibbetts Agricultural Machinery Co.'s niew building was totally wrecked by fire. The building had just been completed and occupied by the company; only part ially insured.
The war between St. Louis and Chicago for supremacy in the grain trade still goes merrily on. Chicago cannot see how it is we can get her trade and attributes it to unjust railway discrimination. In reality it is because the present export trade is much better handled by river than by lake transportation, more especially as we are now supplying a district south of us usually dependent on Europe. It i eported that the rates to Chicago will oon be lowered, but St. Louis grain dealers have little fear of the conse quences as all the St. Louis lines promise to back them up. As it is St. Louis grain facilities are being taxed pretty heavily, despite that "hold your wheat" edict. And in this matter I see that though greatly urged, St. Louis is of fering little assistance toward that end Mr. T. F. McEnnis, vice-president of lately to see about keeping back wheat but his visit seems to have met with ittle success.
And again the Western Union has shut down on private wires and refuses to furnish them to the members of the Exchange. It does this to help its local Chicago trade by obliging the use of he regular line. It is to be hoped that this attempt to obstruct the St. Louis rade will be frustrated.
A very pretty exhibit car from Texas passed through this city en route North It is very handsomely decorated and fruit display.
At the St. Louis Fair this year quite an interest was taken in the flour competition; as usual the E. O. Stannard Milling Co., and the Sessinghaus Milling Company carried of the prizes. The following are the awards. Best barrel straight flour from winter wheat, made by country burr or stone mills: 1st, Steele Milling Co., Troy, Ills. 2nd, J. H. Martin, St. Louis County. Best patent flour from spring wheat: 1st, Baur \& Regel, St. Louis. Best wheat bran, Hezel Milling Co., St. Louis. Best rye flour, Baur \& Regel. Best barrel patent flour, made in St. Louis or East St. Louis: 1st, Sessinghaus Milling Co. 2nd, E. O. Stannard Milling Co. Best barrel clear flour from winter wheat, made in St. Louis or East St. Louis: 1st, E. Stannard Milling Co. 2nd, Hezel Milling Co. Best barrel patent, country make: 1st, Steele Milling Co., Troy Ills. 2nd, E. O. Stannard Milling Co., Alton III. Best buckwheat flour, Baur \& Regel.
During the month the "Export" mill at Greenville, Ill., was burned, It was owned by C.H. Seybt of Highland, Ill. J. Hurd of Milwaukee and Mr. Valier of St. Jacobs, Mo. With it were destroyed 50,000 bushels of wheat, it was valued at $\$ 125,000$ and insured for only $\$ 70,000$.
wheat.
Receipts this past week were 661,902
bushels and for previous week $818,200 \mid$ all the flour the Urban mills can make bushels. Shipments still continue very in a year to one firm there." Mr. John heavy, being 393,398 bushels this and Smith is no talker, and not being 826,600 bushels last week. Stocks to- "understanded by the people" of Gerday were $2,671,165$ bushels as against many, did not bring many interesting 2,520,472 last Saturday. Withdrawals amounted to 179,576 bushels by rail and 99,942 bushels for home consumption. Prices on grades still continue to fluctuate in sympathy with future quotations. Yet the demand on No. 2 red and No. 3 red continues very strong and at no time did offerings exceed the demand. The following are the week's quotations:

flour.
Receipts and shipments both fell oft this week being for the former on 29,650 bbls. as against $29,769 \mathrm{bbls}$. of last week, and for the latter $44,614 \mathrm{bbls}$. as against 45,865 . Trade continues very, very dull and but little local or foreign business is being done, in fact the market is dead while prices remain lmost stationary week after week Quotations are as follows: Patent, $\$ 4.50$ @ $\$ 4.65$; extra fancy, $\$ 4.25$ @ $\$ 4.35$; fancy, $\$ 4.00$ @ \$4.10; choice, $\$ 3.60$ @ $\$ 3.75$; family $\$ 3.40$ @ $\$ 3.50$.

Walter Howard Bain
St. Louls, October 10, 1891.

## our buffalo letter.

M. GEORGE URBAN, JR. and Mr. John Smith returned from their European trip a day or two after my last letter was in print. To say that Mr. Urban's appearance was greeted with applause is mildly expressing it; it was an ovation of the roaring kind which e respond? He did, and there is not man on the floor who can make a better speech than Urban when he feels so disposed. The stories he told is what caught the "boys." They were anxious to hear from the old country regarding the truthfulness of the famine reports, and especially how the people over there live. No one on 'Change who has made the trip has yet given
them an idea of what life really is in Vaterland. When asked regarding the prospects of an increased demand for corn in the absence of rye in Germany,
Mr. Urban voiced my sentiments exactly , in the last number of the United States Miller. He said: "Why they don't want corn over there; you can't thing that will lay heavy on their stomachs for five or six hours. To give you an incident I will relate a conversation I had with a smart young German woman who was in the baker business. I asked her why they did not use wheat flour. Her reply was. "What! I can eat a whole loaf of white bread and in half an hour I am again as hungry as I was before; but a few pieces of rye bread stays for half a day.' 'There is nothing to take the place of coarse rye bread to these people. They thrive on it too. The baker business I mentioned is also interesting. It is the custom of these women to give a certain sized loaf for a certain amount of flour. The difference in pounds is slight, but the profit is certain after baking. I saw many miles of fields which were heavy with crops of rye on my previous visit, but not a sheaf was visible this year, and I believe the failure is even worse than reported. I know that I could have sold stories to tell, but you can rest assured that he has a noddle full of valuable knowledge concerning the manufacture of flour which will be of great use to the firm of Schoellkopf \& Mathews.
Mr. H. C. Zimmerman, formerly of the Banner Milling Co. of this city, but for the past two years with the firm of Cowper, Zimmerman \& Co. of New York, is in town. He was one of the leading members of the Merchants' Exchange of Buffalo, and is greatly missed for his active work in reforming and putting that institution on a more business footing than it ever had. His work only commenced when he left Buffalo, but the ideas he then entertained were carried out with what results is known to all the members of the Exchange. Everybody was glad to see Mr. Zimmerman and especially to hear that he was doing well in his new field.

Mr. George Sandrock and Mr. "Clint" Newman were in the field for mayoralty of the city of Buffalo. George would take it and Clint would like it. The Republican party could not find a candidate willing to cast his hat into the ring against the present Democratic incumbant, but it appears they never thought of Newman. He would make the greatest mayor Buffalo ever had in point of disagreeing with the actions and opinions of the common council, and for that matter, everybody else. Sandrock would be an honor to Buffalo, but he is against the use of money in elections, and therefore, could not be elected. No barrel, no votes. George has the barrel, but would not take out the bung. President Scatcherd expected to be the nominee, and so the Merchants' Exchange thought it was sure of one of its members filling the seat, $i$. e. if there are enough Republican votes to go around.
State wheat is not coming out of farmers' hands as freely as country millers expect, and therefore Buffalo dealers are called upon to fill up the gap. The best white and red are selling at $\$ 1.00$ per bushel delivered at the mill, as a rule, however, the granger keeps posted on the market and wants Buffalo prices, including the freight to the point of delivery. O, the Farmers' Alliance is working wonders
There is no danger of a glut of grain at this port as long as the supply of cars keeps up as well as it has this year. To average over half a million bushels of grain per day by rail for four weeks requires some tall hustling on the part of the Central and Erie roads to keep the ball moving. The West Shore and Lehigh Valley bave also done considerable, but the first two are the principal competitors for rail stuff.
This is the millers' harvest. There is a living profit, and possibly a little more, in grinding wheat at present prices of flour. The demand, too, has been brisk, and with a lively influx of orders the miller gets the necessary courage to buy enough wheat ahead to tide him over the coming dull spell. A dull time is sure to strike the trade here in the near future, for the production has been greatly larger during the past six weeks than ever before in the history of the flour business in Buffalo. Prices have ruled considerably below those prevailing during the first week of last month, but with the deeline in wheat a margin sti remained. Old

Duluth wheat is nearly played out, the $\mid$ the most influential members. I doubt last sale being 6,000 bushels of old No. Northern, at a price about 5 cents above new. The demand for old wheat flour continues good and Eastern buy ers are willing to pay the advance of 35 50 cents per barrel asked over new if they are sure of getting what they want. Schoellkopf \& Mathews is the only firm having any old wheat in store here now, and with the new crop running as poor as it has for the past three weeks, the supply is dwindling rapidly Complaints were numerous of the bad quality of No. 1 Hard and No. 1 North ern, and there was serious talk of cut ting the inspection fully a grade. Thi week, however, dealers have what they call special lots of these grades, but the offerings are simply what was expected of the present crop. It is evident Duluth has been "playing it" on the trade, both here and in New York; still, as we have had the pick of the cargoes, our millers did not suffer as bad as the Eastern purchasers.

Over $100,000,000$ bushels of grain and flour, as wheat, were received at this port from the opening of navigation this year to Oct. 1st. This is the largest on record by some six million bushels. The rail carried out just twice as much grain as the canal, and all the flour with the exception of 8,000 barrels The N. Y. Central rails are kept hot.
It is wonderful how wheat hangs around $\$ 1.00$ in Chicago, and how closely the limits for Duluth wheat in this market are kept to that price. No 1 Hard has ranged between $\$ 1.02$ and $\$ 1.04$ for a month, with No. 1 Northern just 1 cent below. Some days the former is preferred and then a whole week will elapse before another bushel can be sold, only Northern being wanted. The miller hasn't got onto this crop yet.
Money is getting tight and the wise trader, who has gone through the mill, in this respect, many times, is providing for the future. To be caught short of funds when banks are complaining of a light supply, is one of the greatest calamities that can befall a grain house. The wise man prepares for these coming events beforehand, and the banker is now a much coddled individual.
The Urban mill started up last week. An elevator and storehouse have been added. The mill now presents a handsome, business-like appearance. The capacity will not be known for a few weeks.
The new Wells elevator will be in operation on the 18 th of this month. It is one of the best equipped houses on the river. The old Clinton mill, which has been turned into an elevator by Tom Ryan, has not yet turned a wheel, and the outlook for doing any business this year is growing fainter every day Tom is up to some scheme.
Mr. Alexander Mann, formerly of Boston, was in Minneapolis last week, it is said for the purpose of opening a house there in connection with a Buffalo firm. As it is rumored that feed will be a specialty, it is generally supposed that Heinold \& Rodebough are interested parties, although Harvey \& Henry may know more about the matter later on than they do now.
How it is that the old woman in the Northwest has left off scolding? Blew herself out probably, and now the readers of that valuable milling

## have a much needed rest.

John Campbell's name will probably be brought before the Trustees for reinstatement at their next meeting. The matter is being seriously considered by
large amount has been engaged. With corn at a low price the Canadian can
afford to sell his barley, and not so afford to will go abroad for feeding purposes.
Mr. A. Fred Brown, of the Fort Orange Milling Co., Albany, was married last week in this city. The wed ding was one of the social events of the season. The members of the Exchange did not have an opportunity of congratulating Mr. Brown, and many regrets were expressed thereat.
There is a greater proportion of poor wheat from Duluth this year than ever before in my recollection. Frosted, halfripe, smutty and No. 3 Northern, are being offered here, and it is beginning to dawn on the minds of our old wheat men that there is something wrong about this crop, which will create a bull movement ere long. There was evidently more in those frost damage dis patehes than at first supposed.
Messrs. Spann \& Chandler are mak ing the barley business spin as usual They are now doing two-thirds of the business, and if the rest of the traders do not show more life the prospects are they will have the whole thing to them selves before January.
The Inspection department, as far as car grain is concerned, is not making expenses. The receipts have not exceeded a half dozen cars per day for three weeks. All hands are busy with cargoes, however.
The receipts of car stuff, owing to the light demand, have been put in store. The Niagara elevators took in a fair amount until a few weeks ago, when the management refused to handle any more. There is no money in this business for large houses like the Niagara "A" and "B." The following rates were made by the Exchange and Ontario elevators :
On all sound grain received from cars, on and after date, until further notice, the charge will be as follows
Elevating, etc., and storing 5 days or parts thereof, $\frac{\downarrow}{\ddagger}$ cent per bushel.
Storage, each succeeding 10 days or parts thereof, $\ddagger$ cent per bushel.
Running to side bin for delivery to cars or wagons, $\ddagger$ cent per bushel.
Blowing, $\ddagger$ cent per bushel.
Winter storage will begin Nov. 15th next and on all grain in store at that date, or after, the ch rge for winter storage will be $t$ cent per bushel, for each 10 days, or parta thereof, until such charge (accumulated after Nov. 15 th) shall amount to $2 \downarrow$ cents per bushel; then the grain shall be free of storage until 5 days after the opening of canal navigation in 1892.,
Snipe are moving, ducks are flying and W. C. Jacus is so busy keeping his boats going that he has not had a shot this season. To a true sportsman like Jake it is agony. 18.

## OUR NEW YOBK LETTER.

THE breadstuffs markets have shown less activity the past month than since the beginhe new crop year. Yet there has been a gradual enhancement of values, in face of the maximum movecorn, as well as of the minimum new export demand so far on this crop, excepting also for corn, which has been going out of the country more freely since the failure of the corn clique in Chicago, than for the previous two months, while the receipts have fallen to the lowest on the last short crop since the premium on spot corn was reduced. This increased export movement of corn, however, has been at the expense of that in wheat, exports of which have steadily fallen off since the middle of September, owing to the in-
ability of the Continental ports of Europe to discharge the heavy arrival3 of the six weeks' previous shipments from this country as fast as they came in. For a month past the French and Belgium markets, which were the heaviest buyers of our wheat in July nd August, have been re-sellers of cargoes both here and in the English markets, while the latter bought very little here during August and early September, though they have been coming in slowly for a month past, or since our new spring wheat began to arrive. This demand, however, has been steadily growing, and has been quite free and continuous for a week past, as the bad condition in which the English harvest was gathered has deprived those markets of their native supplies, on which they had depended for the bulk of their wants until after the new year. This wet wheat now requires an additional amount of our hard varieties to mix with them, and the! British millers are ordering our No. 1 hard spring and No. 3 Kansas hard in liberal quantities for immediate shipment. Badgett, the Binghams and G. K. Clark as well as Max Held have been steady and good buyers of these grades for a week past, while the latter has resold several cargoes of No. 2 red o our receivers for Paris account.
As for the speculative market, it is in the hands of the local traders, who are simply "scalping" it on the "long" side when the crowd gets "short" and export demand is good, and on the "short" side when the crowd gets "long" and export demand is checked by any sudden advance. The last government report was the signal for a bear raid on the whole lot, as it indicated larger yields of all the cereals than previous reports, and confirmed late higher private estimates of practically a six hundred million wheat, nearly a two billion and hundred million corn and a seven hundred and sixty million oat crop. But the proposed removal of the German duty on grain and the increased export demand at the decline checked the latter in wheat, while the continued light movement of corn and the closing out of the ast of the ten million clique corn to exporters advanced the market in face of the crop report.
The feature of the markets the past week has been the heavy engagements of ocean freight at a sharp advance in rates to old-time figures (5d Liverpool) for all the room offered for prompt and near shipment, both for corn and wheat to the English markets, until many believe that Great Britain is now in our markets to stay, and that we have been near bottom prices on this crop of wheat and flour, and, that before the close of our inland navigation, the Coninent will have digested the heavy breakfast she took in August and September of our new crop, and will then come back for a good dinner, for which she will compete with English buyers at higher prices.

The demand for flour, however, has not kept pace with that for wheat in this crop, whereas flour was heavily exported on last crop where wheat was neglected. This has been explained by the fact that the Continent, so far, has been our big buyer this year, and always takes wheat in preference to flour ; while last year the United Kingdom was our chief buyer, and took flour because relatively cheaper than our wheat. But this year the inferior quality of English wheat requires more foreign wheat for mixture in order to
use the former, and this is believed to be the immediate cause of this slack export demand for flour, which has scarcely moved or changed during the month, except about a week ago when our city jobbers took old spring patents freely at $\$ 5.50 @ 5.60$, and new ones to arrive at $\$ 5.10 @ 5.35$. The Pillsbury, Washburn, Crosby Consolidated Mills being the chief sellers through their agents here, Mr. Smith, Mr. Ford and Mr. Perrin. The large buyers were Lang, Miller \& Huber, Weeks \& Parr and, of course, Swezey. Hadley \& Toomey and Daniels were the chief export buyers, the latter taking spring patents to arrive in sacks at $\$ 4.75 @ 4.85$, and the former bakers' springs on a i. f. U. K. and winter straights at $\$ 4.60 @ 4.65$ delivered in sacks in New York. The city millers are all running, but, outside of Hecker and Jewell,
are not selling much, though the price for their blended spring and winter clears for the West India trade has not varied from $\$ 5.25$ in over two months, so great is the demand for their
blended flours for those markets that they can sell all they make at that price when Western winter straights will not bring $\$ 5$ in barrels for those markets, or the Southern ones $\$ 4.80$ and clear $\$ 4.65 @ 4.75$. As for low grade springs, they have not sympathized in the 10 c . advance in the general market the past week, while low winters have, as the latter are scarce and wanted and the former are not.
Rye flour is scarce and firm at $\$ 5.15 @ 5.25$, while the grain has advanced to 96 c . c. i. f. N. Y. for No. 2 Western on renewed export demand and a vacancy of the foreign markets from the effects of rushing Russian rye on the German markets to get ahead of the prohibition of its export from that
country. Corn products have been held up by corn.

The death of the old and well-known head of the export firm of E. R. Livermore occurred last week after a long and painful sickness from cancer, but the business is continued by his surviving partner.
The output of the city mills is now 8,500 barrels daily. Jewell has lately increased his capacity to 2,000 barrels, and with Hecker and Jones, all of which, as well as King's County, are running on blended flours, the Staten Island on winters, and the Jersey City on springs. Oct. 13th.

## our london letter.

为the end of the first week in September, farmers in the
United Kingdom United Kingdom generally
nsolately resigned themselves to the contemplation of a harvest which would not be worth the trouble and expense of gathering, but renewed hope was infused into their minds by the steady rise in the barometer. The 8th of September was the first day of a spell of fine weather, which lasted for some twelve days; but just before it set in the average price of wheat reached 41 s 8 d per quarter, which is higher than the average has attained for eight years,
the price for September, 1883, being 41 s 10 d per quarter. During the fine spell of weather great progress was made with the gathering in of the crops laid and twisted corn by hand, and if the work in the late harvesting districts had not been interrupted by rain, on the 20th of September, all the crops would have been cleared off the land in the
course of a few days. Whereas, even on

Tuesday last, a quantity of grain in stook, or uncut, was to be seen in some
parts of the country. In the eastern and outhern counties the crops are gathered in, but in the west midlands and northern England and Scotland there is a good deal of work yet to be done. There is great variation in the quality, the corn being surprisingly good in some instances, while in others it is declared to be unfit for milling purposes. However, the new wheat, generally speaking, does not grind well, the skin being tough and thick, so that the proportion of offal is greater than usual. Large yields were here and there spoken of on Mark Lane, last Monday, and the general out-turn is put down as an average in quantity, there being more reports of a yield of 4 to 5 quarters per acre than those, which state below 3 quarters. During the present week there has been a good demand for sound red wheat, 35 s to 38 s per quarter being paid, which level is a substantial ad vance on the 32 s to 36 s quoted immediately the fine weather set in.
Beerbohm's annual estimate of the wheat supplies and requirements of the world is always very carefully compiled at the beginning of the cereal year, and the list of estimated exports and requirements during the current cereal year is as follows:


The estimated exports are $3,800,000$ quarters larger than the actual shipments last year, while the estimated requirements are $13,600,000$ quarters greater than last years' net imports. The deficiency shown for the current year is $6 \frac{3}{4}$ million quarters, but it allows nothing for the extra wheat consumption in Russia and only $4 \frac{1}{2}$ mil lion quarters extra for Germany, Holland, Scandinavia and Belgium for the shortness of rye.
On account of the price ruling for foreign wheat and the quality of the English wheat, which has been, in a good many cases, brought to the market before it is in condition, the English miller finds himself in a tight corner. Last Friday the market in London was in such a condition, that it paid the English millers to buy American flour instead of foreign wheat, to mix in with what they had in stock and sell to the bakers, but since then things have improved a bit for the home miller, or in other words, a margin of profit between the price of wheat and the price of flour is now visible.
There is some talk amongst the trade of holding a Milling Exhibition, similar to that held in London in May, 1881, next year. The month fixed upon is July, but it now is a question of support, as there is no likelihood of any great revolution in milling taking place. At the next Council meeting of the National Association of British and Irish Millers the question will be brought forward, and there is a likelihood of a lively discussion taking place on the question.
The milling industry in Spain, which is one of the most important, is now undergoing great changes and has been
lish milling engineers. The mills are quickly being remodelled to the roller
system, and the American milling engineers should turn their attention to this market, as there is much to be done in this respect.
It is proposed to establish in Russia, an empire where, although agriculture is the principal source of national wealth, there exists no ministry of agriculture, a Central Agricultural Institute, with experimental scientific stations, etc. The director and members of this institution are to be specialists, and the establishment will embrace several sec-tions-agricultural, geological, meteorological, botanical, chemical and technological. The aim of the institute will be, to establish and direct experimental stations and model farms, to centralize and bring together the works of the different rural economic societies, make analyses of the soil and of different products, etc.

An extraordinary general meeting of the shareholders of the Rio de Janeiro Flour Mills and Graneries, Limited, took place in this city, at Winchester House, yesterday, to consider "the present position of the company and to decide on the course to be adopted for carrying on the business." The chairman, in opening the meeting, said, that since their last general meeting various events had occurred, which rendered an extraordinary general meeting that after noon necessary, in order that the direc tors could have the views of the shareholders on the present position of the company. The shareholders were aware that when the company was first started, two directors were appointed resident in Rio de Janeiro. Of these, as announced in the last report, Mr. Holman, on ac count of the state of his health, came to reside in England, and last December finding that he was unable to attend the board meetings, he resigned his seat. The other Rio director, Conde de Figueiredo, who in the early days of the company took a great deal of interest in its welfare, and indeed, very strongly recommended the contractor who was employed to carry out the works, appears of late to have had his time fully occupied with banking and other mat ters, and, in the month of April last, while in Paris, sold the whole of his shares, and thereby, of course, ceased to be a director of the company, which he had so large a part in founding. The Count did not retire from the company on account of any disagreement, so that
the shareholders may still look for his assistance in anything undertaken in Rio. To fill up the vacancy caused by the retirement of Mr. Holman, the directors, as mentioned at the December meeting, endeavored to secure the services of Mr. Burgess Marriage, a large London miller, who, although he met the directors of the company several times, was unable to join the board in consequence of the increasing claims of his own business upon his time. There were thus two vacancies to be filled. With regards to the treaty between the United States and Prazil, it was a surprise, as the company had been formed in the days of the Empire, when industrjes with the object of giving employment to the people were encouraged, so that there was no reason to suppose that the policy of the Government would be reversed. The Chairman then went on to state that their flour mill, besides giving direct employment to a great number of persons, engaged in the mill itself, had also the effect of encouraging the sultivation of wheat in the parts of Brazil which
suited its growth. The Brazilians, he understood, were beginning to see the fact that the United States had in the treaty the best of the bargain, and there was good prospects of it being annulled according to the latest information from Brazil. The accounts which would give the result of the last twelve months' working had not yet been received from Rio, but a cablegram had been received which showed, leaving out the loss caused by the fall in the rate of exchange, that the mills, etc., made a profit of $£ 21,000$. The loss from exchange, however, altered the net earnings of the company; as the matter stands there was a considerable loss. At the time the company was formed the rate of exchange was $22 \frac{1}{2} \mathrm{~d}$.; but owing to the high credit enjoyed by Brazil the rate rose higher and higher until, in the year 1888-that is at the time when the regular milling operations began, it stood at about 27 d ., which really means that the paper money of Brazil at that time was quite as valuable as gold, and so it continued, with comparatively small fluctuations, until 1889. ${ }^{\text {i }}$ The accounts were closed on Aug. 31 in that year at 27 d ., but between that date and Aug. 31, 1890, the rate fell to $22 \frac{1}{8} d$., and this caused a loss of $£ 30,9622 \mathrm{~s} 8 \mathrm{~d}$., and on the 31 st of last month the rate had again fallen further to 15 d ., causing an additional estimated loss of $£ 43,000$. The chairman then read an extract from a letter received from one of his colleagues who is paying a visit to Rio and has been there for the last four months. The letter was dated Aug. 22, and states: "There is no doubt that, were the element of exchange eliminated, or could all losses be wiped out, the prospects for the mills are most encouraging. We can sell daily more than we make, and though the bakers and dealers complain that we are asking fully 1 milrie-i. e. 1 s 3 d . per barrel more than the best American marks, which is the case, they come back and buy from us." The following is an extract from another letter received a few days ago: "The more I see of the working of the business the more I am convinced that, with proper management, we should be able to hold our own with the Americans, treaty or no treaty, though I think there is no doubt the treaty will be cancelled." The chairman then remarked that although he would much prefer to see the business carried on without interruption, in the opinion of the board there were three courses open, one of which will have to be adopted-viz., to provide money for carrying on the business of the company, or to close the mills for a few months in order to see if the treaty is to be annulled or not, or to sell the concern. Still he believed that if the shareholders would show a little more courage there would be a good future before the company; and, in his opinion, about $£ 250,000$ more money was required to do the thing properly. It was ultimately resolved that a committee be appointed to confer with the directors as to the best course to be adopted under the circumstances, and that the meeting be adjourned for a fortnight to receive the report of the committee. So I must wait until next month before giving you the result come to.
X. Y.

London, Oct. 1, 1891.
All persuns desiring to reach the entire milling and grain trade of America, by circular or otherwise, should obtain a copy of
CAWKEk's American Flour Mile AND Graln Elevator lirectory for 1890-91.

## MILWAUKEE ITEMS.

SEPT. 20th the steamer City of Fre mont took its first cargo of flour for export across the lake to Benton Harbor. It consisted of twenty-seven carloads, and was taken from Benton Harbor direct to the seaboard.

Frank Hubpper, foreman for the Weisel \& Vilter Mfg. Co., was drowned in Lake Michigan while out boating Sunday, Sept. 13. He leaves a wife and three children.
The Rapid Post and Packet Co. of Milwaukee, incorporated Oct. 6, will shortly introduce to the world one of inventions of the century. It is a railway, and accompanying rolling stock, for transmitting mail and small express matter with great rapidity, and is the invention of a Milwaukee "man, Warren S. Johnson, presidentin and principal owner of the Johnson Electric Service Co. When asked about his device, Mr. Johnson said: chanical description of it, nor explain the nature of the propelling power, for this reason: We have applied for patents in England, France, Germany, Austria and Italy. These patents must be issued on the same day that the patent in the United States is"issued. According to the laws of some of the foreign countries when issued in the United States a patent becomes the property of the world, and is no longer protected in other countries. Hence, in order to obtain protection in the counthe patents issued here and there simultaneously. Now, I will tell you all I consistently can of the apparatus. It is a railroad, which may be either elevated or under ground, for transmit ting mail matter and moderately small express matter with a rapidity which has not heretofore been anything like equaled. Its mechanical name is the Impulsive Railway. It will convey matter from Milwaukee to Chicago in about thirty-five minutes, and from Chicago to New York in six hours. The railway is of simple construction, and will cost $\$ 15,000$ a mile. The vehicles of transmission are small cars which will carry 100 pounds each. As to the propelling power, it is not electricity, though electricity plays a secondary part, and is an incident to the governing power. It is not a pneumatic tube proni., for let me say here that pneumatic tubes are very expensive, thing that was practicable, and in order to be practicable it must not be expensive. No engines, no trolleys, no cables and no motors are required. Great speed is acquired in what I claim is one of the simplest devices ever invented. This railway, of course, is for the transmission of small matter only. The limit in size of packages will be two or three feet square, and a weight as great as twenty pounds can be carried. The cost of transportation will be equally as cheap as that of the present methods. The actual cost of propelling one pound 1,000 miles will be one cent. I do not mean that that will be the cost to the sender, but the net expense to the road. The introduction of this system will work several changes
in the order of things as existing now It will revolutionize the carrying trade to such an extent as to practically abolish the express companies. The Impulsive Railway will take away all the cream of the express companies business, the small packages, which i
their principal source of revenue. Of course, the transportation of heavy impress upon you that we do not claim to be able to carry heavy matter. I may as well state here, too, that the railway, as at present devised, cannot be used to carry people. But it will do what I claim for it, at least I am firmly convinced that it will, and so are the other men who have contributed towards the $\$ 1,000,000$ capital. The success of the railway has been demonstrated by tests which we have made from time to time. These tests have been only at short distances, but the nature of the machine is such that if it works successfully at a short distance it will do so at almost any distance. Our movements have been conducted very quietly for the sake of preserving our foreign patents rights intact. There is no secret process such as the Keeley notor, and nothing to keep from the public except for the reasons I hav mentioned."

## obituary.

Mr. M. H. Escott, secretary and treas urer of the J. B. Allfree Co., died at his residence in Indianapolis on Saturday Sept. 19.
His illness was of short duration and to his friends, outside the family circle, his death was painfully unexpected. He was born in Bristol, England, March 30, 1845. He lived in the neighborhood of Bristol until his marriage, when in 1867, with his young wife, he removed to Canada. A few years later he came to the United States, making his home in Milwaukee, where he became prominent in the mill machine industry, and was widely known through his connection with the Vortex Dust Collector Co. of this city. About three years ago he became connected with the J. B. Allfree Co. as its secretary and treasurer, and it was in large measure due to his urbane disposition, liberal and yet business-like direction of his sphere of duty that the rapid success of the Allfree Company has been due. He was brimful of the best of human nature, and with the Anglo-Saxon straightforwardness and earnestness that, combined with a strongly sympathetic nature, is the magnetic quality in making friends and holding friendships. During a
business connection embracing years, and a personal acquaintanceship of nearly as long, we can only testify to his strict integrity, and regret, along with all others who had the pleasure of his friendship, that so much of promise has broken down at the very climax of developed manhood. Morally, mentally and physically he was a high type of man.
He leaves the wife and eight children, with whom the earnest sympathy of all his many friends will remain. He was buried on Sept. 21, and the funeral was attended by his friends and the 100 employes of his company. He will be sorely missed by all.
"Where Dollars are Made." Along the line of the beautiful Queen \& Crescent Route are grand opportunities for settlers, manufacturers and general business enterprises. A journal, under the title, "Where Dollars are Made," is issued by the above line, containing a vast amount of information about the New South, and a topographical map showing the location of timber, mineral and cotton belts, etc. This is mailed free to any address on applica-
tion to D. G. Edwards, G. P. \& T. A., Q. tion to D. G. Ed wards, G. P. \& T. A., Q.

COLOR TESTING OF FLOURS.

合会HE National Association of Millers, at their recent annual convention, had the gond ortune to hear an excellent paper or "The Investigation of the color of Flour," by Mr. Joseph Lovibond, mayor of Salisbury, but better known to us as the inventor of an instrument for accurately measuring and registering the color of flours, which he calls a tintometer. Mr. Lovibond remarks tha when a beam of light impinges o flour a portion of the light is absorbed by the flour, and a portion only of the rays which constituted the impinging light being reflected to the eye, the color of the flour is really the color of the broken light which reaches the eye, and the particular color is dependent on the preponderance of certain color rays in the reflected light. This fact, as it possibly may have occurred to some of us, makes all the difference in the appearance of a flour when shown respectively by a miller's traveller who knows his business, and one who does not. In addition to placing the proffered sample on blue paper, a lot of difference can be made by a little manipulation accordng to surrounding objects. In employ ng the well known Pekar test, by which the flour is pressed and then dipped in water, the difference of pressure, time and method of immersion in water the time of exposure before examining and the dryness of the atmosphere during exposure, all have an influence on the character of the color developed. As uniformity is therefore necessary the flour could conveniently be always pressed into half its original bulk should be immersed and withdrawn four times, occupying a total of eight seconds; should then be placed oblique ly, so as to drain for thirty minutes be fore examining. Where the extreme accuracy necessary in keeping a record of colors was not required, it would be found sufficient to take but ordinary care, and to examine when dry on the next morning. Flours on being kept, bleach; the only way of keeping an ccurate record, therefore, is to take the above mentioned precautions, and
record in a book the resilts that are shown by the tintometer or other colormeasuring instrument. The color of a flour does not depend on the starch but on the gluten; color should therefore indicate the quantity and also quality of the latter, and thereby be relied upon to show the market value of a flour to a much greater extent than the unexperienced observer usually attaches to it. With a little experience we should be able to anticipate by means of the color of flour, more than the color of the bread. We know it is not always the whitest flour that makes the whit
est bread, but although we know we must have strength in a flour so as to make it carry its color into the bread we do not always take the different de grees and character of color to be a suf ficiently good criterion of strength and other qualities. One member, taking part in the discussion, remarked that he once hád two flours tendered to him as Hungarian at the respective values of 31 s . and 31 s .6 d . By means of the intometer he, however, found there was a wide difference somewhere, and by further investigation discovered tha one of them was a St. Louis flour, worth at the time 26s., and not a Hungarian at all, but had been considerably over dressed so as to resemble the latter We are too apt to take color as indica tive of appearance only (appearance i
not necessarily the result of quality in the goods), and as so many other conditions govern appearance, we say we cannot judge the value of a flour until it is made into bread. Is this so?-The British Baker.

## POINTS FOR ENGINEERS.

THE feed water should be introduced into a boiler through an internal feed pipe, with perforations, in order to distribute the water more perfectly. The perforated pipe should be a few inches below the water level. and the perforations should not be nearer to either head than onequarter of the length of the boiler, and should be on the upper side of the pipe. When mud drums are used they should be made of lap-welded tubes, of not more than 14 or 16 inches in diameter, so that there will be no external or internal grooving, and, if the feed water is not led into them-and it never should be-there will be little or no corrosion.
If possible, mud-drums should always be situated outside of the brickwork of the boilers, and the connection should be made with an elbow pipe, the bottom of the boiler being reinforced at the connection; this will prevent cracking at the flanges of the connections, especially when the flanges are well rounded and of considerable width.
If the front or back heads of the boiler are found to be rounded out, or bulged, there is a great probability that the flange of the head, or flue, as the case may be, is cracked upon the inside.
Flue boilers, and in fact all boilers using bituminous coal, should frequenty be carefully examined along the water line, as a drop in the water level only for a very few moments may produce softening of the iron and consequent distortion.
The front of a grate should be about thirty inches above the bottom of the ash pit.
The volume of a furnace above the grate, in ratio to one square foot of grate, should be from 2.75 to 3 cubic feet for coal ; but with wood as fuel it should be from 4.6 to 5 cubic feet.
It should be remembered that the useful amount of heat that can be obtained from a ton of coal depends very materially upon the condition of the grate upon which it is consumed. If you have the best coal and an inferior condition of grate, the efficiency of the coal may fall 20 or even 80 per centum.
Oxidation is one great source of deterioration in boilers, and is caused by the air held in the water, the process being hastened and intensified by the heat and pressure. That the corrosion of boilers is caused by the oxygen liberated from the water is shown by the fact that its specific gravity is greater than steam (nearly double) and therefore it would naturally remain near the water line; and it is found that the corrosion is nearly always greater at that point.
The use of rain water in a boiler, wice a week or oftener, tends to loosen scale and prevent its formation.-The Safety Valve.

September and October.
The finest shooting grounds in the Northwest are on and tributary to the lines of the Chicago, Milwaukee \& St. Paul Ry. The crop of Prairie Chickens will be exceptionably good this year; also Ducks and Geese In Northern Wisconsin and the Pond bia of Michigan splen. Dour Fulliñormation Gzo. H. Hil Chicago, Ill.


N
EW S.-Every car works in the country is full of orders, and the roads are so short of cars with
which to handle grain that the which to hand
Important improvements are being made the Altoona (Pa.) flouring mills.
Ir is probable that a flouring mill will soon be established at Howardsville, Va The Western Milling Company will er large flouring mill at Regina, N. W. T.
A thirty barrel roller process flouring mill has been established at Overton, Va.

The Charlotte Milling Co. are about ready start their new mill at Emmetsburg, Md. The shakopee, Minn., flouring mill has been so
The recently burned flonring mill of J.S. Benson \& Son at Laytonsville Md., is to be rebuilt.
The Funkstown (Md.) flour mills will soon ncrease their capacity from 150 to 250 bbls. per day.
The recently burned plant of the Plant Milling Company of St. Louis, Mo. is to be rebuilt soon.
E. A. Dudley, of Terra Alta, W. Va., has made some extensive
EfForts are being made to form a stock company to establish a
The Cold Spring Mills near Cape May, $\$ 10,000$. Insurance light.
d. M. Yeager is remodeling his mill a Yeagertown, Pa., and int.
A FIFTY barrel flouring mill will be estab ished at Farrington, N. C.
Co. can furnish information.
The Baltimore \& Ohio elevator and 150 000 bushels of wheat burned at Baltimore Md. The loss is nearly $\$ 500,000$.
J. L. Benson's flour mill at Laytonsville diary. Loss, $\$ 5,000$; insurance, $\$ 2,400$.
The Rockford (III.) Oatmeal Mills burned Sept. 29. Loss, $\$ 40,000$. Insurance, $\$ 38,000$.
complete outfit of rollers, to be used in making buckwheat. is being placed in the Henry Milling Company's mill, in Portstown

Jacob Arner, the veteran miller of Claron, Pa., and his son have leased the T. W the future.

т Hartsville, Tenn., Sept. 3, an incendiary fire destroyed the roller flour mill belonging to Maj. A. S.
ance, $\$ 3,000$.
Near Garrison, Texas, Sept. 26, the gin and grist mill belonging to J. A. Wiggins,
was burned, together with several bales of was burned, together
cotton. No insurance.
The Buffalo Milling Co., of Lewisburg Pa., awarded prizes to the maker of the best bread from their flour. The competition among the ladies was quite exciting. A Loss of $\$ 109,000$ was occasioned at Hastings, Minn., Sept. 17 , by the burning of the
warehouse and weighing house of Smith \& Thompson and Strong \& Miller's elevator. Near Fredericksburg, Lebanon County, Pa., Oct. 2, Emanuel Spannuth's roller flour
was burned, together with 400 bushels of grain and all account books. Loss, $\$ 10,000$; insur ance, 85,400 .
McKellop's grist mill at Perry, Mich., was burned Sept. 16. Loss, $\$ 18,4,00$. A large belonged to the patrons and was stored there, was also lost.
Died.-H. J. Brinkman, of the firm of Brinkman \& Co., owners of the Chisago
Flour Mill, at Rush City, Minn., died Sept. Flour Mill, at Rush City, Minn., died Sept. 22. He had bee
typhoid fover.

## yphoid fever.

Burned-At Hastings, Minn., the -Chicago, Milwaukee \& St. L'aul elevator and several other store houses with a considerable quantity of
Insurance light.
The mammoth roller grist mill of John Bull \& Co., at Slaterville, N. Y., burned September 30. There were over 2000 bushels of new buckwheat in the mill which
entirely consumed. The loss is $\$ 10.000$ entirely consumed. The loss is $\$ 10.000$
The assignment of S. V. White \& Co.,
New York and Chicago, was made on the New York and Chicago, was made on the New York Stock Exchange Sept. 22. The failure is due to long speculation in cor The liabilities of the firm are very large.
The Southern Mfg. Co. is now building flour and hominy mill with capacity 300 bbls. per day at Richmond, Va. It will be run by water power. E. G. Leigh, Jr., is president, and C. R. Robins secretary of the president,
company.

At Washington, Ind., Oct. 4, the flouring mill of George F. Signor \& Co.. was fired by an incendiary and burned, together with the wheat and flour was in the mill. The loss is $\$ 25,000$ with only $\$ 5,500$ insurance.
Robert M. Fairlair, a member of the New York Stock Exchange, died at his home in Dansville, N. Y., Sept. 18, of heart fail
ure. Mr. Fairlair joined the Exchange in 1864. He was 48 years of age. He has not been in active business for some time.
W. B. Forseman, O. S. Kelsey and A. P Foresman, gentlemen from Williamsport Pa., trading under the firm name of The Foresman \& Kelsey Milling Co., have pur chased flouring mills located at Flemingto and known as the City Mills, from B. Packer.
John H. Nyce, whose large brick grist and saw mills were burned several weeks ago at Perkiomenville, Pa., has the walls of his new grist mill nearly all reared. The new structure will be considerably larger than the old one and with an increased
Secretary Mohler, of the Kansas State board of agriculture, issued his final crop report on wheat and oats October 9. It shows the yield of wheat for Kansas to be 58,399 , 619 bushels, and of oats $39,668,045$ bushels The probable product of corn is placed a $145,485,918$ bushels.
Aт Wilmington, O., Sept. 29, the flouring mills and elevators owned by A.F. Peters and occupied by F. E. Langdon \& Co., were totally destroyed by fire with all their contents at 3 o'clock in the morning. Every in-
dication is that it was the work of tramps. Total loss about $\$ 25,000$.
The new flouring mills in Toledo, O., will commence running this month. The elevator which is being built in connection with the mill is about completed, and they will start in with a force of about 50 men. Should they decide to build their own cooper shop, which they will probably do, a force of 50 additional men will be put on.
At Locust Point, Ind., Oct. 4, elevator A of the Baltimore \& Ohio Railroad Company's system was burned, together with all mahinery and the 135.000 bushehs which it contained. The loss, water A cost to construct and put in machinery $\$ 500,000$. Its capacity was 500,000 bushels.

Parfrex, proprietor of the City Roller Mills at Richland Center, Wis., had a inst. He was standing in the doorway of his inst. He was standing inistled just over his head, flattened itself on a beam and fell at his feet Whether the shot was fired by wis feet. Whether the shot was shot is not known.
R. B. Graham \& Co., the well known flour
R. B. Graham \& Co., the well known iour
dealers at 1914 Market street, Philadelphia, dealers at 1914 Market street, Philadelphia,
Pa., made an assignment, October 5, to the City Trust and Safe Deposit company. The iabilities are about $\$ 46,600$; assets $\$ 22.000$ They were losers by the failure of the Spring Garden Bank and also lost considerable mon y by the sub-equent rand Van Guden ward-C
oung.
"No, I do not expect the present heavy receipts of corn to keep up," a leading Chicago shipper said a few days ago. "The country
is about drained of corn. Most of the stuff is about drained of corn. Most of the stuf bulge, and was the final effort of Western bulge, and was the inal old crop. The farmers to realize on the old crop. The rapidity with whic grain scarcely stops as $i$ is marvelous. The grain scarcely from the elevators to boats."
Among lately organized corporations are the following: The Kansas Milling Company, of Caldwell, Kan. ; capital, $\$ 30,000$. Di rectors-J. E. Kramer, W. H. Chaffin and L. Ames. The Oak Valley Milling Company, of Elk County, Kan. ; capital, $\$ 10,000$. Directors-L. A Conneway, S. A. Conneway and. P. Reti of Oak Valley, and I. B. Ather Milling and Elevator Company of Bern, Nemaha County, Kan. ; capital, $\$ 30,000$.
The Stoughton (Wis.) Milling Company will take the Dane county drainage question to the Supreme court of the United States. An appeal is taken from the decision of the Supreme court of the state, made in 1889. The Milling company, through its attorneys, alleges that the law providing for the appointment of the drainage commissioners, was unconstitutional, which opinion is not held by the Supreme court of the state, al though one of the judges (Cassoday) gave dissenting opinion. This appeal from the decision of the Supreme court will delay action in the drainage matter for several lowering the Madison lakes are rejoicing.

In the afternoon of Sept. 27, at St. Louis, Mo., fire was discovered in the machinery toreroom of the Plant Milling Company, the flames spread so rapidly that the firemen could do nothing but save adjoining property The mill was a five-story brick structure, 75 ft . front on Chouteau avenue and 100 feet deep. The warehouse contained 2,000 barrels of flour and building and contents are in ruins. The cause of the fire is unknown. George P. Plant, the president of the company, places the loss at $\$ 250,000$, with insurance about the same. The original Plant Milling Company was established in 1851, and the company is one of the best know
Edwin R. Livermore, aged 71, one of the ounders of the New York Produce Exchange died on Sunday evening, Oct. 4, at his resience, No. 30 West Forty-eight street, after lingering illness. Mr. Livermore had been well known figure in the flour trade for fifty ears, and up to the time of his death was Enders partner of the firm of Livermore Enders, No. 119 Broad street. Mr. Livermore was one of the committee of produce comCanal Ring, and was appointed a Rapid Transit Commissioner by Mayor Edson. He had devoted most of his time recently to the export branch of his business. For three months he had been ailing and was receiving medical care, but he was not he members of his family were with him when he died.
According to an Atlanta, Ga., special, a movement is on foot to buy up the rice mill of the South and form a pool. The Standar Oil Company and English capitalists are supposed to be behind the enterprise. Between $\$ 1,000,000$ and $\$ 2,000,000$ will be required, the working capital being $\$ 1,000,000$. Option eans, Savannah, Charleston and Wilming ton. The only announcement made whe the options were asked for was that a syndi cate proposed to buy all the mills in the Dutch milling machinery, which is the kind used in India an ary, of the syndicate says that the new process will be cheaper than the old to the planter, and the price of rice will be lowered so much that the importers of foreign rice will not be able to undersell the American product.
Aт Minneapolis, Minn., Sept. 24, fire broke out in the building occupied by the Moore Carving Manufacturing Co., and spread to
the Empire Elevator, filled with wheat. The flames then spread to adjacent property and a dozen buildings were burned. Elevator C was owned and operated by Pratt \& Porter, under the name of the Empire Elevator Co. The capacity of the elevator was 130,000 bushels, and the stock of wheat on hand when the fire broke out was about 75,000 bushels. There are two large annexes to the bushels. Those combined capacity is 600,000 bushels. These were leased by the Milwaukee Railroad of Pratt \& Porter. The loss $\$ 1 c 0,000$, on which there was $\$ 78,000$ aggregates $\$ 100,000$, on which there was $\$ 78,000$ insurance. The Moore Wuod Carving Machine Co. ost $\$ 30,000$ with an ing, their loss 88,000 . The Kansas City Graince on Co,'s storehouse was consumed; and Feed osured The block of fram, tores on Washington avenue the brick the Millwood Co. and a few smaller strucures were destroyed or badly damer ures were destroyed or bady damaged. The
oss on these will foot up about $\$ 25$, , 00 , with $\$ 20,000$ insurance. Total loss, $\$ 197,500$; total insurance, $\$ 107,000$.

OUR FLOUR TRADE WILL BE BENEFITED BY LIFTING THE EMBARGO IN CUBA. [保 ty between the United States and Spain goes into effect on January 1st it is expected that there will be a larger trade between his country and Cuba in flour, which now pays a duty of $\$ 6.20$ a barrel at the ports of the islands of Spain in the West Indies, but is to be reduced to $\$ 1$ barrel. It is supposed that there will be a heavier consumption of flour on he islands, because the inhabitants will e able to get it cheaper. When the reaty was ratified there was great complaint by the millers in Seville, Spain, because they saw the United States would be likely to control the West Indian markets on account of the milling cities of the United States being nearor to Cuba. The wheat raised in Maryland and vicinity and the flour made
by Baltimore millers, has peculiar qualities that suit the tropical trade, and is not affected by the shipment to countries south of the equator.

For more than a hundred years the flour made in Maryland has been especially prepared for the West India and South American trade. This business has been very largely conducted in connection with the sugar and coffee trade, and was the larger part of the export. cargo from Baltimore.
The exporters of New York expect o do a good business under the new treaty, and they say that Baltimore will get a big share of the flour from Chicago. It is claimed that the regular teamers from New York will not be able to carry all the flour from that port, but it is well known that steamers eaving New York for the West Indies and Brazil often come here to complete their cargo with a consignment of flour. C. MortonStewart said yesterday that Blaine's reciprocity treaty had stimulated trade wonderfully. He said that reciprocity, wherever introduced, was aking good shape. A great deal had been said against it, but the consumer nevertheless found that it reduced the cost of living and made the necessaries of life cheaper. He said that with Cu ba we have a very small sugar trade, and that we are gradually getting back some of Demerara trade. The Chesapeake was the natural channel through which to export all flour to Brazil, to Cuba and the West Indies, and in fact nearly all the flour going to those countries was originally from the mills of Baltimore or Richmond. The produce f the Baltimore and Richmond millers have always been the favorite brands of the South Americans, and experience has emphasized this fact ; and the new year would witness quite an impetus to he flour trade at this port.-Baltimore American.

## YIELO OF GRAIN.

The October report of the statistician f the department of agriculture relates o yields per acre of grain, and condiion of corn, potatoes buckwheat and obacco. The estimated average yields re -Wheat 15 bu., oats 29.3 , barley 25.8, rye 14.4. The condition of the corn crop is 92.5 , buckwheat 92.7 , potatoes 91.3 tobacco 93.8 . The yield of wheat in threshing has in most districts proved higher than the apparent condition of the crop at harvesting would indicate. In the Ohio valley states, and in the spring wheat region, the exceptional individual yields have been more numerous than usual, carrying the state average to the verge of former years. The average of the middle states are nearly as high. California presents a disappointing output, a large area having heen cut for hay and some districts, especially the San Joaquin valley, return reduced yields that are nearly failures.
The average yields of oats are higher than the early returns of condition would indicate, though that of last month, showing condition when harvested, was the highest for several years, slightly above the record of 1889. Oats have evidently shared the beneficent influences of the present season, yielding quite up to the popular expectation. The same may be said of barley.

The corn crop, very promising last month, though a little late, in danger of frosts above the latitude of 40 degrees,

HE great Northwest. the land of grain, With pride looks o'er her broad ex
And with the conscious gaze takes
Millions on millions at a glance Millions on minion in her soil, Oes the farmers' toil Heaped to rewawer, wheat is gold or money's power, wheat is go It follows, both are maniford Lucky is Northwest, God's garden spot.

## OUR LEGAL DEPARTMENT

## lly Prepared for The United States Mil

 and Milling Engineer, frBreach of Warranty of Machiner -Although machinery worth $\$ 600$ is when delivered in a condition to be practically worthless, if the expendi ture of $\$ 50$ will make it perform good work, there is not such a breach of the warranty as will justify the buyer in keeping the machinery without paying anything for it, but he is liable for its actual value as it was delivered.-Trippe v. McLain, Supreme Court of Georgia, 13 S. E. Rep. 522.

Injury of Employe by his own Fault.- Where an employe in a manufactory knows that the operation of certain machinery subjects him to danger, the responsibility is upon him to protect himself, and failing to do so he cannot recover for injuries sustained.Anniston Pipe Works v. Dickey, Supreme Court of Alabama. Rep. 720.

Loss of Goods in Transit.-Though goods saved by a common carrier from the perils of a freshet were damaged by passing through the freshet, yet if some not saved are unaccounted for, and it is not shown that the freshet caused their loss, or what their condition was when they disappeared, a recovery for their value may be had against the carrier without deducting anything for conjectural damage which they may have sustained by reason of the freshet before the loss occured.-Charlotte, C. \& A. Ry. Co. v. Wooten, Supreme Court of Georgia, 13 S. E. Rep. 509.

Fraudulent Transfer of Property. -A deed without consideration from a husband to a wife, dated March 1, and acknowledged and recorded in December following, is void as to creditors whose debts were created between those aside, actual fraud on the part of the wife need not be shown, as fraud of the grantor is implied fraud on the part of a voluntary grantee.-M'Ghee Importers and Traders National Bank of New York, Supreme Court of Ala bama, 9 South Rep. 734.

Recovery of Damages from TeleGRAPH Company.-Special damages can not be recovered from a telegraph com pany for failure to transmit or deliver a telegram, unless it can be shown that the company knew that such damages as those claimed would result from failure to deliver the message.-Western Union Telegraph Company $v$. Lively, Court of Appeals of Texas, 15 S. W. Rep. 197.

Assumption of Risk by Employe. A servant whose duties require him to work in a place known by him to be unsafe, so that he would otherwise be taken to have assumed the risk, cannot be relieved himself of such a promise to
tion of risk by showing a make the place safe by one other than his master, unless such other person had authority to determine what should be done for the safety of those employed in the place, and to do it or have it done. - Ehmcke v. Porter, Supreme Court of Minnesota, 47 N. W. Rep. 1066.

Statute Requirements Regarding
of Georgia which prescribe a penalty for the refusal of a railroad to receive and transport to any point on its own line, cars containing freight offered to it by a connecting road of the same gauge, does not require a railroad to issue through bills of lading to points on a connecting line, and to deliver its own cars containing freight to such connecting line. The fact that it has issued such through bills of lading to shippers at a certain point gives no right to shippers at another point to demand that they be likewise issued to hem.-Coles v. Central Railroad \& Banking Co., Supreme Court of Georgia, 12 S. E. Rep. 749.
Injury While Passing From One Passenger Car to Another.-Where a person is injured on a railroad train while passing from one car to another while the train is in motion, on his way to or from the smoking car, if the injury is one that is caused or contributed to by negligence of the company, damages may be recovered. The smoking car i placed by the company for use, and it is not of itself negligence for a passen ger to go to it while the train is in mo tion.-Costikyan v. Rome, W. \& O. R Co., Supreme Court of New York, 12 N Y. 683.

Good Will and Trademarks Pass With Assignment.-Under a general assignment for the benefit of creditors, the good will and trade marks pass it to the purchaser of the business at the assignces sale, and the assignor has no further right to their use.-Wilmer v.
Thomas, Court of Appeals of Maryland, 22 At. Rep. 403.
Damages for Refusal to Accept Goods Ordered.-Where a person purchases goods and then refuses to take them, whether they are especially made or bought for him, or are already in the stock of the seller, the measure of damages is the difference between the market value of the goods and the contract price, together with the expense of selling them again.--Tufts v. Grewer. Supreme Judicial Court of Maine, 22 At. Rep. 382.
Contracts in Restraint of Labor. A contract under which a person agrees not to work for any other firm or person engaged in the same line of business at the same place for a specified period after he leaves the employment of his employer, is not a contract in restraint of labor, and is one which can be enforced. - Sternberg v. O'Brien, Court of Chancery of New Jersey, 22 At. Rep. 348.
Wrongful Demand of Demurrage. -Where the master of a ship demands the payment of demurrage before delivering a cargo shipped under a contract which did not provide for the payment of demurrage, the consignee, after tendering the amount actually due, may abandon the goods to the vesse and recover from her owners their value less the lawful charges agains them. - The Reuben Doud, District Court of the United States, Eastern Dis trict of Michigan, 46 Fed. Rep. 800.
Warranty of Goods for Future Delivery.-Where a contract is made for the future delivery of goods or products afterwards to be made or grown, and it is stipulated that they shall be o a certain quality, that amounts in law o a warranty that when delivered and shall be of the quality stipulated. And
if they are not, the buyer does no waive his rights by accepting what is delivered, but he may take that, and and the capacity of the mills wheel in action for the price set off against it creased to 125 barrels of superior flour
warranty.-Morse v. Moore, Supreme Judicial Court of Maine, 22 At. Rep. 362. Payment of Individual Debt with Firm Credit-An agreement by one partner to discharge a debt due the firm by setting off his individual liability against it is not binding on the firm unless made with the consent of City other partners.-Gates v. Vincent Court of Brooklyn, 12 N. Y. 704.
Individual Debt of Partners. -
Where a joint and several note is given by both the members of a firm, one partner signing as principal and the other as surety, if the note is given for an individual debt of the principal, the fact that both partners are liable upon it will not make a firm note. It is an individual debt of the principal, and upon an assignment cannot be preferred to the debts of the firm.-Citizens Bank of Perry v. Williams, Supreme Court of New York, 12 N. Y. Supp. 679.
Power of Wife to Bind Husband's Credit.-Where a husband and wife are living together, the presumption is that she has a right to purchase such things as are for domestic or her per sonal use, and have them charged to her husband. Where they are living separately, the presumption is that she has not that right. And the merchant that sells her goods upon the credit of her husband, is bound to know, or as ertain, whether or not; they are Ning Court of New Jersey, 22 At. Rep. 347.

## Misappropriation of Funds

 Agent.-In a civil action to recovermoney claimed to have been embezzled or misappropriated by an agent, it is not enough to show that the money in ques tion was received by him, as he had a right to receive it, but the plaintiff must go further and show that the money so received was actually misappropriated or embezzled, and until this is shown the defendant is not put upon
his defense.-Panama Ry. Co. v. Johnhis defense.-Panama Ry. Co. v. John N. Y. Supp. 499.

Special Commission Contract.-Under an agreement by defendant that, if plaintiff would introduce him to person named, he would pay plaintiff a commission on all goods he might sell such person through the introduction, plaintiff may recover commissions on sales, without showing that such person was willing to purchase on defendant's terms. In an action for such commissions, the question, whether a sale was made through the introduction, when depending on inferences from facts proved, although the evidence is un contradicted, is a question of facts. Ayers V. Quigl of New York, 12 N. Y Supp. 559.

## staunton, va., flour mills.

$\overbrace{}^{\hat{5})}$HE well-known flouring mills of Witz \& Holt, located just east of Staunton, on the old air grounds, were erected in 1872, nearly a quarter of a century since.
The mill was of the old-fashioned sort, and the roller process was not so well-known or thought of in the South as it is to-day, Isaac Witz and Charles A. Holt were the founders of the mills, and it was not until 1882 that the roller process was adopted. This innovation wrought a great change in the conversion of wheat grains into snowflake flour, and in 1885 steam power

This output has been eagerly sought y the local trade, and country merchants along the line of the Chesapeake and Ohio road, from Charlestown, West Virginia, to Hanover Junction, have andled hundreds of thousands of pounds of Witz \& Holt's brands of patents, families and extras.
The present owners of the mills are saac Witz, C. A. Holt and F. T. Holt, and the capital invested is something over $\$ 50,000$. Twenty people are employed, among whom are three experienced millers, ten coopers, bookkeeper, shipping clerk, etc. At the rate of 125 barrels per day, the reader will ee that the total annual output of this ne mill alone is something like 36,000 barrels.
staunton milling company.
This enterprise was established in Staunton in November 1890, and at the election which followed the.organization of the company, the following officers were chosen: President, J. F. Triplett, Mt. Jackson, Va.; vice-president, J. A. Fauver, Staunton; secretary, P. B. Sublett, Staunton ; treasurer, Reeves Catt, Staunton. These officers and Frank Green also composed the board of directors.
The capital stock was fixed at $\$ 30$,00 , of which amount about $\$ 20,000$ was paid in, machinery purchased and the enterprise set fairly afloat. Active perations began May 1, of the present year, and from that time on the mills have been constantly running.

The mill is what is technically known as a "roller" and is fitted out with the latest and most approved milling machinery, manufactured especially or the company, by the Case Manufacturing company, of Columbus, Ohio. This machinery was put in at a cost of about $\$ 14,000$ and has given perfect atisfaction in every respect.
The capacity of the mills is 200 barrels of flour per day. The manufactured products of the milling company (the different grades of flour and mill-feed) find a ready market in eastern Virginia and North Carolina, while an immense local trade has been built up along the line of the Chesapeake and Ohio and Baltimore and Ohio railroads, and in this city.
An additional feed mill is now being put up, and the future of the company seems bright with promise. The mills are located on Commercial row, near the Chesapeake and Ohio depot-one of the most desirable sites in the city or a manufacturing concern.
L. J. Esslinger, late of Michigan, one of the most expert millers in the country, is in charge of the mechanical department, and Mr. Fauver is the general manager. Six persons are employed in the mills, beside the gentlemen we have mentioned, and others will be added to the present force later on.
Adding to the 57,600 barrels annually turned out by the Staunton Milling company the 36,000 barrels manufactured by Witz \& Holt, we have a total of 93,600 barrels.-Staunton News.

A FAIRY TALE.
A famous woodsman once boasted that he could find his way throug
Being tested, he carried with him a slender thread, which should serve as a guide for the return trip. Reaching the end of his journey, he lay down to rest. While he rested came the genius of industry and breathed upon his thread and changed it to two shining ribbons of steel. It was a railroad. Throngs of people whirled past him in luxurious cars, and he read upon the train the mystic legend: Wisconsin Central !"
For tickets, berths and full information apply at Milwaukee City Tieket Office, 99 Wisconsin St.

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## texas a wheat exporter.

THE probability of Texas becoming a great wheat-growing state and instead of an importer becoming an important exporter of that cereal, is interesting business men and grain-growers of that state. An earnest of this has been given by an export of 90,000 bushels of 1891 Texas wheat from Galveston to Cork for orders, in the early part of July. The grain was grown in the Panhande of from that point to Galveston was $17 \frac{1}{2} \mathrm{C}$ and the value in the elevator at Galveston was placed at 90 c to 91 c , when it was selling at 96 c . in New York. From Galveston to Liverpool the cost of carriage was 3 c more than from New York. But this is not the only feature of the trade of interest. St. Louis, New Orleans and Chicago dealers will be interested to learn that the freight from common points in Texas to Galveston is $7 \frac{1}{2} \mathrm{C}$ cheaper than it is to St. Louis or New Orleans. Galveston dealers claim "tha they are entitled to a differential just double that, or 15 c , and they are al ready working for it. The St. Louis Globe-Democrat says, "they did have the same from Kansas as Chicago had, but it was taken away from them. Chicago kicked against an equal show for the Galveston route. Texas wheat can't help going to the gulf. Kansas wheat will follow it if Chicago influences cannot prevent the restoration of rates to conform to distance. As it is now there is a difference of $7 \frac{1}{2} \mathrm{c}$ on Kansas freight in favor of Galveston as against New Orleans, and the Texas roads and Texas people are wishing to get it made 15 c . They may not be able to revolutionize transportation rates in a season, but the sailing of the first shipload of wheat is a significant beginning. It settles the problem so far as the 12,000 carloads of grain in the Panhandle is concerned There is enough in this to make St. Louis and Chicago grain men do some thinking. Kansas wheat from several points can be put down to-day at the gulf cheaper than at Chicago, in spite of all the powerful influences for the lake route. * * * The 90,000 bushels of wheat were taken from the railroad tracks by the elevator on land It was run out by a belt $2 \frac{1}{2}$ feet wide across the dock and into the ship in fifteen hours. The representative of the English steamship line says that the facilities were equal to those of any other port, and that his company will guarantee the same rate from Galveston to Liverpool as from New York when ever deep water over the bar was ob tained, and there is the meat in the nut. With the same rate from Galves ton to Liverpool as from New York, which way will the grain grown midway
between the lakes and the gulf go?" asks the correspondent of the St. Louis paper named. Deep water is, apparently likely to prove a very important factor.
Colonel S. W. Fordyce, of the "Cotton Belt" Railroad, is quoted as follows "Eastern connections and relations don't concern us so much. We are look-
ing toward the Gulf of Mexico. There is where the transportation problems of the near future will be." Regarding the probable supply of wheat for home and foreign consumption in years to come, there seems to be but one opinion. Three years ago Texas did not pretend oo be able to grow wheat in large quan-
 placed at $7,500,000$ bushers, of which bushels. This section is claimed to be a "natural" wheat country. It is said o be a lime or gypsum soil, and to have he necessary altitude ( 2,000 feet above the sea) for wheat-growing. Twenty counties of northwest Texas are said to be included in this wheat-growing area, which, by the way, does not include the whole of the Texas Panhandle. The correspondent already quoted says:
Not one-tenth of this land is occupied yet it turns out this year $6,500,000$ bushels of wheat. There is the soil and the room in this Panhandle country for $65,000,000$ bushels of wheat. Do not get the wrong idea of this. All of the
Panhandle is not wheat land. The belt begins north of Fort Worth and extends in a northwesterly direction, but not to the boundary of Texas. When you passed beyond the limit of successful wheat-raising in Texas. At the Canadian you strike the red sandstone drift from the Rockies. You are out of the whea belt there. The limestone drift from the mountains of southern New Mexico makes the wheat region of northwest
Texas. The red sandstone drift comes from the Rockies further north. You strike it at the Canadian in the Panhandle and you find no more natural wheat land until you get into northern Colorado.
Though having many favorable aspects the probable large export wheat movement this year from Texas, how. ever, has its disadvantages, for it is de clared that Texas will require wheat ater in the season, and have to pay more for it than she can get for it now for export.-Bradstreet's.

At Morris, Ill., Sept. 20, the grain elevator wned by O. J. Nelson \& Bro. was burned together with 12,000 bushels of oats and 10 ,000 bushels of corn. The elevator was built in 1880 at a cost of $\$ 13,000$. Insurance, $\$ 4,000$ on building and $\$ 4,000$ on grain. The loss is total.
"Catalogue of Farm Lands, Coal Lands, Iron Lands, Timber Lands, Improved Farms with full discription, price and terms, of properties for sale on the line of Queen \&
Crescent Route." The above is the title page of a very neatly gotten up catalogue, of
sixty pages, which is being mailed free to all
persons who will make application to Mr. D. perrons who will make application to Mr. D
G. Edwards, the General Passenger Agent

DEALERS.

## H. R. STROEMER,

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MINNEAPOLIS.

ROSS T. SMYTH \& CO., Grain and Flour Merchants,

17 Fenwick Street,
LIVERPOOL

## C. CAESAR \& CO., <br> Grain Exporters, <br> 30 North Front Street,

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MOÏSE BERNHEIM,
Wheat Flour, Rye Plour and Wheat merchant and broker.
37, Rue J. J. Rousseau, PARIS.

## BUSINESS EDUCATION.

The training of the better class of business schools is of incalculable value to those whom circumstances have thrown upon their own resources, and serves as a safeguard against losses and reverses of fortune-the too frequent business college is supplemental the business college is supplemental to
that of other schools-public, private that of other schools-public, private
or parochial, and is not less important. or parochial, and is not less important.
The Spencerian Business College of Milwaukee opened upon its twentyninth year last month. This institu tion confines itself strictly to business education, in which it aims to be first and foremost. Parties of either sex, contemplating attending a business university or college, should not fail to address the Spencerian Business College of Milwaukee for a handsome illustrated pamphlet circular, which is sent free and which gives much valuable information regarding businesseducation. Students may enter at any time that may be convenient. The pences and offices with trained help, male or female, to suit employers.

FOR SALE.
FLOURING MILL, at Volga City, Clayton Co., Iowa. Water power, Allis A rollers and other improved machinery. Reason for selling, old age of owner. Good wheat is abunt-
ant.
HENRY WHITE.

## FOR SALE-In Genesee Co., N. Y.

PIECE OF MILL PROPERTY, 25 acres,
 West Shore Railroad and in a great custom
business vicinity. Will advance monty to business vicinity. Will advance monty to
rebuild on small payment. For particulars address,

FOR SALE OR FOR RENT.
FOR SALE-The "Pioneer Mills," roller mill, built according to the Edw. P. Machinery of the most modern and improved
patterns. Rail way connections first-class. patterns. Railway connections first-class For full particulars address

FOR SALE-A 100 barrel full roller steam flouring mill, with feed, cornmeal and buck-
wheat roll, and with all the latest improved machinery. Situated in an unexcelled wheat section in the Willamette Valley, Oregon, on
the S. P. R. R., with elevator capacity f storing 150,00 bushels of wheat and 50,000
bushels of oats and barley for feed. This mill must be seen to beappreciated. For $\ln$ formation address F. BARNEKOFF,

## FOR SALE-The flour mill known as the "MODEL MILLS," Rochester, N. Y., 200 bar-

 "MODEL MILLS," Rochester, N. Y., 200 bar-rels, winter and spring wheat, roller and
stone process, modern machinery in good restone process, modern machinery in good re-
pair, good water power, long lease on easy terms, good custom trade. Must be sold to
close an estate. Apply to C. D. Kiehel and

Iohn an | John H. Campbell, Execu. |
| :--- |
| Building, Rochester, |

FOR SALE-Shakopee flour mill-must be sold. Daily capacity 300 barrels. Built
in 1886 . Brick, four stories and basement.
Mill is in first-class order and redy Mill is in first-class order and ready to run.
Elevator 25,000 bushels capacity, crib work Elevator 25,000 bushels capacity, crib work
veneered with brick. Large local and feed veneered with brick. Large local and reed
trade. Twenty miles from Minneapolis. Ad-
dress CHAS. G. HIN Ds, Assignee,

FOR SALE-One of the best pieces of
ailling property in Northeastern Iowa. Water power. Price cheap and terms reason-
able. Address J.C. MANN,
FOR SALE-A good water power flour
mill, doing a paying business. No other mill, doing a paying business. No other
four mill within ten miles. Population of own 4,000 . Address Jerome Judson,
Sandy Hook, Ct. FOR SALE-The Hydraulic Roller Mills,
t Wichita, Ks. It is a full roller, 150 bbl at Wichita, Ks. It is a full roller, 150 bbl. mill, with steam power. This is a good in-
vestment. Good reasons for selling.
Address, Hydraulic MILIING Co..

FOR SALE-A 35 bbl. roller mill, both FOR SALE-A 35 bbl. roller mill, both
steam and water power. Good trade.
Address, 22 S . Mulberry St., Hagerstown, Md FOR SALE OR RENT-A
water-power roller mill, well located in Minnesota. Address,

Address,
Knuppe $\&$ Hartsinck,
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WANTED-A thorough miller and milll
wright desires a situation.
Referenceses furnished if desired. Address,
MILLER \& MILLWRIGHT, Box 123,

WANTED. $-\Lambda$ change by a competent mil-
er with 15 years' experience in good mills. m a young married man, now good mills. Am a young married man, now managing a
successful mill. One year in this position; three years in last as foreman of a 150 barrel
mill. Have a complete kit of tools, and do mill. Have a complete kit of tools, and do
repairing. References furnished. Corres-
pondence solicited, from Nebraska especially. pondence
Address,
Adaress,
ST. Josepr, Mo.
WANTED.-A situation by an experienced miller, single man. Hard wheat country preerred. References, Guthrie Bres. Can Superior, Neb,
W ANTED-Situation as miller, millwright or mechanical draftsman, by a graduate of a
eading German Millers; College, who has perated mill in Germany and held position of first and second miller in America. Single,
sober, reliable and can furnish good references. Prefer to work for a German.
Address, Berouter
ences. Pref
Address,
1417 State St., Milwaukee, Wis.
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rip to porion dates hore Excursion dates heretofore published have

## the training of mechanics.

THE lack of thoroughly traine artisans in the various trades is one of the greatest draw backs on the progress of American in dustry. We have no apprentices nowadays. Boys "pick up" trades. No one in a thousand of our alleged " masters" of trades has had any systematic instruction. The result of this has been to create a wide demand that the deficiency be made up by training of boys in the rudiments of mechanics in the common schools; and there have sprung into existence many college annexes, where the scientific principles of physics are taught in connection with their practical application. No where is this demand for better trained mechanics more felt than in the South. This section needs to encourage every movement intended to train our youth in handicraft, and we ought to have a dozen technological schools similar to the Sheffield annex at Yale, and the scientific and practical schools at Cambridge, that are under the control of Harvard. In this connection we notice that the wealthy philanthropist, I. V. Williamson, of Philadelphia, has determined to found a free school for the training of boys in all branches of mechanical business. He will put into the enterprize at the start $\$ 2,500,000$ or $\$ 3,000,000$, and if the school meets his expectations, or comes near doing so, he will liberally extend and endow it by donations in his will. The site of this school will be in or near Philadelphia. The Record of that city, speaking of the preliminary organization of the board of trustees, made up of wealthy and public spirited citizens of the great manufacturing city of Eastern Pennsylvania, says

The principal features of the school have already been made known and have attracted public attention. Mr. Williamson's plan is not to establish a "Manual Training School" as that term is generally understood and as it is exemplified in the city's public school system. His intention is to teach boys the mechanical trades in order that when they enter upon life they may be able at once to secure employment. He deprecates the tendency of the day to despise hard labor, and thinks that the condition of the laboring class will be immeasurably improved if the work men are bred up from boyhood to take pleasure and satisfaction in their work. It is with this view that he will establish his school and the common belief is that he will give a large part of his fortune to place it on a firm basis and secure permanence.

## JEDGE WAXEM'S PROVERBS,

The Declaration of Independents has got a wider foundation than all the Public skools furnishes the best fatening for the Amerikin Eagel. Some men would rather be president fer fore yers before they die than be the Lord Almity for eternity afterwurds. No wonder some of our statesmen air sitch pore material when you come to think what wages they git.
Pattriotism won't grow in cittys like it will in the country.
Wimmin that marrys the rite kind of men ain't hankering to vote.
It's a good sine fer the country when boys differs with their daddies in polliticks.

Most candidates overdoes it.
Newspaper edditers air the real kings of polliticks.

Thars a mity comfortin' sort of shine to a pocketful of silver money.
A vice-president is mostly fer nfeeti emergencies.-Detroit Free Press.

Morodand, Cingimati, Minesyo \& Sh Lowir RAIIXAY.
BIG FOUR ROUTE
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INDIANAPOLIS

- CINCINNATI

The Only Line running the Popular Buffet CHICAGO and CINCINNATI

The Only Line from Chieago running solld Vestibule Trains into Central Union Depot,
Oinelnnati, where conneetion is made with Through Car Lines for Florida, avolding al .
Through Tlikets via the Blg Four Route ca $\begin{array}{ll}\text { a. Mrray, } \\ \text { Traficic Manager. } & \text { D. B. MARTIN, } \\ \text { Gen'l Pas'r Agen }\end{array}$ ,


 Sleopers.n Meeals served in the "Central's. famou
Dining Cars.



## RECENT MILLING PATENTS.

The following list of Patents for Milling and Grain Handling Appliances, granted in September, 1891, is specially reported for the United States Miller by H. G. Under-
wood, Patent Attorney and Solicitor of Patents. No. 107 Wisconsin Street, MilwauPatents. No. 107 Wisconsin street, Mo way patent named, to any address for 25 cents. No. 458,965 - Dust Collector, Herman A Barnard and Charles A. Barnard, Moline, Barnard and Charies A. Barnara, Moline, Mfg. Co., same place. Home City, Ohio.
Home City, Ohio
458,713-Grain Separator and Cleaner eorge B. Howland, Pontiac, Il
lyn, assignor of two thirds to Drook Newland and Charles W. Thomas, New York, N. Y.
459,352-Safety Device for Mills, Louis Wagner, Baltimore, Md., assignor of one half to John Marr, same place. 459,466-Feed Mill, Jonas D. H 499,466-Feed Mill, Jonas D. Henry an 459,636 - Grain Cleaning Mac George A. Lanaux, New Orleans, La 459,552-Grain Separator and Cleane Henry H. Ring, Lairdsville, assignor to Waldron \& Sprout, Muncy, Pa.
459,570-Elevator and Cleaner for Grain Jobn R. Beynon, Watertown, Wis., assignor of one half to James B. Murphy, same place.
460,061-Dust Collector, John Pratsch, Oshkosh, Wis., assignor of one half to Francis S. Ideson, same place.
460,078 Combined Purifying and Dust
A. Parnard, Moline, Ill., assignor to the Barnard \& Leas Mfg. Co., same place. 460,151 - Dust Collector, Orville M. Morse, Jackson, Mich., assignor to the Knickerbocker Co., same place. 460,152-Dust Collector, Orville M. Morse, Jackson, Mich., assignor to the Knickerbocker Co., same place. 460,436-Grain and Cockle Separator, Thomas F. Gray, Monroeville, Ohio. 460,489-Lining for Grain Spouts, Lerov R. Topp, Louisville, Ky.

No. 460,274 -Winnowing Mill, Carl Wendel, Groton, S. D.

## becent publications.

The Business of Travel," is the title of a book giving a sketch of the life of Thos. Cook, the founder of the business of taking charge of tourist parties to almost any part of the eivilized world. The book has just been issued by Messrs. Thos. Cook \& Son, 261 Broadway, New York City, and is especially interesting to parties contemplating a trip to foreign countries.

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LEAVE MILWAUKEE FOR



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Exporting millers should write to the Riverside Printing Co., Milwaukee. Wis., for the best Flour Cable Code ever published. Thereare more copies of this Code in use than
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# OATVIKRIR'S American Flour Nill le Grain Elevator Directory <br> $\Rightarrow$ —FOR 1890-1891——俗 

It contains: 1. A list of Flour Mills in each State, Territory and Province, with names of owners, P. O. and county; in thousands of instances giving their capacity in barrels per day, kind of power used, etc., also indicating such firms as are supposed to be worth $\$ 10,000$ and upwards. Total number of mills given, 17.145.
2. A list of miscellaneous mills, such as Corn, Oatmeal, etc.
3. A list of Millwrights.
4. A list of Grain Elevator Owners and Grain Dealers.
5. A list of well-rated Flour Brokers, Merchants and Bakers in all parts of the United States and Canada, which has been compiled with extraordinary care, capital and credit being considered in the compilation.
6. A list of Foreign flour and grain importers, secured by our own special correspondents and believed to be thoroughly reliable. In short, it is a complete KEY for reaching the Flour and Grain Trade, enabling ANY department of the trade to reach ANY other desired.

The price is invariably Ten Dollars per copy, on receipt of which it will be sent, post paid, to any part of the world. The complete work only is sold. We do not supply lists for single states. These Directories have been issued every two years since 1878, and have been declared indispensable by the prominent mill-furnishers, flour brokers, millers, etc., of this country and Europe. Address,

## E. HARRISON GAWKER,

36 \& 37 Loan \& Trust Building.
Perforated Metals


Diamsh, Mation, Junily, Wilimana, SPEOTAQLES, ETO.,
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## NEW ERA SCALPER

IT WILL BE MONEY IN YOUR POCKET IF YOU DO.

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Occupies
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and requires
nominal
power.
Has immense
capacity.
One machine
handies
four breaks
in ioo bbl.
mill, or
one break
in 500 bbl.
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(V)EEN this Scalper was put on the market three years ago, its success was immediate, and its merits were recognized by every practical miller who saw it in operation. Naturally other machines sprung up, which were extensively advertised as "just as good as," cat count up a proved a source of worry and expense to the user New on the contrary dozen of them that are never heard of now. The New Era on the collow has given satisfaction wherever used, and where one goes, others follow, as its merits become known. We have any number of testimonials of its merits from millers in all parts of the country. Draw your own conclusions.

## PRICES ARE WAV DOWN.

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## VORTEX DUST COLLIECTOR

Known and recognized as the best Collector for all uses on the market.


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- Buth Upright and Horizontal Machines, manuuractured wilh or without Shoe. -

THIS machine has always been recognized as one of the most thorough, durable and reliable Scourers built. The only objection ever raised against it was its price. This objection is now overcome, as we can offer prices as LOW AS THE LOWEST. Consult your own interests and get a first-class machine, especially since it costs no more than the inferior scourers.


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UNION IRON WORKS, - DECATUR, ILL.
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FOUR SIZES: $6 \times 12,9 \times 14,9 \times 18,9 \times 24 .-2$ Breaks Each.


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AND THE MIILLING ENGINOOR.
Sixteenth Year.-No. 11 .

## IN THE SOUTH LAND.

®N the 12th day of October, 1891 the members of the Wisconsin Press Association met at the Sherman House, Chicago, to go on their annual "outing," this time very wisely, we think, selecting a route through several Southern States, via the "Monon" to Louisville, the Louisville \& Nashville R. R. to Nashville and the Western \& At lanta R. R. to Chattanooga and Atlanta.
The party having been duly provided with three of the finest Pullman coaches ever built, for their use during the entire trip, with James Barker, General Passenger Agent of the "Monon," "Our Jim," as he is warmly called by his friends, in entire charge, we pulled out of the station at 8.05 P . M., and started on our long to be remembered journey.
On Tuesday morning, October 13th, we reached Louisville, and were provided with an elaborate breakfast, which was thoroughly enjoyed by all. Editors are of course, accustomed to good living, but this breakfast was good enough for the Grand Mogul or even Delmonico. After breakfast our party rode and strolled about Louisville and entertained themselves as they saw fit until 3.45 P . M. when we boarded the train for Mammoth Cave and Nashville. Here Mr. Charles E. Harman, Passenger Agent of the Louisville \& Nashville R. R., joined us, and with Mr. Barker, made us all feel very interested. Mr. Harman pointed out some landmarks of battles and railway adventures in war times.
Arriving at Mammoth Cave most of the party after eating supper, took a few hours tramp through the Cave. As this wonderful freak of nature bas been so often described, we deem it unnecessary to write anything particular concerning it, especially as the writer was one of a little group of lame-legged fellows that were compelled to sit around and tell stories and wait until the rest of the party returned, every one with the exclamation "Oh, it was just splendid. I wish you could have been there." Consoling, no doubt, but positively unappreciated by the game-legged group.
It was a tired, but happy party that turned into their respective berths that night.
Wednesday morning found the company at Nashville, a lovely city of 76,000 inhabitants, which from its rapid development shows a large amount of Northern blood. The day was most delight fully spent in free rides upon the electric street cars, and in viewing the former residence of ex-President James K. Polk, visiting the State House, where a brief reception was held, the Fiske and Vanderbilt colleges, etc. Later in the day the railway company furnished a train to take all who wished to go out to the Belle Mead stock farm, owned by General W, H. Jackson, which is one of the finest in the world. In the evening there was a plesant reception at the Commercial Club rooms.
Thursday morning the party were met at the depot in Chattanooga by a committee, who conducted them to the hotel
where breakfast was served. This city
contains a population of 60,000 , and is Here is not only a temperance town, but very progressive. They have here the no liquor is to be found in the county. finest and most extensive system of elec- Here we were shown a large cemetery, tric street railways of any place we ever cotton fields, marble works, cotton facaw, and all this was free to the party, tory, oil mill, etc. It is a city of 4,000 At an early hour the company was taken population, with an altitude of 1,150 feet. to Lookout Mountain. After a few hours At about 6 o'clock the party took a respent in viewing the mountains of six luctant leave of this very hospitable peostates, which may be seen from this point, ple and resumed th
beautiful summer resort, where a lunch Lack of space prevents us from writing was served and a reception held. In the anything like a description of Atlantaafternoon that historic spot, known as the Chicago of the South. The writer Mission Ridge, was visited. Upon this met several former Milwaukeeans, and Ridge lives the original and renowned they all expressed satisfaction with their Col. Sellers, who has a wonderful collec- homes in the South.
tion of war relics, which he took great From Atlanta we started on our return pleasure in showing. The cemetery was trip, which was rapid and pleasant in also visited, where lay the remains of every respect. The flour milling inter-

some 15,000 Northern soldiers. Upon ests, so far as manufacture is concerned, Mission Ridge a park of 7,000 acres has does not compare at all favorably with been laid out. In the evening there was any section of the North or West, but nother reception, at which were brought the mining, manufacturing and agriculout many good speeches, both by resi- tural development cannot be over-estidents of the South and members of the mated. True, it will take time, but the party.
natural resources of the South are inex haustible. On this development depends
$8: 20$ on Friday morning, the patic much of the prosperity of the various pulled out over the Western \& Atlantic mine of R. R. for Marietta, where we arrived at lines of railroads over which and and a good ride by special train, which made frequent business now.
tops at points of interest, such as Fort We believe this tour of Wisconsin Dalton, where the band was out to wel- editors will be beneficial in many ways. come us, Ringgold, where was fought a It gives us new ideas concerning the fierce battle, and many other places of South, which will be given to the readers renown. At Marietta a fine dinner was of a hundred Wisconsin papers for the served, boquets passed, and then came a benefit of all.
delightful drive about their lovely city. The officers of the "Monon," the
"Louisville \& Nashville" and the "Westrn \& Atlantic." deserve the highest praise for their many courtesies and personal attention to the comfort and enterainment of our party, and the officers of he Wisconsin Press Association will ever be kindly remembered for their efficient services in the hearts of their brother

## meeting of milers' mutual in

SURANCE CO'S AT CHICAGO.
Our friend Sparks, of Alton, who never wearies in his efforts to promote the welare of the mill mutual insurance companies, called a meeting of the secretarics of such companies as do strictly a mill mutual insurance business, at the Grand Pacific Hotel, Chicago, November 11th. The prime object of their meeting was to arrange for a more economical inspection of risks by dividing the territory into districts and having one inspector represent all the mill mutuals in a certain district, thereby avoiding the expense of each company duplicating the work of each of the other mill mutual companies. The following companies were represented by their secretaries : Western Millers, of Minneapolis; Iowa Millers, of Des Moines ; Indiana Millers, of Indianapolis ; Illinois Millers, of Alton; Millers National, of Chicago. The Ohio Millers was represented by Mr. Hahn. There were also pressent Mr. D. R. Sparks, of Altona; H. B. Horton, Chicago ; M. S. Blish, Seymore, Ind. An organization was effected by electing the following gentlemen officers: President, D. R. Sparks, Alton, Ill.; Vice-President, J. G. Sharp, DesMoines, Ia.; Secretary, E. M. Perry, Indianapolis, Ind. The objects for which the meeting was called were not fully accomplished owing to the fact that one or two of the stronger companies were not willing to enter fully into the arrangement. The meeting adjourned to meet one year from date.

The reciprocity provision of the tariff act gives the president power to reimpose, after January 1, 1892, a duty on sugar, hides, tea, coffee and molasses coming from countries which by that time fail to make equivalent concessions in favor of our commerce.

Under the reciprocity provision, treaties have already been made with Brazil, with Spain for Cuba and Porto Rico, and with San Domingo. The treaty with Brazil went into effect April 1, 1891, and has not been in operation long enough to show its full benefits, but already our exports of domestic products to that country have been largely increased.
If the reports coming from Washington are true, a reciprocity treaty has been concluded between the United States and Germany, which will be of great importance to the farmers of this country. In return for the free entry of Germany beet sugar into this country, Germany is to largely reduce her duties on American breadstuffs and meats. Our imports from Germany in 1890 amounted to nearly $899,000,000$; our exports to Germany in the same year amounted to more than $884,000,000$. A reciprocity treaty will give us a larger market for meats and breadstuffs in that country and turn the balance of trade in our favor.


## ＂PRINT＂

## PATEIT IMPROVED

 COCKLE MACHINESImmense increase of trade without traveling agents．OUR COMPETITORS GROSSLY ADVERTISING and imitating our STEEL REELS，we have decided to reduce our prices still more．Our Machines are working satisfactorily in the fol－ lowing

Christian Bros．Mill Co．；Minneapolis Flour Mfg．Co．－Standard；Washburn Orosby Co．－ ＂A＂Mill；Pillsbury－Washburn Flour Mills Co．－Palisade；Sidle－Fletcher Holmes Co．－North－ western Mills；Stamwitz \＆Schober－Phonix；Hinkle，Greenleaf \＆Co．－Humboldt；D．R．
Barber \＆Son；Pillsbury－Washburn Flour Mills Co．－Anoka Mill；Minneapolis Mill；Holly Mill；Zenith Mill；Pettit Mill．IN MILWAUKEE，

The Phoenix Mill；the Jupiter Mill；the Gem Mill；the Daisy Mill and the Duluth Mill．
to be sure of getting the best machine buy the genuine
＂PRINZ＂IMPROVED STEEL COCKLE REEL． MRITE TOR OIROULAR AND REDUOED RRIOE LIOT TO THE PRINZ \＆RAU MFG．CO．，MILWAUKEE，WIS．

# THE DUNLAP $\quad$ BOLT <br> 源 <br> 沵 <br> FOUUR ETRZDES． <br> 整 <br> 准 

 ＋IT IS A BOLTER AND DRESSER．

BROOKLYN，N．Y．，Aug．11，＇91． THE BRADFORD MILL CO．，Cincinnati，Ohio．

Dear Sirs：Please Ship as soon as possible， 4 Dunlap Bolts the same as the last one．This is abont the＂Boss＂Bolt after all and we will want more of them after awhile．Yours truly，

BUNKER HILL，ILL．，May 28，＇91． THE BRADFORD MILL CO．Cincinnati，O Gentlemen：Your Mr．Deobold has remodeled our mill using two of your No． 3 Dunla Bolts to reduce our Patent and Bakers．Have been
running a week and ind ind can make 50 per cent Patent， 42 per cent Extra
Fanoy and 8 per cent Low Grade．Our mill was rebuilt two years ago and it has never given satisfactory results until now．Youry very truly，


## MANUFACTURING SITES FOR SALE！

The undersigned owns a few of the best manufacturing sites in the city of Milwaukee，adjoining those now occupied by the Milwaukee Car Wheel and Foundry Co．and the magnificent plant of the Fuller－Warren Stove Works which cover nearly ten acres of ground．Best of railroad facilities．Parties de－ siring a suitable location should investigate this．Address，

E．HARRISON CAWKER，
36 \＆ 37 Loan \＆Trust Building．
MILVNAUKEE．WIS．


## ANSONIA ROLLS <br> FOR USE IN ROLLER MILLS．

The general experience of American Millers unites in pronouncing these rolls the very best for Flouring Mill use．
These Rolls are now used in all Leading Flouring Mills Chilled Rolls for Paper Milis a specialty．Keation thit papor when gor wito to me．


United States Miller
and the milling engineer.
S. h. seamans, Publisher.

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## MILWAUKEE, NOVEMBER, 1891.

We respectfully request our readers when
they write to persons or firms advertising in this paper,to mention that their advertisement was seen in the UNITED STATES MILLER You will thereby ob

## MILWAUKEE AMUSEMENTS.

## AVIDSON OPERA HOUSE-Every evening, Satur

 day and Sunday Matineesday and Sunday matinee
Cay and Sunday matinees.
CADEMY oF MUSIC-Every evening and usual matinees.
BTANDARD T
matinees.
SEOPLE'S THEATER-Every evening and usual matinees.
GERMAN STADT THEATER-Regular perform
Wedneeday, Friday and Sunday evenings.
Wedneeday, Friday and Sunday evenings.
YTON ART GALLERY-Free Tuesdays, Thursdays
and Saturdays. Admission 25 cents on Wednes days and Fridays.
PUBLIC M USEUM-Open daily. Exposition building. Visitors to Milwaukee in either summer or winte
cannot fail to flud amusements suited to their caste

## ANNOUNGEMENT.

To the Friends and Patrons of the United States Miller and Milling Engineer:
I hereby announce that with the issue of the October number of this journal my connection with milling publications terminates. My interests in large and important enterprises demand my entire time and attention.
It is with pleasure that I further announce that $I$ have disposed of my interests in "The United States Miller and Milling Engineer" and "Cawker's American Flour Mill and Grain Elevator Directory" to Mr. S. H. Seamans,
who is to-day the only practical Miller in the United States publishing a milling paper. There is, we believe, no man to whom the Millers of this country are under greater obligations for valuable service than Mr. Seamans, and we believe that with his well known executive ability he will soon place this journal in the very front rank. He knows from long experience the wants of the operative miller, or the financial manager of a milling enterprise, either greai or small, and we believe there is scarcely a miller, inventor or flour broker but will be glad to place their names on his regular subscription books as paid-up subscribers. We are proud of the fact that in disposing of this journal we place it in the hands of one so much better able to manage it successfully than ourselves.
Thanking our patrons (some of whom have been with us for nearly sixteen years) for their many favors, we bid you one and all a kind Good Bye.
e. Harrison Cawker.

## Milwaukee, Oct. 28th 1891.

Upon short notice and much to my surprise I find myself in the editorial chair of The United States Miller and Milling Engineer. This paper he field of milling journalism over six teen years, has a good record, has been free from all bitter and tangling alliances and in catering to the interests of the mill ing industry has been reasonably succes ing in

My long experience in the milling busi- manufactured by the Irish miller is neess through all its phases and in all its details, and my extended acquaintance among the milling fraternity, would no to the milling public, but a few words re garding the future conduct of this pape will not be out of place at this time.
It is proposed to make this a millers' journal in all that the name implies. It will entertain no sectional prejudices, no engage in any acrimonious discussions. Its criticisms will be fearless but without malice. It will encourage and uphold every ligitimate organization that has for its object the success and improvement of
the flour-making industry in all its varied the flour-mak
In my efforts to make this a successful milling journal in the fullest sense of the term, I desire the hearty co-operation and cordial support of mill owners and millers in every section of the country. Items of news, crop outlook, changes in firms and locations, and any other matter of interest to the trade will be welcome.
We shall issue a large edition in January, when the paper will appear in a new form with a new dress.
To advertisers I would simply say, it will be my aim to furnish a medium worthy of your patronage, and a fair share of it will be expected
For the present my headquarters will be 36 Loan and Trust Building, opposite the Plankinton, where the friends of "old and new" will be welcome.
S. H. Seamans.
$A^{\text {LL indications point to the conclu- }}$ $\mathbf{A}_{\text {sion that the }}$ Millers' National Association and the Millers' Tracing Bureau are in a very prosperous condition and its opponent is "not in it."

THERE has been little concerning new and valuable milling appliance, writen in the milling press within the past few months but it is probable that some thing startling may make its appearance at any time. Electrical science so far has done little for the milling industry but who knows but the time may come when you simply press the button and there is your barrel of flour.

THE Rio de Janeiro Flour Mills and Graneries, Limited, are evidently poor speculation for the English syndi cates who hoped to realize immense profits by reason of an arrangement whereby they expected to import wheat free of duty and maintain a prohibitory duty on the importation of flour. The Blaine reciprocity arrangements have undoubtedly placed the company in a position where it will be impossible for them to make any profit out of their well-planned scheme.

WE notice the European millers are not slow to take advantage of the siness methods of their brethren on this side of the ocean. An attempt has been made to form a syndicate consisting of twenty-one flouring mills for the purpose of greater economy and an increase of profits. We think the time is not far diswhen all the mills working under similar conditions will be brought together under one management, not only in this country but in Europe. The result will be better and more economical milling, and lower prices on flour to the consumer in proportion to the price of wheat.

0UR readers will find in our London n usuar of this month items of more than usual interest, particularly regarding
the scarcity of FEEDING STUFFs throughout Ireland, and the remedy proposed by Irish millers in their circular issued for the purpose of creating sympathy in their behalf to that extent that American flour should be boycotted, and the Irish miller alone patronized, for the reason, that the entire product of the wheat when extra caution might require double this
number, either of which would be readily furnished the buyer, while the dealer taken by the present members.

In a recent conversation with a prominent miller, he made this remark: "I hope at the next annual meeting the company will conclude to increase their line on good mills to filteen or even twentythousand dollars, but Mr. Barnum has always opposed it, and, as he controls the company absolutely, it will have to go just as he says." We do not wish for a moment, to cast any reflections upon the success of Mr. Barnum's management, his faithfulness or honesty of purpose, and here reiterate the opinion expressed in the beginning that the management has been one of ability and tact, but this should be no reason why the patrons, actual owners of the company, should be ignored and their wishes concerning their own, considered of little importance, and this brings us to another point, viz., the ownership of the company or its assets. We have heard it rumored that there was "stuck" controlling the old "Fidelity" upon whose charter the Millers' National was built. If this is so, it would be well for the policy holders to investigate; where is this stuck, in whose name it is, to whom does it belong? We heard of this only lately, and in order to learn something further regarding it, wrote to a prominent miller and early policy holder for information, and here is his reply:
Dear Sir:-I am in receipt of yours of the 12 th inst. I note what you say with reference to the Miller's National Insurance Co.; the same thing has been intimated to me several times that you have stated, of some one having a controlling interest in the Fidelity Insurance company. I have often wondered what tho outcome would be in this direction. It is a matter of great importance to the policy holders of this company to know how this matter stands. The confidence of the millers has been unbounded in this company. I hope there will nothing occur to change this confidence. I have known for several years that it was of no use for any policy holder to go there to a general meeting while Mr. Barnum has proxies to make any change he wishes, and has always controlled the company, and I understand receives a salary of six thousand dollars a year as secretary. This is a matter that policy holders ought to understand fully

Very respectfully, ence has shown how easily the Western Manufacturers Mutual Insurance Company of Chicago, was "wound up" and "retired" by its efficient (?) president and manager when it suited his own sweet will it does "become a matter of great importance to the policy holders" when a company gets into the full and complete control of one of its officers.

## the millers' tracing bureau.

Under the efficient and energetic management of Mr. Barry the bureau is more than realizing the expectations of the executive committee of the National Association, under whose auspices it was put into operation; and its patrons are seemingly well pleased with the work being performed, and consider it worth many times its trifling cost. October was a big month, and November bids fair to report a still larger increase in the business. On the basis of the first fifteen days in November, the amount traced during the year will be something over $2,300,000$ bags of flour. True, the output of flour in the West and Northwest at the present time is enormous, and the rate is one which could hardly be expected to continue throughout the year; but the fact that new subscribers are being enrolled daily would indicate that there will be no decrease, but rather a large increase every month during the busy season; and the experience of each month is adding greater efficiency in the handling of the busi-

ORGANIZATION OF MILLERS IN THE UNITED STATES. THE MILLERS' NATIONAL ASSOCIATION.
THE MILLERS' NATIONAL ASSOCIATION.

## CORRESPONDENCE.

LThe following letters are all from our own special
correspondents, and reftect their views and the views
OUR LONDON LETTER.

THE rainfall during the month of October has been nearly
twice as much as the average quantity, and certainly greater than has
fallen in the month of October for the last ten years. The result is that complaints are coming in from all parts of the country as to the alarming backwardness of the Autumn farm work, and the oldest of farmers can hardly remember a season in which work was more in arrear in the
last week of October. Harvest cannot be said to have completely ended as large areas of corn are still in the fields in Yorkshire, Durham and Cheshire. In the early districts the rain during the first three weeks prevented all such work as wheat sowing, potato raising and root carting, and in the low lying districts extensive floods have added to the difficulties of the farmers. It is therefore not surprising that the corn markets through-
out the country have been steadily rising so that yesterday the price of the different wheats on Mark Lane Corn Exchange were as follows : English wheat from 368 to 458 , Duluth wheat 458 , No. 1 Spring $43 s$, Red Winter $41 s 6 d$, Californian, Oregon, Canadian, Koenigsberg, Rostock, Azenia and Australian were 448, New Zealand and Dantzic 45s, Bombay White, Petersburg, Sebastopol Odessa, Ghirka, Tagaurog and Saxonska were 428 , and Bombay Red, Calcutta Red Karachi and Persian were $3686 d$ to $3786 d$ per quarter of 496 fbs . It may be as wel to also give the price that the varicus flours were obtaining on the same market. The three following brands of London
Town households made $3186 d$, Town Whites $33.6 d$ and Seconds made $29 s 6 d$. The English country flour was quoted from 288 to 498 and the American flour made the following prices : Minneapolis Patents 338 , Superior Bakers' $30 s 6 d$, First
Bakers' $30 s$ and Seconds $29 s$ per 280 tbs. The Daisy Mills Tip Top Patent mad 328 and the same mills' Bakers made $28 s 6 d$. The best brands of Hungarian flour is being sold at 418 , but very little can be sold at that high price, as nearly the same value in flour can be had by buying good American Spring wheat flour for 36s6d. There was some talk on Market $y \in s t e r d a y ~ t o w a r d s ~ i t s ~ c l o s e ~ o f ~$
putting up the price of the flour again on Monday, when it is expected the Top Price millers will put their price up, as they have not yet taken any notice of the rise in wheat during the past six weeks; if they do it is expected they will go from 39 s to 428 per sack of 280 tbs .
At the present time the Irish milling trade is so dull that it has been considered necessary to issue a circular to the public to encourage and protect this important trade against American competition. The circular runs as follows:

## Why Are Feeding Stuffs Scarc and Dear? <br> How to Ensure a Plentiful and

 Cheap Supply.Every Irish farmer and every retailer, whose interest is inseparable from and depend on their prosperity, should seriously consider the following: "Why are you at present paying $£ 710 \mathrm{~s} 0 \mathrm{~d}$ per ton tailings when the average price at this season should be $£ 4$ and $£ 5$ per ton? Solely because you are free and unreflecting buyers of American flour, of which large quantities are being shipped to this country, whilst not a bag of bran or poll ard made in connection with it ever eaves America."
"The American policy is this: Ship ible. Keep the work for our flour as posffal for our feeders."
"Let the Irish farmer ponder over this."
"If you wish to test this statement ask any retailer or merchant from whom you buy flour if he has any American bran or pollard."
"Going through the streets of our towns on any market day you will see a curious and instructive object lesson. by side a farmers car you will see side or St. Louis and a bag of bran or pollard made in some Irish mill. Surely there is something wrong in this. What follows? Whilst you are paying the above enormous prices for feeding stuffs your great competitor in beef and pork, ply at $£ 310$ s and $£ 4$ per plentiful sup ply at $£ 310$ s and $£ 4$ per ton."
"How long under these circumstances own markets? How long can you continue to fatten, as at present, beef and pork at a loss? Finally, how long will you continue to play into the hands of your foreign competitors?" "Do you
wish to rectify this state of things? The remedy is obvious and easy. Do ou wish to decrease the cost and inrease the quantity of offal for yourselves and increase the cost and decrease the quantity for your rivals? See that every ag of flour you buy bears
"Now and then the cry goes up from some quarter for protection. In this matter you are all-powerful to protect yourselves. It is within the power of every one of you to rapidly effect the change, and if you will steadily follow the policy indicated here, you will soon again have a cheap and plentiful supply of feeding tuff."
This important circular has been distributed largely throughout the entire county of Cork, especially amongst farmers and retailers of feeding stuffs, and it is the hope of those millers who drew it up that the effect will be to create greater preference for the flour manufactured by the home miller.
In my last letter I gave a report of an
shareholders of the Rio de Janeiro Flour Mills and Granaries, Limited, which was ultimately adjourned, in order that a committee appointed to confer with the directors as to the best course to be adopted in the present position of the company might report to the shareholders their views as to the best course to be pursued. The adjourned meeting was held at Winchester House in this city on October 21st, to consider the report o the committee, and, after some remarks from the chairman, the adoption of the report was moved. The chairman of the committee said that they-the committee had come to the conclusion that a great number of the losses for the past three years had arisen from the want of proper management, and more especially on account of the mismanagement of the concern at Rio. It was almost impossible to manage such a gigantic business from England unless proper supervision were given to the way matters were arranged at headquarters. The original idea in the prospectus was there should be two resident directors at Rio to superintend the general manager there, but the manager had unfortunately been left with the entire management. It had been recommended to the board to appoint some resident person or persons o authority, to advise the manager as regards remittances and sending home the proceeds of the flour sold at Rio, because the company had suffered some large losses in the manner in which the remit tances had been forwarded to England. The annual report and accounts, which were not quite finished and audited would be in the hands of the shareholders shortly, and it would then be found that there had been a decided improve ment on the previous two years, so much so that the directors had been able to write off the losses incurred during two ears.
One of the directors, who was at that moment at Rio had cabled home the re turns, which gave the profits for several weeks as $£ 700$ to $£ 800$ a week, which meant if that rate could be maintained something like $£ 40,000$ a year. Messrs. Knowles and Foster had made very heavy advances to the company, and that firm were willing still to remain the holders of $£ 100,000$ of their loan, if the shareholders would come forward and find $£ 100,000$ to $£ 125,000$ fresh capital, the shareholders being allowed by this firm to have a prio lien mortgage on the property, thus putting themselves second. After some discussion and a series of questions as to the alleged shipments of damaged wheat had been answered, the committee's re port was unanimously agreed to. Three gentlemen were then reported to confer with the directors, as suggested by the committee, these gentlemen to work with the present board during the term of the prior lien mortgage, and the proceedings terminated.

Yesterday I heard that the accounts of the Rio de Janeiro Flour Mills and Granaries, Limited, for the year ending August last, showed a net profit of $£ 22,989$, from which has to be deducted the debit balance of $£ 20,577$ on A ugust, 1890, leaving a balance of $£ 2,412$. And I also understand that the recommendation for raising the sum of $£ 125,000$ by the issue of prior lien mortgage bonds and preference shares mentioned above, will form the subject of a separate resolution at the meeting on November the 5th.
The millers' syndicate mentioned some ime ago in these colums, was put before the public last week under the title of the United Steam Millers Company, Limited, with a share capital of $£ 700,000$ and a debenture capital of $£ 800,000$ or a tota f $£ 1,500,000$. The object of the company was to amalgamate 21 flour milling businesses, mostly situated in the south ern portion of Yorkshire and Lincolnshire, and by general economy from centralized management to further increase the profits, which were shown in the pro-
spectus to be for the year 1890 , somehing like $£ 109,224$. The public, however, did not respond, and it was currently reported last Monday on Mark Lane Market that the syndicate had not een therefore formed.
Until last week the weather on the Continent of Europe was much less unfavorable than in this country, so that in France, Germany and other countries, arge proportions of the rye and wheat crops have been sown. Although drought had somewhat hindered the planting of the winter wheat in Russia, sufficient rain had fallen to facilitate operations.

> Yours,

London, October 31st, 1891.

## our buffalo letter.

## Lakes-The Market-Bufalo Milling Notes

 Lakes-The Market-Bufalo Milling Notes-Nagara Falls Improvements-New York

"LECTION is over and the Republicans, who were so dead certain of the success of their Fassett's persuasive powers on the farmer vote found themselves sadder and much poorer men the day after election. The amount of money lost in backing their opinions does not matter so much; it was the chagrin over the deadly defeat after betting the poor Democrats to a standstill. The victors, however, were magnanimous, and when the disappointed ones straggled in on 'Change not a word was suid. The stakeholders passed over the money, but it was a noticeable fact that not a winner asked a loser to "go out and have a bottle." This, in some cases, was worse than crowing and gave a few of the sore crowd a chance to chew the rag. Then there were others who took it out in whining and trying to place the blame for defeat, instead of planting their pennant firmer on the sound old Republican fortress with the motto, "mortally wounded, but still in the ring." But not a murmur was heard from such warhorses as Wall Prouty, George Urban, f. H. Wolcott, S. A. Simons and several others, but it was evident they felt the blow more keenly than did the others.
Then there was Mr. A. R. James who ame home from Boston before he was eally through with his business in order o cast his vote against Billy Sheehan. The disappointment over his election vershadowed the joy he felt at the vicory of the rest of the Democratic ticket. But, if every Democrat had the interests of his party at heart as much as Mr . James, this pretender would have been snowed under an avalanche of votes. I now I am giving too much election talk which is tiresome stuff, but things were hot this year on 'Change, owing to the fact that the President of the Exchange led the Republican forces in this cam paign.
Vessel owners are reaping a harvest this season. With freights at Duluth up to 7it cents for wheat to Buffalo, enough money can be made to build a ship or two and increase the tonnage of the lakes beyond all hope of earning a dollar next season. Large contracts are talked of and there is little doubt but renewed activity will be witnessed in the shipyards before the year closes.
Duluth wheat has ruled from 2 to 4 cents above last year's prices for the past three weeks, and with the present advance in freight rates from that port an additional 50 or 75 cents must be tacked on the price of flour. Consumers looked for lower prices on the strength of the largest crop of wheat ever harvested in this country.

It is therefore a great disappointment to find flour from 50 to 75 cents per barrel higher this than at the same time last year. But there is a cheap time coming. Duluth wheat will sell lower than it ever has in this market before the next crop. Say 80 cents at least. [Doubtful.-Ed.] No. 1 hard is a scarce article here. The small lots of cash offered occasionally
have brought a big premium over No. 1 Northern, and future delivery is only in market when profits are certain. Quite a large amount of c. i. f. stuff has been purchased during the past two weeks by our millers, and a heavy stock is expected to be carried here by them and also from shipment to other points as occasion may require.
Rye flour continues to hold up, 5.20@ 5.25 being paid here for the best offerings. Harvey \& Henry, the largest millers of this cereal in this section, have for sale, paying from 90 to 95 cents for most of it. The Dodge mill at North Buffalo is also running full blast on rye, principally state, delivered by farmers. From the appearance of these Buffaio rye millers I should judge there was money in the business at present. Rye
feed, however, is selling lower than it has ever before to my knowledge, the best price obtainable being $\$ 18.00$ per ton.
Mr. George Urban is not prepared t say just how much the new mill will turn out, but an increased output is certain. An effort to test the capacity will be made as soon as the machinery is workwill be in a week or two.
A correction is necessary in justice to Mr . Urban as my statement regarding the stock of old No. 1 hard in millers' hands here, has created some comment. It appears that Mr. Urban, before he left for the old country, purchased nearly 200,000 bushels of old No. 1 hard and No. 1 Northern from two of our largest Duluth wheat sellers, and some exceptions were taken by them at the statement that only Schoelkopf \& Mathews held the cream of the last year's crop.
Schoelkopf \& Mathews buy most of their wheat through an agent in Duluth.
Canal-boat owners although not rushed with business are determined to make it pay, and have kept rates up pretty stif considering the railroads are doing their
utmost to carry all the grain coming down by lake. Wheat has averaged 4 cents for a month, and the last trip will be made about the 2 2d. Boatmen ex pect to see rates up to 6 cents when the rush comes, but shippers say there will be no grain for the canal worth speaking of, as the rail has made arrangements to take it all. Not a load of corn or oats was taken for tide water las month. Wheat is now going at 4 cents An effort is under foot to have a large meeting of the lake interests in Buffalo this winter. The managers of the big lines are deeply interested in the matter and with the Merchants Exchange to back it up some good may come to all hands.
A cargo of No. 1 White Oregon was peddled out here, the last of it going about a week ago at 96 cents. It seems to get more and more difficult to sell this
wheat. This lot, although very fine, was in store since August last and could not have realized much for their owners.
Winter wheat has been unusually dull this season owing to the good crops throughout the state. Country millers are paying from 98 to 1.00 delivered and getting all they want at those prices. The effects of the falling off in the demand for wheat in this market is felt by several winter wheat dealers, and as far as their trade is concerned they might as well shut up sho
of the way.
The Newman mills at Akron is running night and day to fill orders for "Akron Falls." The district surrounding the Newman mills is noted for the production of the finest winter wheat in the state and with Buffaio to draw on for choice Duluth wheat (and "Clint" Newman is a judge of wheat), it is no wonder the demand for Newman flour exceeds its production.

Mr. J. H. Grant, chief contracting agent for the New York, Chicago and St.
Louis Road, has a scheme which is de-
signed to benefit the car grain trade at
this point. His ideas will be presented to the trustees of the Exchange at their next meeting.
The Vorhis brothers have given up their lease of the Bates mill at Brocton, which they undertook to manage about a year ago. I think there are several other mills which the present owners and ease-holders would like to drop if it could only be done conveniently
The demand for feed at this point has been only fair, but there has been an accumulation and prices are strengthening daily. Coarse winter is selling at 17.50 acked and spring 16.50
Messrs. Heinold \& Rodebaugh have taken the agency for the sale of cotton seed meal and will push the business with their usual enterprise. The office of this firm has been refurnished and was inspected by a committee of the "boys," who pronounced it within the proscribed lines set down for office decoration. Some objection was made to the color of the carpet, but when the firm promised to have the red spots inked the matter was dropped. At a subsequent meeting o the Decorative Committee of the Ar
Club, it was decided that an edict should be issued against other offices in the building which are a shame aud disgrace o their neighbors.
The erection of a large building on the north side of the Board of Trade has shu out the light from tenants occupying that half of the building. Like a certain Bishop "they are all in the dark." The lower floors are positively useless for grain dealers and upper offices as far a he seventh are in great demand. leases expire. How the boys will kick for a reduction in rents. But it will do no good, the building is like a bee hive The only way out of the difficulty will be to bring the samples down on 'Change and in this respect the darkness serves a good end, as there is altogether too much
"office selling" done in the building. The big floor being used mostly too much as a lounging place.
No more flour has gone by canal since he shipment made by the Duluth Imperial Mill Co. One attempt was sufficient to bring the railrouds to time as 1 said it would when the first boatload left. The canal is a big obstacle in the way of railroads and as a regulator of freights during navigation is the greatest boon to our shippers.
The pleasant, smiling, ever welcome face of Sid. Finn is missed on 'change daily. Mr. Finn is at Mt. Clemens trying to get rid of an old enemy-rheumat ism-from which he has been a sore suf-
ferer. No forwarder in Buffalo is more highly esteemed, none carries a more honest heart than the genial Sid. His many friends heartily wish him back be fore the close of canal navigation.
Mr. F. Austin of the Central Millin Co.'s office was married last month and was given a long vacation by his employer A. R. James. Mr. James knows how it was himself, or at least how he would have enjoyed an extended trip at tha time, had business allowed it.
The Niagara Falls tunnel projecters are eaching out for business. A company has been started in Buffalo to take the power from the city line and distribute it next year. This looks like a go.
Ryan's mill' or elevator is not yet in running shape nor will it be this season As an elevator this scheme is regarded as a failure unless there is some show for a railroad running alongside of it.
The mills are running full time and for the past few weeks there has been an active trade. Not a single complaint is heard in respect to the demand, but the cry among winter wheat millers is tha there is no money in flour. Prices are fairly steady for spring patents at \$5.35@ 85.45 and winter is not quoted below 85.00. As for other grades it is about go
s you please. The trade is said to be stocking up and it will not be long before a general drop
must be noted.
The Lackawanna line stopped taking reight at Chicago on the 15 th and other lines may run until the 25 th but with rates at Duluth and Chicago there will be enough tonnage willing to risk the weather as long as ice does not interfere. There is an enormous amount of freight to come down from there upper lake ports. Several millers in Buffalo have large cargoes in Duluth but refuse to pay above
5 and 6 cents on the wheat and claim they will sell it trusting to rail shipment this winter. It is also claimed that a saving in carrying charges would be made. This is doubtful as it is impossible to see just how these sharp millers figure it. I
believe our millers before the close of navigation will have a larger stock wheat on hand than ever before.
The new Wells elevator took out its first cargo November 10th. In all respects it is the most complete store house on the creek.
Mr. George Sandrock, "honest George," "gentleman George," "the peoples' Sandock" was elected a select councilman by the largest vote on the whole ticket. Mr. Sandrock is president of more private and public institutions than any man in he city. It would take to much space to ive the names of the coporations in which he figures as a director. It puzzles the grain trade how he has time to attend to a small fraction of them. But he does and no matter how busy he may be, he still finds time to have a chat with the boys on 'change. Mr. Sandrock could have been mayor of the city several time had he so wished. His only objection i the use of money in elections, which he considers corruptive. This election, however, has shown his popularity with both
parties and he may yet be forced to run and be elected too without the use of what is considered an essential in politics.
The hydraulic canal which runs the Central, Niagara, Cataract and other smaller mills is to be enlarged. Doe this mean that the Scoehlkopf-Matthews James combination is to enlarge the great mills at the Falls?
Quite a large amount of barley is going through Buffalo from Canada in bond for export. Some of it is for sale here and quite a quantity has already been purchased by our Buffalo maltsters. According to all the arguments of the republican party in defense of the McKinley bill the Canadians pay the duty How is it that our maltsters are paying the price for barley in the Canadian markets together with the freight and duty added or about 85 c .? I cannot see that Canada barley is any cheaper than it was last year, but I do see that Johny Cannuck is finding a new market for his product and at what he considers a good price too, compared with feed. Wheat is going abroad through Buffalo the same way. Over one million bushels will have passed through here in bond before the last week in this month. Buffalo loses its distinction as a Canada malt centre; the west sells more barley here, that's all. Is has not helped our farmers in New York state to the extent of one cent, prices being lower in fact than for the past two years owing to the large crop of cheaper western barley offered in this market.
The sympathy of the entire member ship of the merchants' exrchange is ex ented to Mr. S. A. Simons in the death of his brother Leonard Simons, a resident ot Chicago and a member of that Board of Trade. Everybody knew Len. in Chi cago as everybody knows his brother in this city. The love that existed between these brothers cannot be expressed in

## writing.

Mr. S. S. Guthrie, of the firm of S. S Guthrie \& Son, is on the sick list. Not

Sales of Duluth wheat for export from Buffalo are now in order. F. J. Sawyer sold the first lot of 16,000 bushels No. 2 Northern last week to Liverpool direct. Buffalo elevators will be full of wheat his winter. The advantages of having grain in store at this puint are many and owners who were wise enough last year to place a stock here, within easy reach of New York, Boston and other sea ports, profited so well that there is no doubt of an increased supply this year.
Reports from the Attica mill are most encouraging. The many improvements have increased the capacity and quality of the product to such an extent that the owner finds the output far behind his orders. Feed is especially active.
Mr. Alex. Mann has left us for his old love, Winona, Minn. Messrs. F. J. Henry and Heinold \& Rodebough wish hin suc cess while the man with the O. G. head requests me to say that he would like to hear from him about crops, etc.
The convention for the purpose of or ganizing the New York State Board of Trada, was held in Rochester on the 12th inst. The following delegates were pres ent from Buffalo; from Merchants-Exchange, John W. Scatcherd, N. W. Nor ton; from Lumber Exchange, Harvey J. Hurd, Millard S. Burns; from Live Stock Exchange, John Huges, Harry Robe.
Buffalo, Nov. 15, 1891.

## OUR NEW YORK LETTER

## Countries Demand for Corn by Foreign "Ining"-"The Dutry" will now have his "Inning"-"The Dutch Having Taken Hol- land"-Now Want to Take All Our Yankee staple-Buekwheat-The Russian Bear no Longer Has His Huge Paw Upon the Price onger Has His Huge Paw Upon the Price our Products, but has Turned Into the

THE past month has been one of the most active, as well as remarkable, in the history of the single exception of wheat flour, which has continued as stagnant and featureless as for the preceding month, excepting only a couple of days of activity and strength during the first week in Novem ber. Never in the memory of our dealers has there been such a general export demand for every cereal raised in this country, which can be used either as food for man or feed for beast, and limited only by the amount of ocean freight obtainable, even at a still farther advance over last month's prices, which, as noted in last letter, had reached the highest figures in ten years, namely over 6@7d per bushel for grain and $20 @ 25$ shilling per 100 tbs for flour. Not only this, bu all the berth room and chartering tonnage offered at these high rates has been taken for the balance of this year ; and well into February and March of next year Indeed there is great difficulty in getting any steamers for full cargoes this side of next March and a good deal of berth room as well as chartered tonnage has been engaged into next May, chiefly for corn. In the absence of steam vessels to supply the urgent demand for prompt shipments of spring wheat to the United Kingdom, the first sailing vessels in years have been taken for this and next month's clearances to English ports with hard wheats needed for immediate use in mixing with damp native wheat that will not grind alone, owing to the wet Eng
letter.
The occasion of these late engagements being chiefly for corn, is the utter inability of exporters to buy spot corn, which means old crop, and that is practically exported, except what has been bought by exporters for forward delivery at, and since the failure of the Chicago Corn clique, until the foreign houses control all the old corn in the country and are supplying our home trade at prices higher even than when the corner was higher even than when the corner was
being run. But, these deliveries are nearly made, with but little more old
corn coming from the hands of farmers, who sold in September when that month was at a high premium and the new crop assured. Hence the export purchases of new for all forward deliveries, into next summer even, as fair as offered both of the steamer and No. 2 grade. This is one of the most remarkable occurrences in the trade and is due to one of the most remarkable causes, namely the prohibition ot exports of corn, oats and barley from Russia, or, of all feeding stuffs as it had previously prohibited exports of its chief food staple--rye ; and, as it is now, has practically done in the case of wheat by imposing a heavy export duty on that cereal also.
Such conditions as these, truly, have never existed before in all the grain
markets of the world; and the result markets of the world; and the result
has been to throw the entire demand of Europe upon the United States, for every kind of grain ; and even mill feed which has been shipped heavily the past
month to the Ennglish and some of the Continental markets, whileHolland has bought over 100,000 bushels of tnckwheat grain in the last two weeks, a thing that was unknown as an export staple heretofore It is therefore easy to understand the situation, remarkable as it is by this
simple fact that Russia-our chief competitor in the markets of Europe, has withdrawn her crops from the world' supplies for the present, if not for the balance of the crop year. The great
Russian Bear-which has hitherto always been a veritable "Bear" on these markets has turned the greatest "Bull" the world has ever seen, and has turned all Europe with her to the Bull side also and will hold her there so long as the present
policy is pursued and probably until another crop year, as there is now little doubt that this action of Russia was a genuine famine necessity instead of political or war move as at first suspected.
This explains why Europe has continued such a consistent and persistent buyer of our wheat on the face of the largest movement of the largest crop on record, and at the same time has taken everything else we raised at equally high or higher prices than wheat, in spite of such a famine in the ocean freight market and famine prices as noted at the beginning of this letter. Prices of grain and of freight alike are no check to this year's crop movement into export. It is
simply "What have you got to sell, and how soon can you give it to us?" on the body sees it, except the remnants overyold 1885 to 1888 "Big Four Bear Combi"backing" this "export demand" and "Russian scarecrow," as they have regarded the latter and belittled the former, until they have dropped nearly all their old-time Bear Fortunes made when Ream and Cudahy used to boast that they wanted no better investment than to sell grain short for the carrying charges or premiums on late over the near months and corn stuff; for in these everybody ran away from the latter. This year, however, in the face of the largest crops of all kinds has been at a premium, and often at a very high one over the futures, so urgent has been the demand for these staples for shipment to meet immediate wants. Not until of late has spot wheat even reached its natural level with or below the near options, and only because the more urgent demand for ocean freights for feed stuffs has left little room avail able for wheat of which Europe has had a better supply from her heavy August, September and October shipments than she had of other grains. Yet Chicago, utterly blind to the fact that she is the tail of the breadstuffs this year, keeps on tugging away at the Bear strings she has pulled so long, thinking she will be able to pull prices down, notwithstanding her string has broken

In this connection is also found the explanation of Europe having taken about $10,000,000$ bushels of oats, and $2,000,000$ of feeding barley since the prohibition of which of feeding grain from Russia, of dian. Owing to the beneficent tariff which prevents our maltsters buying Canada barley, except they pay 30 cents naltster does, and which enable feeding of malting barley in Europe at the same price they can lay down feeding stock from the United States, which is killing our malting trade, as they bav
done practically nothing on this crop.

Rye has continued to advauce on the
port demand untilit has touched the price of No. 2 wheat here, our rye flour, in con sequence, has crossed the price of the best he finting patents in this marke the formor record, as the supply o there are German bakers in this city whose customers will have the rye flou in preference at even more money than the best wheat flour made.
This kind of flour, however, is the only ne that has shown either strength or ac ivity for two months or more, during which time there has scarcely been a variation in the general market which as been simply held by the mills at ormer prices because they could not be
sold lower as the prices of wheat in the interior, even with the free movernent so much had already been sent ahead for export. There were a couple of days las and shippers bought quite freely of the higher grades, both spring and winter, and prices advanced fully 10 cents. When millers then advanced their limits 10 cents more, wheat scored back, the trade withdrew, exporters' orders were cancelled, and at this writing the whole list is as flat as ever again with prices
held at about 10 cents better than a month ago at which there is a slow job bing trade. Winter straights and patents, spring patents and rye mixtures are in the best demand at 4.80@4.90 in straights, and 5.00 for very fancy, $5.00 @$ 5.25 for patent winter, 5.15@5.25 for country and 5.25@5:50 for Minneapolis patents with 5.45@5.60 for old, 10,000 of Pillsbury's selling early this week on pt.
Low grades are not plenty and steady Low grades are not plenty and steady,
city mills still hold the price of West India brands unchanged at 5.25 at which Hecker, Jewell, Jones and Kings County are filling regular steamers. But shippers are not buying ahead and in round lots as they did a year ago. Both they and local jobbers having had enough of speculating in anticipation of "famine" prices. Some of the city mills are sold up, but others are accumulating stock
and are believed to have broken to 5.75 last week to relieve themselves. They are all selling the feed they make at 75 cents in lines to both home and export trade for 40, 60 and 80 lbs . Buckwhea flour is steady but dull at $1.90 @ 2.10$. umption checked by prices of corn. Wheat today was excited active higher on renewed and general buying for the English markets, which took about 100 boat loads on 800,000 bushels, chiefly No. 1 Northern spring, No. 2 do and No. 1 red, and also bought flax and barley freely, but held off on corn on he cold weather West, which will freez and dry out the new crop and improve the grading and increase the movement Oats followed corn and flour sympathized in part with wheat but not generally Rye flour sold at $5.50 @ 5.60$ today
New York, Nov. 12, 1891.

## OUR ST. LOUIS LETTER.



HERE is a pretty how-de-do at present between the Mayor and the Merchants' Exchange over the improvement of the Mississippi river
and it is all the result of the recent

Western Water-ways Convention, held a
Evansville, Ind. When that Convention met and passed the usual resolutions en dorsing many Western improvements, and suggesting many things in the way of advancing river commerce in the West it took much heed of the projected Hennepin canal and entirely neglected poor
old Mississippi, which, while an outlet to much of our Western commerce, has been suffered to remain in such a state as to greatly hinder river shipping during the ate fall season. At that season the water in the river reaches its lowest point, and falls to such a level as to allow of only light barge loading. When, therefore, the Western Water-ways Committee failed to see wherein the river needed any special improvement, and adjourned without suggesting any, St. Louis shippers were not a little put out. But not only shippers alone manifested their dis pleasure, but many who are interested in the subject only in that it brings out the Western commerce. Prominent among the latter was Mayor Noonan, who came out in a letter to the public condemning the work of the recent Convention, and proposing that a committee of citizens be selected to take action in the matter and
press the claims of the West before Congress towards securing sufficient appropriation. With this end in view he invited a number of prominent gentlemen to act on the committee with him, and naturally enough invited all the leading Hers of the Merchants' Exchange How unfortunate it was, however, that the Mayor had failed to remember that there exists a Mississippi River Improvement Committee of the Merchants' Ex change, and that this committee, besides declining to act with His Honor, as it naturally should, feeling as it does that all work in the matter of river improve ments should bgin with and be for-
warded by it, would feel called upon to vindicate its office by beginning counter operations to those of the Mayor. The result has been most awkward, not only to St. Louis' interests, but to many of
the business men, who are at a loss whether to work with the Mayor or with the Exchange. Mayor Noonan disclaims any wish to usurp the office of the Ex change Committee, but believes that no act in the matter. other hatter. The Exchange, on the through the representatives of the differ ent commercial organizations of the city Towards this end it has issued invitation to the different associations to have dele gates attend a meeting set for Nov. 24, on he floor of the Exchange. Mayor Noonan has not as yet informed his committee when a meeting will be held, but it would not be surprising if it were
called for the same date. It seems unfortunate that since both parties are working towards the same end that they could not be united in their efforts, yet mayhap it is better as it is, nursing up, as it does,
more interest and calling out greater energy, and be the result what it may both sides can claim a share in it.

Anent this river question, I see the Mississippi River Inspection Committee has reached Vicksburg, and has expressed itself as well satisfied with the result of their semi-annual trip. Owing to the very low stage of water they have been able to recognize the great want of
river improvements both above and below Cairo. At Vicksburg they received a petition from the city officials asking that they suggest an improvement in the harbor, which is now in a poor state. It is to be hoped that they make an urgent demand for river improvements from the Government, and in doing so they can be assured that they will receive a hearty support from the West, as all the cities are taking up the subject. From Kansas City comes an invitation to appoint delegates to a river convention under the auspices of the Commercial Club, to be
held Dec. 15th and 16th. From Mobile, Ala., the Commercial Club, of that city, sends a request that delegates be sent to join it in a tour of inspection in the interests of river improvements of the West. The Mississippi is not the only one to have it shown by this late dry spell that improvements are needed, and already representatives from Georgia have been here asking for an endorsement to an appeal. Georgia intends to make application for an appropriation for Savannah river improvements. Arkansas too has not been slow in the general movement, and a river convention has just been held in Little Rock, where action was taken towards pressing the claims of the Arkansas shippers, in having the Arkansas river improved so that a five-foot level may be maintained between Little Rock and Fori Smith.

After a long struggle the Real Estate Committee of the Merchants' Exchange has been successful in securing the authority to select a site for the new building, subject only to a final majority decision of the Exchange members. The vote for the amendment was taken two weeks ago and resulted in a vote of 1,004 in favor of and 151 votes against the proposition. An occurrence that added largely to obtaining of the result was the talling in, casement and all, of one of the large upper windows in the Exchange hall. Luckily it was before 11 o'clock and few people were in the hall. The window was just above the grain corner, and had it fallen half an hour later most serious would have been the consequences. As it was only two people were at all injured by the falling mass, which must have weighed several thouand pounds. Such was the force of its fall as to drive the legs of the heavy oak grain tables, on which it fell, clear through the floor. After such a demonstration of the age and condition of the building, there was but little hesitancy entertained y the members as to how to vote. As yet the Real Estate Committee has done nothing towards selecting a new location, ave to invite offers of property from the roperty-owners, but before the year is ut it will be definitely decided where the new building will be located.

Now that the Western Union has caried out its threat to take all the private wires off the floor the Board of Directors re in a quandary as to how they can get he Chicago quotations for the public use The Chicago Board of Trade has refused o allow them to be sent, and has forbidden Mr. Robert Lindblom, who essayed supply the Exchange, from sending any further quotations. However, Mr. R. H. Nichol, who supplies the bucket shops, has offered to perform a like ervice for the Exchange, and his offer nay be accepted. Just now all the pri vate wire-men have offices in the build-
ing, and the old messenger-boy scheme ing, and the old messenger-boy scheme is being worked, under a provision, howver, that no gait faster than a walk shall be taken by the boys.

Capt. O'Shea has been reappointed Chief Grain Inspector of the State. It was thought that Mr. George Morton would be a choice of the Railroad and Warehouse Commissioners, but Mr. O'shea got it. Mr O'Shea has appointed Mr. J. A. Miller as his Chief Deputy, to succeed Mr. Washington, his former offier. Mr. Miller has been in the service ince its organization, holding the posiion of Inspector, and is considered a very good grain expert.

## Wheat

came in very well this past week though not so heavily as the week before, being only 634,327 bushels this as against 805 ,298 bushels last week. Shipments were 477,835 bushels this, 344,190 bushels last week; a slight increase. Stock still continúes to increase being now $3,242,553$ bushels, while last week's showing was
only $3,183,600$ bushels. Withdrawals $£ 3,8921588 \mathrm{~d}$; expenses in London, after from elevators show 75,539 bushels for deducting transfer fees, interest, etc. city use, 234,042 bushels for rail shipment and 79,800 bushels for export, via river. Grades continue in good demand, No. 2 Red being taken for export with No. 3 Red for home use; in fact, the demand was greater than the offering, and dealers were on the lookout for good lots all week. Prices at closing show No. 2 Red, $92 @ 92$ t cents; No. 3 Red, $88 @ 88 \ddagger$ cents and No. 4, $82 \ddagger$ cents. Hard Spring wheat was also in favor this week and was eagerly dealt in.

## Fiour

receipts show a slight increase this week being 34,476 barrels this, and 27,443 bar rels last week, shipments were 55,307 bar rels this and 51,028 barrels last week While the local and southern trade was dull the export demand was good and shipments to Great Britain, France and Havana were made in large quantities that for the latter port being shipped so as to reach destination after Dec. 20t when the duty will be removed. Euro pean orders were mostly for high grade and were given now so as to take advan tage of the lake and rail freights which closed Saturday. After the 23 rd expor shipments go up 5 cents on rates or to 26 cents from East St. Louis, which has caused no small amount of shipping Prices are only fair and are quoted: Pat ent $\$ 4.45 @ \$ 4.60$, extra fancy $\$ 4.20 @ \$ 4.30$ fancy $8390 @ 4.00$, choice $\$ 3.50 @ 83.65$ family $83.30 @ 83.40$.

## Notes.

Owing to the late drought in Illinoi all water supplies have failed and many of the country mills are shut down; fortunately rain has come soon enough to put the wheat crop into good shape for winter quarters.
A great many mill furnishing men are in town seeing what they can do towards securing contracts on the new mill Mr Plant thinks of building.

Mound City.
St. Louis, Nov. 16, 1891.

## the pillsbury-washburn flour

 MILL CO.FEW people, unless shareholders are aware of the magnitude of interest attaching to them: and even amongst the shareholders there are many to whom the statements made in the report just issued by the directors in anticipation of the second annual general meeting, fixed for Friday next, will come almost in the nature of a revelation. To the coming meeting will be submitted the statement of accounts for the twelve months ended August 31st. As often happens with industrial businesses, the company's experiences during the pas year, while distincly profitable and fairly satisfactory, have been of a chequered char acter. Thus it is recorded that "the result of the first six months' trading were satisfactory, but owing to the continuous fall during the latter half of the year in the price of wheat (of which, in order to be independent of market speculations, the company is compelled to keep a larg stock, representing at least two month' consumption), the result of flour sales, although showing a fair milling profit on the price of wheat at the time of grind ing, showed a loss on the original cost." The directors go on, however, to express their pleasure in stating "that the volume of business has been maintained, and the company's brands never stood better in the market than at the present time."
The year's results are thus stated "Taking the stocks at cost, the profits on the trading for the twelve months, after charging all the working expenses in America, amounted to $£ 148,2508$ s9d from this have to be deducted the following: Maintenance of buildings, plant and machinery, £21,753 3s3d; fees of local committee and managing director's salary,
$£ 3,736 \mathrm{8} 10 \mathrm{~d}$; difference in exchange $£ 69818$ s8d; leaving $£ 118,1692 \mathrm{~s} 4 \mathrm{~d}$. Ou
of the above have been provided: In of the above have been provided. In tures, twelve months $£ 38,100$; dividend on preference and ordinary shares, at 8 per cent per annum for the six months to 30 th April last $£ 40,000$; leaving $£ 36,936$ 16s11d." Apart from the interest on the debentures, which amounting, as above shown, to $£ 38,100$, has been provided for the whole year, the figures above cited have especial reference to the distribution on the two classes of shares for the six months ending 30th April. What fo ows relates to the share dividends for th ensuing six-monthly period, namely, tha ending Aug. 31: "Adding the balance brought from last year, $£ 1,79310 \mathrm{~s} 2 \mathrm{~d}$. leaves to be dealt with $£ 38,7307 \mathrm{~s} 1 \mathrm{~d}$ Out of this the directors recommend the payment for the six months to Aug. 31 of a dividend on the preference shares a the rate of 8 per cent per annum, and final dividend at the rate of 4 per cen on the ordinary shares (free of incom ax), making, with the interim dividend 6 per cent per year. These dividends wil bsorb $£ 30,000$, leaving a balance of $£ 8$ 7307 s 11 d . To this balanceit is proposed o add $£ 8,000$ by a transfer from the gen ral reserve fund, in order to provide a special reserve for the benefit ot the cur rent year, in accordance with the recom mendation of the auditors certificate The sum of $£ 10,16611 \mathrm{~s} 11 \mathrm{~d}$, charged to the capital account, is represented by actual additions to the property, made for the improvement of its earning power. Thus, it will be seen that while the pref erence shares get, as matter of course, fo the whole year, the handsome rate of 8 per cent, to which they are entitled, the final dividend on the ordinary capita makes its rate 6 per cent for the year.
Mr. Sydney T. Klein, one of the Lon don directors, has recently returned from a trip to Minneapolis, and has written a special report on the prospects of the company from a personal examination This report is a highly satisfactory one

## GEORGE BAIN

1HE unexpected news flashed over the wires announcing the death of George Bain was great shock to his many milling friend hroughout the country. The remarks of his most intimate friend on the floor o he Merchants' Exchange at St. Loui Smith said
"George Bain's life on the floor of the Merchants' Exchange and in this community has been an open book for more han a quarter of a century, and I but give tongue to your thoughts, when I say he was a large-hearted, brainy, social honest man-endowed with electrical en ergy which even the 'sling and arrows Heous fortune could not check.
He had positive views on all ques tions that had two sides, and hesitated not to express them regardless of numbers and consequences.
'He devoted his great ability largely to the advancement of the commerce of St. Louis, often at the cost of neglecting his private interests, but, to use one of
his pet phrase, 'he couldn't help it, he was built that way.
"He was original ; you often heard the remark: 'There is only one George Bain.'
You always knew where to find him He was always the same-breezy, independent, whether bluffing a millionaire or tipping a tramp.

He was not a saint, did not pretend to be ; but could he command and hold such hosts of loyal friends and the rare love and devotion of his numerous fam-
ily, who knew him inside, without being a strong, noble, lovable man?
"His untimely taking off is all the
re to be deplod the
cently effected business arrangements and was negotiating others, which would
via Cape Horn to the purchaser, Guillermo Firth, of Linares, Chile.
rank of our active business men, when his riper experience and maturer judg ment would doubtless have insured hi prosperity and given him a leading par in shaping our commerce

But it was not to be. You migh suppose that the appropriate ending of such a life would be to the sound of drum and trumpet or the boom of cannon. No

After a week's sharp illness, whil apparently convalescing, planning a va cation to the Springs, he went to sleep a hours later the'silver cord wa oosed' so gently that even the faithfu, loving watcher at his side scarce knew when the end had come
"The dead are all too soon forgot, bu he had so fully pecome a part of our daily life that the void left by his death wil long be felt.

The least we can do in memory of such a man is to express our respect, sor ow and sympathy.'
We first met George Bain in the hey day of his prosperity, a strong, vigorous, genial gentleman. It was at the grea Millers' Convention, of which he wa president, held at Buffalo in 1877. We were not only impressed, but charmed with the magnetism and the power with which he controlled the ever-exciting and changing moods which prevailed during that convention, bringing instantly, as it were, order out of chaos by his prompt vigorous decisions, that while they were effective and to the point, created no an tagonism. As a presiding officer he had few if any superiors. Quick and ready to see a point, happy in his retorts, mak ing everybody satisfied.
Our intercourse with Mr. Bain from that time on through the dark hours o the Millers' National Association litiga tions was of the most congenial nature We found him always ready to devote his time, energy ond money for the bene fit and success of the Associations' work.
The following resolutions in honor o his memory were adopted by the Mer chants' Exchange of St. Louis
The Merchants' Exchange has by the death of George Bain incurred an irreparable loss, He had filled every oflcial position within the gift of the members, from committeeman to vice-president and president, with honor to himself and credit to the exchange. He was ever foremost in all efforts to advance the commercial interest of St. Louis, devoting not only time and money, but also his unparalleled energy and rare discretion to this end, regardess of his private interests.
He was the sworn foe to shams and pre He was the sworn foe to shams and pre
tense, the friend and patron of the weak and struggling, devoted to his family and in every phase or hife an honorable, outspoken, justly proud
The least that can be done by his assoc tes is to record this brief tribute to his memory and to express our heartfelt sym pathy for the bereaved family he so greatly
loved, and whose losses so far exceeds our own. and whose losses so rar exceeds
Alex. H. Smith, Alex. H. Smith,
Michael McEinis, Michael McEinnis
E. O. Standard, Web M. Samuel,
John Wa

## MILWAUKEE NOTES.

Sr. Juan Mucio Perez, of Urnapan Michoacan, Mexico, has ordered of The E. P. Allis Co., of this city, a 50 -barre water power roller mill, which will be shipped by rail via St. Louis and El Paso.

At Sanderson's mills the largest car of wheat known here was received on Noy 14th, and contained a trifle more than 1,200 bushels, or within 30 pounds of the weighing capacity of the scales in use. The wheat was of fine quality, and the weight so heavy so to break some of the car springs.

The E. P. Allis Co., of Milwaukee, Wis., received by cablegram since th end of the Chilean war, an order for a 200-barrel water power roller mill, which will cost about 815,000 delivered in New York. From that port it will go by ship c

While crossing the Northwestern railway bridge near the mouth of the harbor at 2:45 P. M., Nov. 16, Hugh Williams was struck by an outgoing passenger engine, and so badly injured that he died soon after being removed to the Emergency Hospital. Williams was sixty years and of age a millwright by occupation. He leaves a wife and eight children. Williams lived at the corner of Jackson and Buffalo streets.
Anton Kufeke vs. Bernhard Stern.An interesting case between parties well known in the flour export trade has just been tried in this city. Many of our readers, no doubt, in their experience in exporting flour have had similar experience with European buyers. It seldom happens, however, that the case is taken into the courts for trial. A compromise is usually reached, but in most cases the exporter has to pocket the loss claimed.
"In August 1886 Anton Kufeke of Glas gow ordered of Bernhard Stern 1000 sacks of patent flour branded "Reputation" and 2000 sacks of bakers branded "Etruria" The order was given to Mr. Stern person ally, he being then in Glasgow. The flour was bought by sample, Stern leaving a sample with Kufeke. The bakers was brand known as "Sylvan', but Kufeke ordered it put up in 140 tb cotton bags and branded "Etruria". One half the order was to go to Glasgow and the balance to Kufeke's branch house at Leith. At the same time Kufeke's Liverpool house bought some of the same flour under its own proper name "Sylvan," and sound jute. No complaint of unpool concern against this flour. But about a month after the flour arrived at Glas gow and Leith, Kufeke commenced find ing fault with it. F.rst he wrote that it was "not up in color to the type sample." Later he complained that the flour was "unsound", "musty", "fusty" and "rot ten," and in each of his letters he asks for an allowance, but he never refuses to a cept the flour under the contract. Mr . Stern, on the first complaint, compared the grinding sample with the standard from which the selling sample had been taken, and, finding everything all right he utterly refused to recognize Kufeke's claim for an allowance. Finally, Kufeke's appeals for "allowance" proving futile, he writes to Stern that he is preparing his claim for Dun \& Co., to have suit com menced, and adds "you and your son will not make a nice appearace in the witnes I shall take care the papers here give a full account of the trial, also the leading milling journals in your country." This bluff having failed, Kufeke com menced suit for damages. Mr. Stern
counterclaimed for 8250 due him from the Liverpool house jury disagreed. The case was tried again last week, the trial lasting three days and a half, and the jury returned a verdict fo Mr. Stern, finding as a fact that the flour when shipped was equal to the sample by which it was sold. Under this verdict Mr. Stern is entitled to judgement for $\$ 250$ and costs, and his reputation as miller is thoroughly vindicated."

## FLORIDA AND THESUNNY SOUTH

## THE BIG FOUR ROUTE.

To all persons contemplating a southern
trip the Big Four Route offers special attrac-
tions and advantages possessed by no other tions and advantages possessed by no other
line. Solid Vestibuled trains, heated with steam and equipped with palace sleeping
cars, reclining chair cars and elegant parlor
café dining cars run daily, cars, rechining chair cars and elegant parlor
cafe dining cars run daily, making connec-
tion in Centrat Union Station, Cincinnati, with through express trains of the Queen \&
Crescent Route, Louisville \&Nashville, Ken-
tucky Central and Chesapeake \& Ohio Rail ways, avoiding the tedious transfer necessary via other Iines, and affording pratatically
through train service to Old Polut Comfory through train service to Old Point Comfort,
Asheville, Chattanooga, New Orleans, SavIn Sout
Fou
at a Big Four Route. D. B. MArTis, General
Passenger and Ticket Agent, Cincinnati, 0 .

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## CROPS

Favorable reports come from France about the appearance of the fall sown wheat.
Private cables that are reliable say that the Russian ukase prohibiting exports of wheat will be issued Saturday, Nov. 14.
The quantity of flour and wheat on passage to European markets during the past week increased 960,000 bushels, and corn decreased 80,000 bushels.
The receipts of wheat at Liverpool during the past three days were 560,000 bushels, of which 312,000 bushels were Ameri can. Receipts of corn, 88,000 bushels.
The official report of the Servian minister of agriculture represents the wheat crop as good, both in quality and quantity, but the crop of maize was only medium.
Texas has harvested the largest wheat crop ever raised in the State. Very little of it will be exported, as it will be made into flour by Texas trade, but it will keep at home about $10,000,000$ gold dollars.
Advices from Paris state that the bears are taking advantage of the American Millers and the Paris Grain Syndicate are agitating for an increase in the duty on flour owing to the increased imports from America.
The Polish potato crop is estimated at 33 per cent of an average. The normal crop 120,000,000 bushels, of which abou $89,000,000$ bushels is used for food, the
balance going for seed, distilling and cattle feeding. The crop this year is put at $40,000,000$ bushels.
Оhio Crops. - Wheat averaged 17.50 bushels per acre, total product, $45,063,480$ bushels; oats averaged 30 bushels per
acre, total product, $26,608,380$ bushels; corn, compared with a full average crop estimated at 94 per cent, potatoes 97 per cent, apples 53 per cent.
Shipmpnts of wheat from Calcutta, week were: To Great Britain-55,000 quarters. To Continent-22,500 quarters Same time last year, 90,000 quarters Same time in 1889, 65,000 quarters. Same time in 1888, 115,000 quarters. Same time in 1887, 47,500 quarters.
Stocks of wheat in Liverpool, Fleetwood, Hull, Glasgow, Bristol and Gloucester, on the 1st inst., amounted to 650 ,month a Nov. 1st last year. Of flour, suarters on decreased in Liverpool, Glasgow and Bristol, but in London have slightly increased.
Odessa, told a proprietor, resident in transport of grain from his estate in a southwestern province to the next railway station formerly cost him 32 copecks per pood, whilst since the construction of a strategic line comparatively adjacent to his prop
copecks.
The wheat crop of California this year will equal $20,000,000$ centals, which, at an average selling price $\$ 1.60$ per cental,
would give $\$ 48,000,000$ for the cereal year, or exactly double the value of last year's yield. This would bring up the cash value of output wheat, gold and sil ver in California and Nevada to 860,000 , 000, or close to the bonanza year of 1881.
Michigan Crop. - According to Michigan Crop Report for October, the wheat of the State averaged $19,411,730$ bushels in the State, which has been exceeded only in 1879,1880 , and 1882 . The acre; of barley 24.63 bush bushels per (estimated), 59 bushels. Potatoes are estimated at 80 per cent of an average
crop, and Winter apples about 33 per cent.
Destitution in Russia.-Reports are nereasing in nnmber of thefts of grain in

Saratoff, owing to the destitution of the people. In some districts the people eat food refused by animals. The rumor is repeated that mothers kill their children in order to prevent their starving to death. The famine has revealed the existence of considerable maladministration among government officials. Some the ministers are likely to be dismissed.
The value of the exports of breadstuffs for September, 1891, was $831,462,021$ The value of the same for the correspond ing period last year was $\$ 7,199,348$. comparison of these figures shows the greatly increased activity of trade, due to the foreign demand. Our surplus is now going abroad as fast as the ships can carry it. During the first half of the pres ent year about $\$ 70,000,000$ of our gold
coin was taken from us by Eur coin was taken from us by Europe. The went away.
Heavy Export Tax on Wheat.-The t. Petersburg correspondent of The Times London, telegraphs his paper that he learns from the best sources that a heavy export tax will be imposed on whea probably a fortnight or three weeks
hence. All the ministers except M . Vishnegradsky, Minister of Finance, fav ored a total prohibition of the exportation. Therefore a modification is still possible. The long warning given to ex
porters will result in an active trade in porters will re
the meantime.
Wheat on the Pacific Coast.-Ar rivals from the north are on the increase and some of the tonnage now looking in vain for California wheat, will probably be provided with cargo from this source While this may in a measure relieve the pressure upon the freight market, it will not be of material aid to the vigorous contest between these two interests, ural and indisputable advantage, and has steadily been gaining ground of late The influences that have directly affected the situation have therefore been rather local in character modified, of course, by fluctuations abroad and, less directly in the east. Holders have shown less disposition to realize, and material has been secured only at advanced rates. Sales of choice shipping have been made at $1.71 \ddagger$ per cental, but at the close the tone was much improved, and while buyers were not active, sellers generally required $\$ 1.72 \frac{1}{2}$ for best grades. Milling has been placed at $\$ 1.75$ but millers do not display any eagerness and values lack support. For choicest samples of northern wheat there was also here a somewhat improved inquiry for export, and values have been marked up in conformity with the rise in native varieties.
Wheat in Manitoba. - In Manitoba the situation has been marked by an increased movement to market. After the slow movement of late, receipts last week pulled up rather more suddenly than was expected. At a number of Manitoba country points, farmers' marketings were fairly large, reaching fully 10,000 bushels per day, or more, at some points. At in, about this quantity was coming , at Gretna deliveries were showing up well, the quality at these two points being good, a considerable portion going
No. 1 and No. 2 Hard. Portage la Prai. rie also showed large deliveries. Virden marketings were 6,000 bushels per day and at Deloraine from 3,000 to 4,000 bushels per day were received. Brandon has not been brisk yet. Other principal points were receiving from 1,000 to 4,000 bushels per day. This movement is o nothing like what it will be whe rost puts a stop to plowing operations, which are at present taking up the tim of farmers very considerably. Whea has been moving to lake ports very freely for shipment before the close of navigaon, and with increased deliveries at country points, there was also a larger rail movement eastward, averaging well
up to 200 cars per day. The weather
was favorable most of the week for thresh ing. and reports coming from nearly all parts of the country, stated that the yiel was turning out even larger than previ
country from $15,000,0 t 0$ to $20,000,000$ rabbi skins are sold annually, but the rabbits in rease still faster. The first pair of rabbit was carried from England to the colonies in 851
AN attachment was recorded in the town clerk's office to-day in a suit brought by the Minneapolis Flour Manufacturing company of Minneapolis against James B. Smith, the wholesale grocer, at Nos. 285 and 287 Stat treet, New Haven, Conn. The amount o attachment is $\$ 1,200$ and the suit is brough o recover an indebtedness for that amount. Safe blowers affected an entrance to the office in the flour mill of Edward Paist \& Brother, at Collegeville, Pa., on Saturday iight.Oct. 27th, and made a determined effort get at the contents of the safe belonging o the firm but failed, though they ruined the door of the fire proof. They also tried to open the safe at Collegeville station but were again unsuccessful.
The first lease of power which is to be deeloped by the Niagara tunnel now building was filed for record on the 13th of Oct. It is from the Niagara Falls Power Company to the Soo Paper Company, and extends to 1936. Three thousand horse power is to be furnished at an annual rental of $\$ 24,000$. December, 1892, is the time when the first quarterly payment is to be made.
Many years ago a Scotchman carried a thistle to Australia, and he was banqueted by his countrymen for the act. He planted it in his garden and the seeds were soon scattered far and wide by the winds. Reports say that now it has supplanted the native grasses on millions of acres of land, destroying sheep-runs by the hundreds, and is causing a great deal of trouble.
The Russian police have given notice to bankers that no dealings with or through the house of Rothschilds will be permitted in Russia. Bankers corresponding with the Rothschilds in Paris, London or elsewhere movernment is correspondents. The Russian the Rothschilds onaccount of their opposition to their recent loan, which was successfully negotiated without their assistance.
The total freight movement through the sault Ste. Marie Canal in September was $1,388,333$ tons, showing an increase of $8 \frac{8}{4}$ per the fact that there was a, notwithstanding cent in the iron and ore traffic. The viariety of the traffic will be seen from. The variety that the leading be mere the statement iron ore, 351,517 tons of coal, 548,115 barrels of flour, and $5,928,840$ bushels of wheat.
Will grind less wheat.-A telegram from Grand Rapids, on the upper Mississippi, announces that Government Engineer McKinzie has ordered the closing of all the big flouring mills which for the deal to the have been manufacturing the past month, day. The closing of the voirs wlll make it necessary for many neapolis mills to shut down for many Minmust run by steam power and the others will be greatly reduced The river output than for many years, and the is lower reopening the roservins within month not encouraging - month is

## RECENT MILLING PATENTS

The following list of Patents for Milling and Grain Handling Appliances, granted in October, 1891, is specially reported for the United States Miller by H. G. Underwood, Patent Attorney and Solicitor of Patents. No. 107 W isconsin Street, Milwau kee, Wis., who will send a copy of any No. $460,763-$ Fo any address for 25 cents. No. 460,763-Flop board for Bolting Devices, Joseph A. Segbers, San Francisco, Cal. No. 460,914-Conveyor, John M. Finch Crockett, Cal., assignor to Milford Har mon, Jackson, Mich
No. 460,915-Machine for Bolting Flour, John . Finch, Crockett, Cal., assignor to Mi ford Harmon, Jackson, Mich.
Elevators, Dight Transmission for Grain Elevators, Dighton A. Robinson, Minne apolis, Minn., assignor to John Simpson same place
Min, 460, Grain Sampler, James N. Stacy, Minneapolis, Minn.
and 0 , 491 -Grain Separator, James McGill and Thomas Ryan, Lockport, N. Y., as signors to the Richmond M'f'g Co., same place.
Sto, 731 -Middlings Purifier, Herman W Stone, Jr., Morris, Minn.
Bo. $461,385-$ Grain Meter, Hale E. Hawk Bucyrus, 0.
No. 461,836-Grain Meter, Hale E. Hawk,
Bucyrus, O. No. $461,385-$
Bucyrus, O., assignor of Hale E. Hawk,
win J. Monnette,
win J. Monnette, same place.
No. 461,802- Uust Collector, Paul C. Sain-
sevan, San Jose, Cal.
No. 462,006-Grain Meter, John Henry, Ar a

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## OUR LEGAL DEPARTMENT.

## Specially Prepared for the United States mille

 agineer, frRecovery by Father for Death of Child.-Where a child is killed by machinery in a factory, under circumstances which charge the employer with negligence, the father is entitled to recover for the loss of the labor and services of this child, computed for the whole of the remainder of his minority, and for money actually expended for doctor's services and the other expenses incident to the sickness following the injury.-Augusta Factory vs. Davis, Supreme Court of Georgia, 13 S. E. Rep. 577.

Voluntary Assumption of Risk by Employe.-A boy was employed to work at one machine and was by the foreman transferred to another, which was used for cutting. He was placed there to clear away. He subsequently undertook, without instructions or order, to feed the machine, and his fingers were caught by the knives. He voluntarily assumed the risk, and cannot hold the employer liable for the consequences.-Leistritz vs. American Sylonite Co., Supreme Court of Massachusetts, 28 N. E. Rep. 294.

Illegal Subject Matter of Telegram. -After receiving a telegram for transmission, accepting payment for the same, the company cannot defend an action for the statutory penalty incurred by the failure to deliver it with due promptness on the ground that the contents of the telegram related to the sale of futures, and consequently to an illegal transaction.-Gray vs. Western Union Telegraph Co., Supreme Court of Georgia, 13 S. E. Rep. 562.

## Recovery for Delay in Delivering

 an Unrepeated Message.-The provision on a telegraph blank that "Errorscan be guarded against only by repeating a mersage back to the sending station for comparison, and the company will not hold itself liable for errors or delay in transmission or delivery of unrepeated messages beyond the amount of tolls paid theron, not in any case when the claim is not presented in writing withinsixty days after sending the message," is not a bar to an action for damages resultiug from delay in delivering an unrepeated message, as the action is not founded on any error which repeating could have cured, and the liability of the company is the same for the prompt delivery of unrepeated and repeated messages.-Western Union Telegraph Co., vs. Lowery, Supreme Court of Nebraska, 49 N. W. Rep. 707.

Failure to Deliver Goods Sold.Where a contract for the sale of several carloads of goods is made by sample the buyer has a right to inspect them before accepting them and when the draft for the first two carloads shipped arrives before the cars do, the refusal of the buyer to accept the draft until the cars arrive, and the consequent protest of the draft, will not warrant the cancellation of the contract, and upon the refusal of the seller to ship the balance of the order, damages for breach of the contract may be recovered.-Erwin vs. Harris, Supreme Court of Georgia, 13 S E. Rep. 513.
Damages for Failure to Deliver
Goods Sold.-Where merchandise is sold Goods Sold.-Where merchandise is sold
for future delivery and not delivered until after the date contracted for, the measure for damages is the difference between the value at the date of delivery and the date agreed upon, and the buyer will not be permitted to show that he had contracted to sell the merchandise for a certain sum and thereafter sold it for a less sum. The measure of damages is the difference in value, and not in individual contracts.-Ramish vs. Kirschbraun, Supreme Court of California, 27 Pac. Rep. 433.

Protest of Foreign Bill of Ex cHANGE.-A valid waiver by an endorse
in Wisconsin of protest of a bill of exchange from another state, must be in writing and signed by him or his agent. Where a holder of a bill presents it to the acceptor and surrenders it to him in exchange for his check, that is payment of the draft, though by reason of the failure of the bank the check was dishonored, and the draft therefore cannot be pro-tested.-First National bank of Showegany, Maxfield, Supreme Judicial Court of Maine, 22 At. Rep., 479.

Long and Short Haul Clause of Interstate Commerce Act.-Where a violation of the long and short haul clause of the Interstate Commerce Act is sued upon, the fact that the rate sued upon was made jointly by the defendant and another road not a party to the action has no effect upon the liability of the company sued, but to establish the violation, the shipper must show that the higher rate for the shorter distance is for like services under substantially similar
conditions and circumstances.-Junol conditions and circumstances.-Junol
vs. Chicago \& Northwestern Ry. Co Circuit Court of the United States, Southern District of Iowa, 49 N. W. Rep., 290.
Interference with Interstate Commerce by Peddler Legislation.-A state statute which provides that "every per son, a citizen of the United States, author ized to do business in this state, who, as principal agent, peddles * * * goods, wares, or merchandise, shall pay a license tax as follows: * * *," is unconstitu tional as to citizens of other states, as regulating interstate commerce. Where manufacturers of goods in one state send their agents into another state to sell goods by sample, the goods to be delivered to each purchaser by the agent
afterwards, the fact that the goods were to be delivered by the agent does not make him liable to pay as a peddler. In re Spain, Circuit Court of the United States, Eastern District of North Carolina 49 Fed. Rep., 208.
Rejection of Insurance Application. ane owners of certain property applied hereonsurance broker to secure insuranc thereon. He presented an application to
an agent of the company, which was returned for the completion of formal details omitted. These were supplied and upon receipt of the completed application the agent endorsed "Rejected." Befor notice of the rejection reached the owners, the property was destroyed, and they claimed the insurance money upon the reject that the application had not bee rejected before the fire. They can no recover, as no valid contract was ever
entered into. The agreement must be complete and mutual before the contract can exist.-Faughner vs. Manufactor's Mutual Fire Insurance Co., Supreme
Court of Michigan, 49 N. W. Rep., 642.
Liability of Employer to Outside Parties for Negligence of Employe.A grain elevator was operated by ma-
chinery moved by horse-power in an adjoining "power-house." The centra wheel was moved by a horizontal lever pon the wheel there was a convenien place to sit and ride. The place was attractive to children, and they were per-
mitted to frequent it. The employe in charge of the machinery and powerhouse, on the day in question, having old, hit the presence of a boy six year old, hitched the horse to the lever, and
started the power while the latter was sitting on the wheel, exposed to danger from uncovered machinery, and then left the premises, with no one in charge. Soon after, in getting off the wheel, the child was caught under the "tumbling rod," and killed. This was negligence on the part of the employe for which the employer was liable. The acts or assions of the child's parents in suffer ing him to be upon the street, in the vicinity of the power-house, were not to
be negligence proximately contributing be negligence proximately contributing
to the injury, and would not prevent the
recovery of damages.-Gunderson vs Northwestern Elevator Co., Supreme
Court of Minnesota, 49 N. W. Rep., 694.

## THE FATE OF PENNIES.

1seems to be with pennies as it
is with pins, says the Washington
in correspondent of The Cincinnati Commercial Gazette. Yet they vanish in some fashion. Last year the Philadelphia mint coined ninety-four millions of pennies. It would take a goodsized building to hold so many, but they did not begin to supply the never the establishment referred to is hard at work manufacturing further supplies, and so it will continue. Bronze cents are
subject to more acciderits than happen to subject to more acciderts than happen to hat a per United States coins. It is said times for once that a dime passes from one pocket to another. Being of small value, the little pieces are not taken much care of. There are a thousand ways in which they get out of circulation, and thus the minting of them has to be kept
up continually. The metal blanks by up continually. The metal blanks by
which they are made by the simple process of stamping are turned out by contract for Uncle Sam by a factory in Connecticut at the rate of a thousand for $\$ 1$. As they come from the machines, fres
and new, they look like glittering gold. One may get a notion of the number pennies lost from the history of the old half cents. Of these 800,000 were issued few years ago. Where are they now? A few are in the cabinets of coin collectors. None have been returned to the
mint for recoinage, or are held by the treasury. Nobody sees them in circula. tion. All of them, except some hundreds saved by curio-hunters, have absolutely disappeared. Of the old copper pennies $119,000,000$ still remain unaccounted for, save that once in a long while one sees specimen. There are more than $3,000,000$ bronze two-cent pieces somewhere, out of $4,500,000$ of them that the government issued. Of nickel three-cent pieces, nearly wo million are yet outstanding, although is almost never that one of them is come across.

Patching up bills.
Speaking of the redemption of pape noney, a very novel and interesting ap plication was made the other day to the division of the Treasury wihich has this business in hand. The story, as it quickly came out, was as follows: An ingenious youth, employed to sweep out a. New York bank, devoted attention for a considerable period to gathering up the crumbs from the tills in the shape of corners and other bits of notes, such as get torn off and fall about in any place where dollars ar counted. In the course of time he got together a quantity of scraps of the sort sufficient to fill a pint measure, and he sent them on to the Redemption Bureau at Washington in a box, with the explanation that they had been eaten by mice. He stated the amount at 8200 , and asked for new bills in exchange. His little game was betrayed on the face of it by the fact that the pieces forwarded represented, if anything, nut less than $\$ 1,000$. The usual affidavit was demanded from him swearing to his loss; but he had not thought of that requirement, and lacked he nerve to give it, luckily for himself. Undoubtedly the Redemption division does get swindled sometimes, though not often. The woman experts employed to examine the money sent in are wonderfully kkillful. It is marvelous how deftly they will poke over a few charred fragments of notes, and set an accurate valuation upon them. The other day a poor woman in Ohio sent a wee corner of a twentydollar bill, with a pitiful story about her baby's having burned it. Hardly more was left than a fragment big enough to show the figures of the denomination, but she will get the money back. Mice are
great destroyers of paper currency, and great destroyers of paper currency, and some of the most hopeless specimens that
come in have been chewed up for beds by those little rodents. Sometimes a pill-box full of indistinguishable ashes will arrive accompanied by a certificate stating the amount represented. Of course such a case is hopeless. It is usually a kitchen tove catastrophe.
greknbacks go up in smoke.
Kitchen stoves burn up more cash every year than is lost in any other way.
People will confide their hoards to them for hiding, and when they are lighted the greenbacks go up in smoke. The greatest sum ever consumed by fire in this country was $\$ 1,000,000$. That amount was burned at the subtreasury, but the government and printing pring. It has been estimated that lost or destroyed. Of thoney issued is currency it is reckoned old fractional currency it is reckoned that $\$ 8,000,000$
worth has been totally lost. A few doys ago an old colored man from across the Potomac in Virginia bromg across the treasury an extraordinary looking lump of metal. He said that it was a lot of silver dollars, halves and quarters which he had put in a tin can some years back and hidden in the stone wall of a barn, by emoving a stone and plastering up the orifice. When he took out the box, he found that trickling water had rusted it of iron, and sticking the coins with oxide ass. As sticking them together in he Assistant treasurer Whelpley had ye and put into acid and treated with ye and sawdust, so that the silver pieces came out as pretty and bright as when they were minted, and the old man carried them away delighted.
SURPRISED THE TREASURY OFficials.
One day this week a five-dollar note on
he National bank of Rhode Island, the National bank of Rhode Island, at Newport, came in for redemption. On the face it looked quite new, but the back was washed perfectly clean, so that not a mark was left on it. The joke of it is that the bureau of engraving adopted the brown back for such bills on the ground that it could not be washed off, as the green back can be. It was intended in this way to prevent counterfeiters from. procuring treasury paper by rendering notes of
small denominations blank with acids, and printing big ones on them. This is the first time that confidence in the indelibility of the brown ink has been disturbed. Even the seal on the front, which is done in the same ink, has entirely disappeared in the bill described. Whether the thing was done for a jest or by accident the authorities do not pretend to say.

## THE WEIGHT OF A DOLLAR BILL

## Washington Letter: In the treasury

 here, one day this week, the question came up as to the weight of a dollar bill. Scales of perfect accurancy were brought into requisition, and the surprising discovery was made that twenty-seven 81 notes weighed exactly as much as a 820 gold piece. The latter just balances 540 grains. However, the bills weighed were perfectly crisp and new. Trial made with soiled notes such as come in every day for redemption, showed that wenty-seven of them weighed considerably more than the 820 coin. Every paper dollar on its way through the world continually accumulates dirt, perspiration and grease, so that after a year of use it is perceptibly heavier.The actual weight of paper money which the treasurer sends by express every year to all parts of the country is in the aggregate enormous. Since July 1 it has dispatched $\$ 38,000,000$, nearly all of it in small notes, to the South and West for the purpose of moving the crops. The banks lend this cash to the farmers on whatever they grow, and thus the products of the fields are harvested and shipped.
ALL persons desiring to reach the entire
milling and grain trade of America, by eircular of otherwise, should obtain a copy of Cawkek's American Flour Mill and Cawker's American Flour Mill an
Grain Elevator Iirectory for $1890-91$.

## mILLERS＇INSURARGE COMPAMIES．

$\mathrm{I}^{\mathrm{T}}$ is unfortunate that the meeting of secretaries at the Grand Pacific Hotel in Chicago on the 11th inst．，could not have formulated a plan and entered into it with a zeal worthy of the object，to promote the welfare of each and every company doing strictly the business of mill insurance on the mutual plan．The fact that one or two companies consider themselves more firmly anchored finan－ cially than some of the others，is no rea－
son why they should not enter fully into an arrangement for promoting the general welfare，and their declining to do so is， to say the least，not very good policy． Fortunately no mill mutual，which has adhered strictly to mill insurance on the mutual plan，has yet been obliged to re－ tire from business．Should any one of these companies，however，have an un－ fortunate run of excessive losses and be obliged to wind up，the damaging effect upon the balance can hardly be estimated． It would seem，therefore，an absolute necessity for each and all of these com－ panies to stand together ；and that duty develves to a much greater degree upon the stronger than it does upon the weaker companies．
And that brings us to consider which are weak and which are strong．It does not follow either in theory or practice that
the strongest or the best mutual company is the one having the largest amount of cash assets piled up．The Millers＇National with its immense capital and big interest account，has not been able to furnish in－ demnity to the millers of the country for any less money，or upon any better secur－ ity than the Iowa Millers，without any capital beyond its premium notes，or the Illinois Millers＇Mutual Association，with a very small capital aside from the notes of its policy－holders．
All of the three companies named have been in the field from twelve to fourteen years，and have therefore exceeded the time usually required to get a general average upon both expenses and loss ratio．The fact that the smaller of these companies have gone through the period of average，and furnished indemnity at even a less cost than the larger，would seem to indicate that they are en－ titled to the same consideration，and hold an equally strong position with the larger companies，so far as safety to the insuring miller is concerned．

## INSURANCE．

The years of 1890 and 1891 will long be remembered by both，mutual insur－ ance companies and their patrons，as years of trial and tribulation．
The Farmers Alliance of Kansas has established a big fire insurance trust and appointed a farmer named H．Bowman Burton insurance commissioner．
The Mutual Union and the Associated Manufacturers Mutual Fire Insurance Companies，of Moline，Ill．（H．Cleveland， secretary），have＂thrown up the sponge．＂
The Manufacturers Mutual Fire Asso－ ciation and the National Mutual Fire As－ sociation，both of Akron，Ohio，have re tired．The inability to meet their losses is announced this week，and the Ohio
superintendent has proceeded to wind them up．
The Mississippí Valley Manufacturers＇ Mutual，of Rock Island，Ill．，and the Northwestern Mutual，of the same place， retired from business October 31st，and will be succeeded by the Northwestern Fire Insurance Company，a newly organ－ ized stock company which will take their business．The capital is $\$ 100,000$ ．The old companies，which were purely mutual， were started in 1880 ．
The somewhat famous case of Byram \＆Sullivan against the Etna Insurance Company，on trial in the Federal Court at Indianapolis，Ind．，the past week，ter－ minated Monday with a verdict for the full amount of the plaintifff＇claims，

Popular Night School．Seven Departments
Day and Evening Sessions．
in either the COMMERCIAL or SHORTHAND department，or six months 80 ，payable monthly，if de－
sired．Night school 85 a month．


85,000 ，and $\$ 100$ additional for interest As the suit against the 有tna was a tea case it is expected that the other insur－ nce companies will now come forwar and settle the claims against them，aggre gating altogether about $\$ 35,000$ ．

## FIRES．

are you insured？
At Irwin，Pa．，Oct．17，W．C．Dichey＇s oller flour mills and contents were burned Loss，$\$ 10,000$ ；insurance，$\$ 10,000$ ．
The Star grist mill，owned by W．C． Lord，Waupaca，Wis．，burned Nov． 5 $\$ 10,000$ ；insurance，$\$ 6,000$ ．
The Ceresco flouring mills，owned by W．S．Crowther，Ripon，Wis．，were des－ troyed by fire at 3 o＇clock，Nov． 1 ．The loss is $\$ 22,000$ and insurance $\$ 12,000$ ． The mills were to be shut down this week for repairs．Mr．Crowther will rebuild．
The flour mill of W．C．Richey，at Ir－ win Pa．，was destroyed by fire Oct．17， The building contained the most im－ proved machinery and several thousand bushels of grain and a great lot of flo
Tue old Cross prist mill at Clito
The old Cross grist mill at Clintonville， Pa．，owned by Hoffman \＆McKee，was
totally destroyed by fire last Tuesday af－ ternoon．An oil well rig，close by the mill，and 150 barrels of oil also went up in smoke．The fire was caused by the smokestack blowing down against the building．
On Saturday evening，Oct．17，the large and well－equipped roller flouring mill of H．C．Richey，at Irwin，Pa．，with machin－ ery and all contents，including a large amount of grain，flour and feed，was de－ stroyed by fire．The fire was discovered about 40 oclock，but was beyond control． The origin is a mystery．
The flour mill owned by Mr．John Jones，and located just at the edge of Mechanicstown，Md．，was destroyed by fire last Friday night．The interior of the mill，which is a frame structure，was a mass of flames when the fire was dis． covered．The mill had been fitted out with rollers and new machinery about a year ago．The loss is about $\$ 5,000$ on which there is an insurance of $\$ 3,000$ ．
The Advance elevator，owned by King－ man，Warren \＆Co．，Peoria，Ill．，was com pletely destroyed by fire Oct．30．There were 100,000 bushels of grain in the buil－ ding of all kinds，some of which can be saved．The loss on the building will approach $\$ 30,000$ ，and the whole will approximate 890,000 ．It is impossible now to get at the insurance of the grain but on the building there was $\$ 16,000$ divided among half a dozen companies．

Trowbridge Boiler Cleaner
涼 USING NO CHEMICALS．嚓
Jf His Cleaner has been for five years past subjected to the most severe and varied tests with artesian well and all other waters impregnated with every known element of incrustation，from the Lakes to the Gulf and on the Pacitic Coast．It has never falled to answer in every case oughly proven its entire efficacy，we offer it to the steam－using world，confident that it is the best and only sure apparatus and method for removal and prevention of scale in Pipes and Boilers，using no Chemicals．

SEAMANS \＆WHITNEY，Agents，

84 New Insurance Building，

The cotton gin burned at Sherman Texas，last week，was equipped with Grin nell automatic sprinklers．The Provi－ dence Steam and Gas Pipe Company make the following statement：＂Our man who is doing work at Sherman，Texas， telegraphed to our Chicago office，under date Oct．23，as follows ：＇The cotton gin was burned down here to－day．Sprinklers worked，but had no water．Main was cut off up town，and had no water for half an hour after the fire started．＇This， we presume，refers to the Sherman Oil and Cotton Company．We have no further information，but under the con－ dition no blame can attach to the sprink ers，and yet this will doubtless be pro claimed as＇another sprinkler failure．＇
At New Brighton，Minn．，Oct．28，the olling mills of Harris Brothers were burned．The insurance of $\$ 56,000$ wa placed as follows：Commercial Union， Imperial，Fire Association of Philadel phia，Royal，Orient，Sun Fire，each， $\mathbf{8 2 , 5 0 0}$ Providence－Washington．\＄3，000；Hekla $\$ 4,500$ ；State Investment，German of Quincy，Pennsylvania，British America Alamo，Delaware，Reliance，Spring Gar－ den，Connecticut，Citizens＇of Pittsburg， Burlington，Insurance Company of Norti America，Merchants＇，Liberty，Southern California，each $\$ 1,500$ ；Broadway Na－ tional of New York，Concordia，Manufac turers＇and Builders＇，Jersey City，Amer ican Central，German of Freeport，Niagara Obio Farmers＇，State of Iowa，Citizens of Missouri，each $\$ 10,00$ ．

## business education．

The training of the better class of business schools is of incalculable value to those whom circumstances have thrown upon their own resources，and serves as a safeguard against losses and reverses of fortune－the too frequent result of ignorance．The work of the business college is supplemental to that of other schools－public，private or parochial，and is not less important． The Spencerian Business College of Milwaukee opened upon its twenty－ ninth year last month．This institu－ tion coyfines itself strictly to business education，in which it aims to be first and foremost．Parties of either sex， contemplating attending a business university or college，should not fail to address the Spencerian Business Col－ lege of Milwaukee for a handsome il－ lustrated pamphlet circular，which is sent free and which gives much valu－ able information regarding business－ education．Students may enter at any time that may be convenient．The Spencerian College supplies business houses and offices with trained help， male or female，to suit employers．

H

## for Price List 1.

36 Chardon St．，BOSTON，MASS．

LARGE ORDER FOR TURBINES．
Eighteen large Water Wheels were re－ cently ordered of Janes Leffel \＆Co．，
Springfield，Ohio，builders of the famous James Leffel Water Wheel，by one firm． The Turbines of this large order are to be used for driving a fine Wood Pulp Mill， now under contract for construction in Wisconsin．This mill is situated near large quantities of suitable timber，and
where ample water power can be obtained．
A committee from the Kansas Millers＇ association have been in New Orleans several days and completed arrangements with railroad and steamship lines which will lead to the shipping of nearly all heir flour for Europe through New Or－ leans．The flour will be shipped at the saving of eight cents a barrel and 1,000 ， 000 more barrels of flour will go that way annually．

## grain trade notes．

The severe weather in Minnesota and the Dakotas indicates that winter has se in ，and plowing and other field work has been entirely suspended．The wheat not properly stacked probably will suffer serious injury throughout the Northwest． The aggregate output of flour at Min neapolis last week was 201,525 bbls－ veraging 33,587 bbls daily，aqainst 208， 930 bbls the previous week， 179.980 bbls for the corresponding time in 1890，and 171，400 in 1889
Wheat stocks in county elevators of Minnesota and the Dakotas increased 979,700 bushels last week and are 6,947, 000 bushels．The movement from Du－ uth by lake outward has been enormous， and at Buffalo there is said to be a block－ ade in consequence．
The Secretary of the Chicago Board of Trade reports a decrease of 113,000 bush． wheat，but an increase of $1,006,000$ bush． corn and 89,000 bush．oats．This，how－ ever，is said to be exclusive of $2,000,000$ to $2,500,000 \mathrm{bnsh}$ ．wheat on board vessels in Buffalo harbor．

## boArds of trade．

Grain Rules Changed by the Mil－ waukee Chamber of Commerce．－At the noon meeting of the Chamber of Com－ merce，Oct．21，the grain inspection rules
were amended by striking out the word were amended by striking out the word ＂rejected＂wherever it occurs．Grain which has heretofore been known as＂re－ ected＂will hereafter be called No．4． He fllowing resoluion was her duced，and will be acted upon at the next meeting：
Resolve
Resolved，That when the meetings of this chamber are called to order，the con－ tinuing of business，or engaging in con－
versation，shall hereafter be regarded as discourteous and offensive conduct．
Milwaukee Chamber of Commerge Rule Changed．－An amendement has of Conmmerce to provide for the election of new members by the board of direc－ tors instead of the full membership．It is proposed to post the names of candi－ dates as at present and to allow seven dis－ senting members the privilege of prevent－ ing an election，but a board meeting will not be necessary every time a new mem－ ber is to be taken in．

## DEALERS.

H. R. STROEMER, Grain and Provision Broker, MACON, Ga.


## TREPAGNIER \& BRES,

Provisions and Western Produce 81 MAGAZINE STREET. Near Poydras,

NEW ORLEANS
H. W. 尸ARRISH, MONTCOMERY, ALA.

## FLOUR, GRAIN, HAY,

GEO. W. PHILLIPS, Jr.
FLOUR•AND•GRAIN 83 The Rookery

OHIOAGO.

## S. S. LINTON \& CO <br> Grain Commission Merchants,

42 Board of Trade, $\quad 46$ Ohamber of Oommeroe
DULUTH.
mINNEAPOLIS.
ROSS T. SMYTH \& CO Grain and Flour Merchants,

17 Fenwick Street,
LIVERPOOL
C. CAESAR \& CO.,

Grain Exporters,
30 North Front Street,
PORTLAND, ORE.
WM. L. BOYD. $\infty$
WM. L. BOYD \& BRO.
General Commission Merchants,

## -

No. 208 Spear's Wharf, baltimore, MD.

 references: baltimore banks ANTON KUFEKE. $\begin{gathered}\text { RRANK KUFEKE. } \\ \text { RCHARD KUFEKE. }\end{gathered}$ ANTON KUFEKE \& CO., ANTON KUFEKE. Liverpool.

## Glasgow.

## Flour Merchants.

 MOÏSE BERNHEIM,Wheat Flour, Rye Flour and Wheat merchant and broker
37, Rue J. J. Rousseau, PARIS.

## CLUE LIST.

Wecan furnish the United States Millee and Milline Engineer with any of the following papers or periodicals, for one year at prices named, the money to accompan the order
Harper's Monthly and United States Miller
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Harper's Bazar, weekly, and United States Miller and Milling Engineer,
Harper's Young People, monthly, and U. S. Miller and Milling Engineer, and Milling Engineer,
St. Nicholas, monthly, and United Stutes Miller and Milling Engineer.
Scribner, monthy, and United States Miller
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United States Millor and Milling Engineer


THE TORMADO


 SEAMANS \& WHITNEY, 84 Kew Ins. Bldg. Milawaukee.


FOR SALE-The flour mill known as the Modet MILLs,", Rochester, N. Y. 200 barrels, winter and spring wheat, roller and
stone process, modern machinery in good restone process, wor power, long lease on easy
pair, good water
terms, good custom trade. Must be sold to close an estate. Apply to C. D. Kiehel and
Iohn H. Campell. Executors, 803 Wilder John H. Campiell, Expecuto
Building, Rochester, N Y.
FOR SALEE-Shakopee flour mill-must n 1886. Brick, four stories and basement.
 Elevator 25.000 bushels capacity, crib work
veneered with brick. Large local and feed veneered with brick. Large local and feed
trade. Twenty miles from Minneapolis. Ad trade. Twenty miles from Minneapoins. Ad
Cress $\begin{aligned} & \text { CHAS. G. HINDS, Assigne, } \\ & \text { Shakopee, Minn. }\end{aligned}$
FOR SALE-One of the best pieces of milling property in Northeastern lowa able. Address

Myron,Iowa.
FOR SALE-A good water power flou mill, doing a paying business. No other
flour mill within ten miles. Population of town, 4,000 . Adderess, JEROME Judson,

Sandy Hook, C
FOR SALE-The Hydraulic Roller M Mills nill, with steam power. This is a good in stment. Good reasons for selling.

FOR SALE-A 35 bbl. roller mill, both
team and water power. Good trade. team and water power.
$\begin{aligned} & \text { Address, } \\ & 22 \\ & \mathrm{~S} \text {. Mulberry trad } \\ & \text { Hagersto }\end{aligned}$

FOR SALE OR RENT--A 75 barrel, linnesota. Address,

KNUPPE \& Hartsinck, | St. Paul, Minn |
| :---: |

## SITUATIONS WANTED.

WANTED-A thorough miller and millwright desires a situation,
nished if desired. Adres,
MILLER \& MILLW RIGHT, Box 123,

WANTED. $-A$ change by a competent mil ler with 15 years' experience in good mills. ler a young married man, now managing a
Anccessful mill. One year in this position: successful mill. One year in this position;
three years in last as foreman of a 150 barrel three years
mill. Have a complete kit of tools, and do
repairing. References furnished. Corresrepairing. References furnished, Corres-
pondence solicited, from Nebraska especially. pondence solicited, from Nebraska especially
Address,
S. C. EARNEST,
ST. JosEPH, Mo.
WANTED.-A situation by an experienced miller, single man. Hard wheat country pre-
ferred. References, Guthrie Bros. Can go at once. Address ${ }^{\text {W. A. PARK, Box }}{ }^{73}{ }_{\text {SUPERIOR }}$
WANTED-Situation as miller, millwrigh or mechanical draftsman, by a graduate of a
leading German Millers; College, who has operated mill in Germany and held position
of first and second miller in America. Thor oughly understands machinery. Single
sober, reliable and can furnish good refer sober, reliaier to work for a German.
ences. Prefer
Address,
it Address, $261 \mathrm{3d}$ St., Milwaukee, Wis

HARPER'S MAGAZINE.
The Magazine will celebrate the fourth Centenary f the Discovery of America by its re-discovery,
hrough artileesgiving a more thoroughe exposition
han bas hitherto been made of the Recent Unpece.
 The Field of the next European War will be deribed in a aseries of papers on the Danube "From
ie Black Forest to the Beak Sea, by Pouiney
igelow and F. D. Millet, illustrated by Mr. Millet and Alfred Paruon\& Articlees aiso will be given on
the German, Austrian, and ltalian Armies, illustrated
by T. de Thulstrup. Mr. W. D. Howells will contribute a new novel, "A
Worid of Chance, echaracteristically American. Es
pecial promtnence will be given to short stories pecial prominence will be given to Short stories,
Which will be oontibuted by T. B. Adrich. H. H:
Davis. .. Conan Doyle, Margret Deland, Miss Wool-
Son, and other popular writers.
 class-mate and life-1
A Personal nemoir
Thackeray Ritchie.

HARPER'S PERIODICALS HARPER'S MAGAZINE.
HARPER'S WEEKLY, HARPER'S BAZAR,
HARPER'S YOUNG PEOPLE, ". $\ldots$.... 4.00
Postage Free to all Subscribers in the United State The Volumes of the $\overline{\text { Magazine begin with the Num- }}$
bers for June and December of each Year. When
 back, in neat cloth binding, will be sent by mai
post-paid on reeept of 8.00 per volume. Cot
Cases, for binding, 50 cents each - by mail, post-paic Remittances should be made by Post-office Mone
Order or Draft, to avoid cuance of loss. Newspapers are not to copy this advertisement without th
express order of Harper Brothers.
Addrees: HA HPER \& BROTHERS, New York.

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 HARPER'S YOUNG PEOPLE
Postage Poostage free to all subscribers in the United Slates,
Canada, and Merico The Volumes of the Weekly begin with the frst
Number of January of each sear. Number of January of each year. When no time is
mentioned. subscriptions will begin with the Num-
ber current at t.to time of recelpt of order.
 postage pail, or by express, free oo expense (pro)
vorder the freight does notexceed one dollar per vol-
imee), for 87.00 per volume. Cloth Cases for each volume, suitable for binding,
will be sent by mail, post-paid, on receipt of 81.00 each. Remittances should be made by Post-office Money
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## HARPER'S BAZAR.

Harper's Bazar is a journal for the home. It give
the latesi intormation with regard to the tashions

 and its last page is famous as a buaget of wit an
humor. In its weekly issues everything is inolude
ind Which is of interest to women, The serials for 188
will be writen by Waiter Bessit and William Black
Mrs. Oliphant will become a contributor. Mario

 HARPER'S BAZAR....
HARPER'S MAGAZINE HARPER'S BAZAR....
HARPER'S MAGAZINE
HARPER'S WEEKLY.. HARPER'S YOUNG PEOPLE
Postage Free to all subscribers
Canada, and Mexico,
The Volumes of the $\overline{\text { Bazar begin with the first }}$ ber
Number for January of each year. When no time Nember tod subsseriptions will begegin with
mentioned
current at the time of recelpt of order.
Bound Volumes of Harper's Bazar for three years
bak, in neat coth bliding. will be eent by mail postage pald, or by express, free or expense (pro
vided the freight doea not exceed one dollar per vol
ume) for 87.00 per volumee
Cloth Cases for each volume, suitable for binding. Hemittances should be made by Post-office Money
Hrder or Draft, to avold chane of loss. Newespapers are not to ecpy this advertisement wihout
express orver of Happer \& Brothers.

Harper's Young People.
The Thirteenth Volume of Harper's Young People
began on November 3, 1891. For the coming year

 mnother sory by one of the best known and mos
popular of arterican authors and tories in three
and four parts by Thoms Neison Pate, E. H. House


"The best weekly publication for young people in
xistence. It is edited with scrupulous care and at
 TERMS: Postage Prepaid, 82.00 Per Year. Volumes V. VIII. and XII., of Harper's Young
People, bound in colot, will be sent by mail, postuge
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 Remittances should be made by Post-office Money
Order or Draft, to avoid channee of loss. acpress order of Harper $\&$ Brothers.
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## Scribner's Magazine.

## AN FXCEPTIONAL YEAR

 The year 1891 has been marked by a greater ad-rance than any similar period since the Magazine
 irculation has risen to more than 1 tu,000. It may
ustiy be promised that the further improvenents
un the FORely incressed opportunitus.
FEXT YEAR.
 The Poor in the World's Great Cities
 pecial study and work among the poor of the great
cties The plan will incude an accoun of the con-
intion of lifo in those citios (in many lands) where
int comparison as well as for their own intrinsio inter
est. While from a scientitice poont of view, the ar
tcies will be a contribution of great importanee
the treatment will bo thoroughly populat, and the the treatment will bo thoroughly popular, and
elaborate illustrations will serve to make the pre
tation of the subject vivid as well as picturesque. ASHINGTON ALLSTON Unpublished Reminicenses and Letters of the
Yoremostamong early American painters
ber of illustrations will lend additional interest to IMPORTANT MOMENTS.
The aim of this series of very short arties is to
describe the signal occasions when sime decisive
 what of the flrst use of the Atlantic eable, the
that
frst ute of the telegraph and the telephone the first
successful experiment with ether, the night of the successful experiment with ether, the nig
Chicago tre, the scene ad the moment of the
the impeachment of Andrew Johnoson, eto.,
$\qquad$ seasonable articles, umog them being:
small Country Places, how to lay out and beautify them, by Samuel Parsons; Jr.
Fishing Lore from an Angler's Note-Book by Dr Leroy M. Yule
Mountain Station Life in New Zealand, by Sidney Dickinoin.
Racing in Australia, by Sidney Dickinson, with
Alustrations by Birge Harrison. The illustrations are made from original material.
A full prospectus appears in the Holiday Number, now ready.

CHARLES SCRIBNER'S SONS, Publishers,
THE WORLD'S FAIR
Whether you intend to visit the World's Fair in
Chicato in ing ir93 or not you will want a history of it
from the beginning. such a history is being magniflTHE EXPOSITION GRAPHIC The frst number of this great quarterly edition of The

 Eye Vilew of the Exposition Grounds and Bulldings
trom designty the Bureau of Construetion,
You will wat a copy for yourself and several for S2 Pages, with Supplement. The fnest pab-
itioatom in Ameria.
Do not fail to send for a copy or ask your News. dealer tor it. Price so Cts. (with order). Subserip-
tion, one year, $\$ 2$



The Graphic Co., Dearborn and Harrison Sts, CHICLEO An agent wanted in every town in the U.S. CLUBBING TERMS WITH THIS PAPER.


Mil WhkE, Wis.

The Century＇s Programme in 1892－
＂Life of Columbus＂Articles for
That great American periodical，The Cen－ tury，is going to outdo its own unrivaled
record in its programme for 1892，and as record in its programme for November number，new readers should com－ mence with that issue．
In this number are the opening chapters of The naulahia，
a novel by Rudyard Kipling，the famous author of＂Plain Tales from the Hills，＂writ－ ten in collaboration with an A merican writer， man and a young woman from a＂booming＂ Colorado town，who go to India，he in search of a wonderful jeweled necklace，called＂the Naulahka＂（from which the story takes its name），and she as a physician tó women． The novel describes their remarkable adven－ tures at the court of an Indian maharajah． Besides this，The Century will print three number of short stories by the best American number of sho
story－writers．
The well－known humorist Edgar W．Nye （＂Bill Nye＂）is to write a series of amusing sketches which he calls his＂autobiogra－ phies，＂the ifrst one of whe
biography of a Justice of the Peace，＂is in November．This number also contains a valuable and suggestive article on
Food－Supply of the Future，＂which every
farmer should read，to be followed by a Food－supply should rea
farmer
number of others
Of Great Practical Value to Farmers， treating especially of the relations of the
Government to the farmer，what it is doing Government to the farmer，what do．This series will in－ clude contributions from officers of and other，well－ known men will discuss＂The Farmer＇s Dis content．＂＂Co－operation，＂
A celebrated Spanish
A celebrated Spanish writer is to furnish liantly illustrated，and the publishers of The Century have arranged with the managers of
the World＇s Fair to print articles on the buildings，etc．
to appear in 1892 is
by the anthor of＂The Anglomaniacs，＂and
the magazine will contain a great deal about the metropolis during the year，－among other
things a series of illustrated articles on＂The things a series of illustrated articles on＂The
Jews in New York．＂In November is an illustrated description of＂The Players the features of the splendidly illustrated Christmas（December）number is an article To get The Century send the yearly sub－
scription price $(\$ 4.00$ to The Century Co．，
Union Square，New York，N．Y．
＇The Best of Children＇s Magazines．＇
The publishers of St．Nicholas，that famous young folks＇magazine，are offering to send a sample copy，free of charge，to any father
or mother who would like to consider the question of taking a children＇s magazine during the year to come．
Certainly if that question is up for discus－ sion in any household St．Nicholas will be the magazine selected．From its first number， the English world，and the pencils of the most famous illustrators，have been at its service．Tennyson，Longfellow，Bryant， Thomas Hughes，Whittier，Bret Harte，Bay－ ard Taylor，Mrs．Burnett，Mss A．Mitchell，George Mcdonald，Mrs． Oliphant，Professor Proctor are a few of the many great names which have been upon its list of contributors．Mrs．Mary Mapes
Dodge is the editor．Everything in it is Dodge is the editor．Everything in it is illustrated．

In 1892
there are to be serial stories by Brander Matthews，Lieutenant Robert H．Fletcher （the author of that charming book，＂Mar－
jorie and Her Papa＂），Laura E．Richards， William O．Stoddard，Charles E．Carryl（the author of＂Davy and the（obblin＂＂）and
Frances Courtenay Baylor．There will be
hort stories by Thomas Nelson Page，Mary E．Wilkins，Mary Hallock Foote，Richard
E．Walcolm Johnston，Octave Thanet，Gen．O．
Moward and many others，wither O．Howard，and many others，with papers of
travel and addenture by J．T．Trowbridge
and Liputenant Schwatka．and usefularticles on＂How Columbus Reckoned，＂＂Wililiam
the C nqueror，＂．＂Volcanoes and Earth－ quakes，＂＂Straight Lines and Circles，＂etce
In＂Strange Corners of Our Country＂the
Great American Desert，the Cliff－Dwellings rreat American Desert，the Cliff－Dwellings
of Arizona，and other interesting places，
will be descrbed，and in＂Honors to the
Flag＂and＂Boys and the National Guard＂ the patriotism of the young readers will be describe＂The Making of a Great Newspa－ per，＂and the are and incandescent

Applied Christianity
St．Nicholas teaches；－unsel fishness， is what St．Nicholas teaches；－unsel fishness，
faithfulness，courage，truthfulness－these things are taught in a hundred ways by
stories，poems，and pictures．Do you need such an assistant in your work with your ready familiar with St．Nicholas，send a pos New York，N．Y．，and ask to see a sample
copy．A year＇s subscription to St．Nicholas makes a splendid Christmas present，for

玉AIエオAモ．
BIG • FOUR • ROUTE

CHICAGO
INDIANAPOLIS
－CINCINNATI
The Only Line running the Popular Buffet
CHICAGO and CINCINNATI
The Only Line from Chieago running Solid
Vestibule Trains into Central Union Depot Vestibule Trains into Central Union Depot，
Cincinnati，where connection is made with Through Car Lines for Florida，avoiding all
able transfers．
Through Tickets via the Big Four Route

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o. a. MURRAY, D. B. MARTIN,
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This is not a puzzle．neither is it a theorem
eometry it is merelv intenced to call attention form the direet ronte between Chicago and MM
wakee and the points named above．Through Fas
raing with Pullman Vestibuled Drawing Roo rains with Pullman Vestibuled Drawing Room
Sleepers，Meals served in the＂Central＇s＂famous
Dining Cars．
For tickets，Sleeping Car reservations，time table
ete．，apply at City Ticketo Offece，99 Wisconsin street，
o at New Passenger Station．Fourth Ward Park．


## A REST．

His Grievance．－It is true now，as it was of old，that man is born to trouble．
＂I don＇t know what Smith does with his money．＇

No，I don＇t．Yesterday he was short， d he＇s short again to－day．
＂Did he want to borrow from you？＂
＂No，hang it，I wanted to borrow from him．＂－New York Press．
Unforgiven．－The pet of the house old knelt as usual to say his prayers a his mother＇s side．
＂God bless papa and mama and Uncl
Ed and－and－＂here he hesitated．
＂And Polly，＂prompted his mother．
Polly was his nurse．
＂Ma！＂he cried indignantly，looking p，＂can＇t I skip Polly？She spanked e to－day
The Tempered Wind．－＂Being ban ished to Siberia is not wholly an evil to he poor Russians．＇

Indeed！’
＂The ukase that banishes them to Si － beria relieves them of their names．They are always afterwards known by a num－

At Retail．－＂Ink is cheap．
＂I don＇t know about that．I left a penful on the back of a note once that cost me two thousand five hundred dol－ lars．＂

A Waste of Energy．－＂How is it uncle，you always smell eggs before eat－ ing them？＂
＂Io make sure they are fresh．＂
＂Goodness gracious，can＇t you tell that by tasting them？＂－Fliegende Blatter．
An Insidious Criticism．－Rev． Mr Spouter－How did you like my sermon yesterday？What did you think of my exordium and my peroration，eh ？ De Grumpe－I thought they were too far apart．－Life．
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Used as a first cleaner, before sending to the mill machines, gives splendid results. The Scourer and Brush Machine in the mill have never given us an hour's trouble in the two years they have been in use, and I would not replace them with anything I have yet seen. The Dusters' work is entirely satisfactory, doing their work well, and requiring very little attention.

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Sxiteenth Year.-No. 12.

## PERTAINING TO THE CROPS

TE world's wheat production in 1891 as compiled by Brad streets has only been exceeded once since 1887. A table of compilations which will interest all having deal ings in wheat.
"It will prove a source of some surprise to many to learn that latest available official, semi-official and unofficial estimates of the production of wheat in countries which either import or export the same in appreciable quantities furnish an aggregate fully $17,000,000$ bushels in excess of the like aggregate in 1890, and more than $61,000,000$ bushels heavier than in the crop year ending June 20, 1889. This at least is the conclusion one reaches after studying the totals which have been collected and published by no less an authority than Mr. J. E. Beerbohm, of London. The publication of recent "provisional official" or semiofficial estimates of the wheat crop in America, Russia, France, Hungary and Australia render this compilation possible. It also appears that, notwithstanding the unexpectedly heavy yields in this, a year of so great a scarcity in portions of Europe, the total production is not in excess of estimated requirements. The great deficiency in the European rye crop is characterized as "a separate and unusual factor which renders the present season one of an extraordinary character." The crop-total estimates which are in no sense based upon official data are those of Turkey, Syria and Persia. The totals of Argentine and Australasia it is believed will be more likely to fall below than to exceed the aggregates assigned them. The tabulation, in quarters (8 bushels each).
The alphabetical arrangement has advantages, of course, but we believe the meaning of the year's shortages of wheat may be the better appreciated by arrang ing the following totals geographically as follows:


Grand Totals, qr'trs. $200,300,0000287,160,000$
The features of this table are the unprecedentedly short crops in Europe and the transfer of power to supply wheat from the old world to the new. The
change in this respect is to be better seen
in the following record of the crops i European and non-Europeon countries since 1887, to which is added the (Beerbohm's) estimated normal consumption of the world ( 000 omitted):
Production
Ruropean
Non-Europe

## Tstimated

$\begin{array}{llllll} \\ \text { sumption...272.250 } & 270,500 & 269,750 & 288,000 & 266,250\end{array}$

It is admitted that it is somewhat arbitrary to assume that the consumption in the world increases annually by $1,750,000$ quarters, but 'this is the figure implied y the natural increase of the population, ther conditions being equal.
The years of 'plenty' ended, accordng to this exhibit, in 1888 . Several years previous to 1888, and notably 1887, were 'fat' years, and left large reserves upon which a considerable drain has evidently been made. The main point, however, is that, according to computations and past experience, the present year's wheat crop is barely equal to the estimated current consumption; while the rye crop this year, according to the last Russian official estimate $(11,000,000$ quarters larger than the one issued last August), is 28,000,000 quarters less than last year, and $8,000,000$ quarters less than in 1889. Under these circumstances the present apparent abundance of wheat can only be considered temporary, having been the result of active European buyng during the past three or four months. The delay in the prohibition of exports of wheat from Russia induced extraordinarily large shipments from that country so that the quantity of Russian wheat now cut off from importing countries would not exceed $2,000,000$ quarters, $16,000,000$ bushels. The supply and demand, taking the season through, is, however, 'such that the sentimental effect of the prohibition of Russian exports, especially on the American markets,' it is declared, should 'be very greatAmerica would indeed then be the maker of wheat prices.' Meantime, adds Beerbohm, 'foreign wheat is in too liberal supply for any advance to make much progress,' even in America, where prices are now being made."
The failure of the foreign rye crop alone makes it possible for America to dictate prices to foreign buyers. In view of the fact that Russia's crop of wheat this year is but $4,000,000$ quarters less than her largest yield-any one yearand being the largest wheat exporter of any country excepting the United States, it would seem that the care of her starving poor was wholly and completely under her own control-notwithstanding a short rye crop.

## PROGRESS OF THE METRIC SYSTEM.



E project of a uniform system of weights and measures for all civilized nations is one which, while not attracting a great
degree of attention on the part of the people, will always continue to be pressed by thoughtful and progressive men until its final adoption, which is probably only a matter of time. Uniformity in the standards which register amounts and values in the exchanges of
extended system of commerce will be so necessary, that it may be regarded as sure to be ultimately brought about. When we come to injure what existing system presents the best chance of ultimate adaption, we are met by the fact that while some of the most important commercial states, as the United States and Great Britain, use one system in their ordinary transactions, they have made another, the metric system, optional, as have some other states, while the grea majority of the civilized nations of the world have made the latter system obliga tory. The states which have made the use of the metric system obligatory are Germany, Austria-Hungary, Belgium, the Argentine Republic, Spain, France, Italy Peru, Portugal, Roumania, Servia Sweden, Norway, Siwitzerland and Venezuela. The countries which have made the use of the metric system optional are the United States, Great Britian and Turkey, while the system has not yet been legalized in Russia and Denmark. The weight of authority, so to speak, may therefore be said to be in favor of the adoption of the metric system, and it is this system which is most energetically advocated, and with reason, when the pro ject of a uniform system of weights and measures is discussed.

The use of the metric system in the United States has been optional for a long time, but its adoption bas been confined mainly to governmental departments and scientific bodies. It is already used in the marine hospital service, in the foreign business of the post office, in the Coast and Geodetic Survey, and, to some extent, in the Geological Survey, the Mississippi river survey, the Mint, the international weather charts and bulletins of the United States-Signal Service and the reports of the United States Census of 1880. The International American Conference, in a unanimously adopted report on weights and measures, recommended the adoption of the metric system by the United States, and Secretary Blaine, in a letter accompanying this report, which was transmitted to Congress by the President, recommended the adoption of the system in the customs service. The Secretary submitted a draft of a bill for that purpose, which provided that on and after a certain date the metric system of weights and measures authorized by the act of Congress approved July 28, 1866, should be used exclusively in the customs service of the United States. The subject has recently been brought again to the public attention through the circulation of a petition prepared by the American Metrological Society, asking Congress to enact such a measure, to go into effect on July 1,1893 . This petition the society desires to have numerously signed and transmitted by the signers to the represent atives of their districts in Congress. This petition may be heard from in the next Congress.

There are always difficulties in the way of the adoption of a new system of any kind. The vis inertio is a powerful force in human nature; it is always so much easier to go on in the accustomed paths than to make improvements. At the same time the advantages of the metric system are so great that they bid fair to overcome
in the first place is decimal, and has the advantage for purposes of computation that decimal systems have over others based on a different principle. Again, the metric units of length, bulk, weight, etc., are simply related to each other, a circumstance which gives the system a geat advantage over the irregularly related or unrelated units of other systems. Finally, he system has become an international one, and intercourse between nations has increased to such an extent that it is now as important to have the same weights and measures used in different countries as it was a century ago to have the same weights and measures used in different parts of the same country
Naturally enough, the first step in the introduction of the metric system was the making its adoption optional. The next step would be the making the use of the system in the government service ex clusive, as was proposed in the enactment recommended by Secretary Blaine referred to above, and as is contemplated in the practically identical measure pressed for adoption by the Metrological Society. The adoption of the metric system by the government offices would not be very difficult and would not require a great amount of time; indeed the outside limit fixed by he department officials who have been consulted is twelve years, which is the ime estimated for the complete introducion of the system into the customs and internal revenue service. In most of the departments it would require only about two years or less. The adoption of the sistem by the government in the customs service would be of the greatest importance to the progress of the metric system in the United States. It is not to be doubted that its adoption by the government would be followed shortly by its adoption by chambers of commerce boards of trade, manufacturing associations and other voluntary societies and individuals, from which point its ultimate and complete adoption would be only a matter of time.

## electaical.

"The next great field lying ready to be cultivated by electrical engineers," said a thoughtful man, "is that of equipping large mills and manufactories with electric power. It's bound to come. Just consider the possibilities in such a line of work."-The Electrical Review.
Ir is stated that Mr. Edison owns beween 400 and 500 patents. When experimenting, he wears a long, loose frock of checked gingham, reaching from his hin to his feet.
The janitor of a building in this city touched a live wire, which was not properly insulated, it burned a ragged hole through his waistcoat, and rubbed against his watch. He received a slight shock, and, upon recovering, looked for his watch. The works had been thrown out from the case, and irregular scallopshaped holes were burned in the front and back of the case. Around the edges the melted gold had formed small globules, and similar globules were found on the floor. The works of the watch were so completely magnetized that they are worthless.-The Engineer, New York Oity.


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 PATEIT IMPROVED COOKLE MACHINESImmense increase of trade without traveling agents．OUR COMPETITORS GROSSLY ADVERTISING and imitating our STEEL REELS，we have decided to reduce our prices still more．Our Machines are working satisfactorily in the fol－ lowing BIC MILLS IN MINNEAPOLIS
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The Phoenix Mill；the Jupiter Mill；the Gem Mill；the Daisy Mill and the Duluth Mill．
to be sure of getting the best machine buy the genuine
＂PRINZ＂IMPROVED STEEL COCKLE REEL．
WRITE FOR OIROULAR AND REDUOED PRIOE LIST TO THE PRINZ \＆RAU MFG，CO．，MILWAUKEE，WIS．

# THE $\div$ DUNLAP $\div$ BOLT 嚓 <br> 凉 

 ．．．．．．．．．．IT IS NOT A CENTRIFUGAL REEL．．．．．．．．．．． ＋IT IS A BOLTER AND DRESSER．＋THE BRADFORD MILL OO CinOOKLYN，N．Y．，Aug．11，＇91． Dear Sirs：Please Ship as soon as possible， 4 Dunlap Bolts the same as the last one．This is abont the＂Boss＂Bolt after all and we will want more of them after awhile．Yours truly， KING＇S CO．MILLING CO． John Harvey，Head Miller．

THE BRADFORD MILL OO CincingNKER HILL，ILL．，May 28，＇91． of your No． 3 Dunlan Bour Mr．Deobold has remodeled our mill using two running a week and find we can make 50 par Pant Patent， 42 per cent Extra Fancy and 8 per cent Low Grade．Our mill was rebuilt two years ago and it has never given satisfactory results until now．Youry very truly，


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 $\underset{\substack{\text { Atforney at Law } \\ \text { And Solitor of }}}{\substack{\text { PTSNTSN }}}$ 107 Wisoonsin street， 107 Wisconsin Street，

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6－1y Practices in all United states Courts． <br>
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## United States Miller

## S. H. Seamans, Publisher.

W. F. Whitney,

Special Agent.

## PUBLISHED MONTHLY.

Offiog, $36 \& 37$ Loan \& Trust bldo., Milwauker.
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## MILW AUKEE, DECEMBER, 1891.

We respectfully request our readers when hey write to persons or firms advertising in Was seen in the UNITED STATES MILLER Gou will thereby oblige not only this paper but the advertisers.

## MILWAUKEE AMUSEMENTS.

A VIDSON OPERA HOUSE-
BIJOU THEATER-Every even
BIJOU THEATER-Every even
day and Sunday matinees.
day and Sunday matinees. matinees. OF MUSIC-Every evening and usual
TANDARD THEATER-Every evening and TANDARD THEATER-Every evening and usual
matinees. GERMAN STADT THEA TER-Regular perfor.
Wednesday, Friday and Sunday evenings.
LA YTON ARTGALLER $Y-$ Freee Tuesesays, Thursdays
and Saturdays. Admission 25 cents on Wednesdays and Fridays.
PUBLIC M USE UM-Open daily. Exposition building Visitors to Milwaukee in either summer or winter
cannot fail to flad amusements suited to their taste.

THE ANNUAL MEETING of the Millers' National Insurance Company will held at the office of the Company, in Chicago, on the third Wednesday, the twentieth of January, at which time three directors will be elected to take the place of the same number whose terms of office will expire.

Wreceived a very pleasant call from Mr. Mr. B. F. Ryer, Western manager for Huntley, Cranson \& Hammond, Silver Creek, N. Y., the wideawake manufacturers of scourers, sep-
arators and other first-class milling machinery.

Wwish to say to the operative millers throughout the country, both head millers and their subordinates, that we shall be pleased to receive from them communications pertaining to their craft. Items of news, changes of location, their experience with the various special milling machines now upon the market, and, in short, all items of general interest that may come under their observation or experience.
NATIONAL. TRANSPORTATION ASSOCIATION.
WORK of the National Transportation of which the Millers' Association is a member, is beginning to bear fruit. The Western Traffic Association, containing all the principal railways west of Chicago, has invited a conference of the bill of lading committee of the National Transportation Association, of which the Millers' National Association's secretary is a member, at a meeting in Chicago on December 16th, to discuss the uniform bill of lading which these lines propose to put in general use in the near future. The form proposed by the railways is almost identical with that heretofore presented and urged by the National Transportation Association.
THE ONE-MAN POWER IN MUTUAL IN surance management.
 thimble nigger:-"Now you see it, now you don't." Who gobbles the ripened fruit?
As we go to press a dispatch announces that Philander B. Armstrong, manager, president and chief organizer of what is known as the "Armstrong Trio," composed of the Mutual Fire Association and Armstrong Fire Insurance companies, of New York, had reinsured their entire business,
aggregating $8200,000,000-$ a reserve amounting to $\$ 1,000,000$ - with the Lancashire, of Manchester, Log. The transaction was celebrated by a men in New York last evening by Mr. Armstrong. There is a significance attaching to this deal that millers will do well to heed.

## MILLERS' TRACING BUREAU

E bureau is still prospering, new members are joining from time to time. There is a gradual increase in volme of business each month over each preceding month amounting to about 20
per cent. The total number of sacks traced during the current month will reach at least two hundred thousand. An average of from seventeen to eighteen days is being maintained from time of shipment to date of sailing. The secretary is receiving highly commendatory letters from the patrons of the bureau, and the European flour buyers are beginning to appreciate the benefits of having their flour traced. Several communications to this effect have been received from British buyers; one prominent firm returned their sailing notice to shipper endorsed across the face: "This commends itself to us. It is mak ing good time also."
There are now over twenty of the heavies vestern flour exporters reporting all thei shipments to the bureau for tracing service,
besides a number of smaller and occasional besides a number of smaller and occasiona demand from members of the association for tracing services upon domestic shipments; and the executive committee of the National Assoctation hope to make arrangements for such services early in the new year.

## IMSURANCE

$\mathrm{T}_{\mathrm{min}}^{\mathrm{HI}}$HE proposed Northwestern Fire In surance Company, of Rock Island, Ill., contemplated by W. B. Ferguson, secretary late Mississippi Valley, has ailed to materialize.
The burning of the North Star Boot and Shoe Company's plant at Minneapolis, equipped with the Walworth sprinkler system, is another experience for sprinkler companies to heed. Will they profit by it? No sprinkler company ought to allow a plant to be equipped with their devices, except upon their own plans and under the direct supervision of an exper in their employ. If they do, they should not complain if their reputation is badly scorched, when the equipment is burned in the building it was expected to protect. And any fire insurance company writing a double line on a sprinkled risk at half rate or less, by reason of the statement that "the risk is sprinkled" without a thorough examination by a competent inspector, should not complain when the loss comes through some defect in the equipment.

A plant properly equipped with automatic sprinklers must show good results.
A test of the Grinnell equipment at the works of the Cataract Manufacturing Company, Niagara Falls, N. Y., a few days since, with an air pressure on pipe of twenty pounds and a water main pressure of fifty pounds per square inch, water was flowing through a head in one corner of the building in forty-five seconds after it had been automatically let into the system. In the second mill with air pressure at twenty-five pounds the fire was out in one minute and fifty seconds from the time it started.

## MILLERS' NATIONAL ASSOCIATION.

$T \mathrm{HE}$ affairs of the association for the past year seem to have been kept wel in hand. Everything that has arisen of a nature requiring aid of an organization has been promptly and effectively attended to; and we think members will be fully satisfied when they receive the report of the executive committee, which will show that the affairs of the association have not been neglected.
Few members are aware of the fact that
theassociation hasyetseveral patent claims in which the members are somewhat interested, viz: the purifier suit of Russen vs corrugated rolls; the Detwiller claims which have been contested by the Pennsylvania Millers' Association for some years at an expense of about ten dollars per unit capacity; and the Cyclone Dust Collector patents. It is not expected these suits will cost the membership a large outlay, yet neglect on the part of the executive committee would result in some cases to large royalties being demanded and considerable annoyance.
The committee have taken up a numer claims on the part of members, and suits have been entered in the case of the Gem Milling Co. against the Anchor line
for unreasonable delay and damages sustained on an export shipment to Glasgow Steps have also been taken in the case of Stern \& Son against W. A. Green, of Providence, R. I., for cancellation of an order for flour without valid reasons. This will result in an early settlement. That more such cases have not been taken in hand by the committee is simply by reason o the fact that members have not presented their complaints.
INSURANGE COMPANIES RETIRED.-THE OUTLOOK NOT FLATTERING.

FRE insurance companies, both stock and mutual, are heing retired at a rapid rate. The year 1891 will long be remembered as a Black Friday year in insurance circles. A number of promient stock companies have been reinsured during the month, and quite a number are reported as contemplating similar action. Among the mutuals added to the long list "gone before" may be named the Hudson River Fire and Marine, of Jersey City, N. J., managed by Geo. B. Delamator, formerly of the Reliance, of Dubuque; the Woudworkers Mutual, of Winona, Minn., a sprinkler company, re-insured with the Mutual Fire, of New York; State Mutual, of Hyde Park, near Chicago retired. We think, a a rough estimate, over sixty stock and mutual fire insurance companies have been withdrawn from the field within a year. Flour mills cannot be at fault for such disastrous showing. The fact that al Mill Mutuals, writing nothing but mil risks, have "held the fort" in every in tance, shows conclusively that we mus o make a profitable showing. We an ticipate that the coming annual state ments will make interesting reading fo those interested in such literature. There certainly is little or no inducemen
Tal to inyest in insurance stocks.
top writing on account of heavy losses recently.
FOOD MANUFACTURERS' ASSOCIATION.
$6 T$ HE board of directors of the Food
Manufacturers' Association gave the pess a reception at Madison Squar Garden, New York, on Saturday after noon, the 5 th inst. The reception was well attended.
The object, as stated by the secretary of the association, "was to establish close and cordial relations between the press and the managers of the food exposition which it is proposed to hold at Madison Square Garden, New York, in October, 1892, under the auspices of the Food Manufacturers' Association.
"The real importance and magnitude
of this great work upon the part of the
association was not clearly understood by
the press until this meeting, when it wa made perfectly plain by the gentlemen present who are interested in the underaking.
"Mr. Johnson, of The New England Grocer, responded for his section of the country, stating that he believed the food movement should be conducted by the food manufacturers themselves; and that food manufacturers themselves; and effort made by the latter towards im-
proving our food supplies would not only redound to the benefit of the manufac turers, but to the grocers as well, the in terests of the two being so closely allied that the grocery trade could not but be greatly benefited by the coming exposition. Other speakers were Mr. C. F Bussing, editor Retail Grocer's Advocate, Mr. Paul V. Flynn, editor New Jersey Trade Review; etc."
While we are not fully advised as to he details regarding the objects of this association, if it will take in hand the various adulterations in food products it will have a great field in which to operate, and be the means of doing an unlimited amount of good.
RETALIATION BETWEEN BRITISH AMERICAN PROVINCES.

OUR neighbors, the Canadian millers, count of the action taken by Newfoundland. She having imposed an import duty of 50 cents per barrel on Canadian lour. Just as the meeting of the Dominion Millers' association had adjourned a dispatch was received from Messrs. Campbell \& Stevens, of Chatham one of the largest milling firms in Western Canada, which read as follows: "Cancel all Newfoundland businese. Present action of our government taxing Newfoundland goods has induced them to put 50 cents differential duty agains Canadian flour." On receipt of this dispatch President Goldin, of the Dominion Millers' Association, called together some of the members that had not yet left the city, and they adopted the following: "Resolved, That the secretary be e quested to ascertain from our Government whether the increased duty on flour into Newfoundland is specialiy directed against Canadian flour. If so, that the Executive Committee be instructed to take steps at once to lay our case before the Government with a view of having he increased duty put back.
Mr. Carruthers said: "During the past four we have shipped 30,000 barrels of flour to Newfoundland for the Norris Mills of St. Catherines. This extra duty will simply prevent us from competing with American flour in that market, and kill our flour trade with Newfoundland completely. St. Louis flour is now our principal competitor. Flour is the
largest article imported into Newfoundand from Canada, and this retaliation hits us, therefore, in the worst place it possibly could, which is, no doubt, the intention of the Newfoundland government."

## the north star fire.

REGARDING the North Star Boot and Shoe Company loss, Mr. O. B. Hall of the Walworth Manufacturing Company, says: "We have no positive nowledge regarding the condition of the prinklers in the North Star Boot and Shoe Company's building. The equipment was installed by a concern in St. Paul. It had for a source of supply a small iron tank, which was two-thirds full of water and one-third of compressed air. This in cold weather, of course, was held back by an air machine. It is our opinion that if everything was in operative condition at the time of the fire, it would be a very unusual occurrence to have water enough in the tank to completely fill the pipes, to say nothing of ejecting any on the fire. Will write you more fully as soon as we hear from them direct. The equipment is hardly worthy of any consideration as an automatio sprinkler protection, but in no sense can they blame the Walworth sprinkler, in this case or any other, and our competitors may be as lively as they please in misrepresenting the facts; until they can show us that the Walworth sprinkler is not operative after being installed any length of time, we shall claim great superiority over theirs."


ORGANIZATION OF MILLERS IN THE UNITED STATES.


## CORRESPONDENCE.

## LThe following letters are all from our own special correspondents, and reflect their views and the views

## our buffalo Letter.

Mr. Riliey Pratt's Elevator Experience Not to be Repeated If He Knows It-Mr. Gatchell,
Late superintendent of Buffalo Elevators,
Made comminsioner of Public Works Made Comminsioner of pubse Wrikst
schioenkop- Mathews et al. vs. Wright.
The Interatonal Elevator Sold to E. W. Evans for $\$ 3, \mathbf{3 0 0 0 - A n t}$ still Another Buf-
falo Suit on thio Garpet-New Manager for
far Well sold-Geo

MRILEY PRATT knows all about elevators now,
having been baptized and having been baptized and
into the mysteries conduly initiated into live transfer-house, such as Buffalo boasts of-not the Chicago kind, with which he is probably familiar. It happened all in an hour on a bright day when the creek was jammed full of vessels. Riley wanted to see the jam, and also expressed a desire to go through City Elevator A. In company with his
friend O'Brien they were piloted through the first door all right, but ten feet inside it was dark as a pocket. Superintendent Prouty led the way, O'Brien next, and Pratt followed, stepping high as a turkey in wheat stubble.

As they neared the first "conveyor" the superintendent in his usual curt manner called out, "step high and keep to the left." The next second Riley was being conveyed along miles an hour, having fallen through the bridge. Luckily for Pratt the big superintendent is an active, strong man, for no sooner did he hear the sound of a falling body then he knew what had happened and starting on a keen jump he caught
the elegant form of Riley just at the edge of the pit into which he would have been dashed if Prouty's arm or the seat of Pratt's pants had given out-like so much brought out into the light for examina tion. "Is this the Primrose of the Ex change I walked down with?" asked O'Brien. "Damn you ; didn't I tell you o keep to the left and step high? thundered the superintendent. Pratt paused, his eyes rolled, his appearance betokened murder! But he paused again, and to this second of cool contemplation the two gentlemen undoubtedly owe their lives, for instead of the bursting the poor dust-begrimed these cruel taunts meekly remarked to himself : "I did as I was told, stepped high and kept to the left. Trolly cars run fast ; conveyors run fast ; I must be slow." It took an hour to get the dust out of his clothes, and during that time nor until he reached the hotel did he utter a word.

Mr. George S. Gatchell, manager of the Associated Elevators, has been appointed to the position of commissioner of public works. Mr. Gatchell is a country boy, and has the usual luck of a hayseed in the city.
fact the only man present who had the larger amount of grain in store here for grit to buy the "white elephant." Not millers than ever before in the history of another in the city would bave thought Buffalo. Such is the case to-day, but of purchasing it at the time. The elevator was handed over to Mr. Eames for the sum of $\$ 73,000$, which covered all claims. As soon as the name of the purchaser was announced everybody looked surprised, and grain men began to figure on the big plum which had slipped out of their mouths. The next morning Mr. Eames was offered $\$ 30,000$ for his bargain. He refused this, and the following day turned over a half interest to Mr. McIntyre of New York at a price not mentioned. Its another lesson that the "shoemaker should stick to his last." A long time will elapse before the legal fraternaty will again indulge in elevator property. This storehouse cost twice the sum paid by Mr. Eames, and is as good as new with every prospect of

The suit of George T. Chester, miller of Lockport, against Daniel E. Newhall comes up again this week in Buffalo. The case is one growing out of a series of deals in wheat dating back to 1889 , when the crop of No. 1 ot 1888 went up to $\$ 1.45$ per bushel. Mr. Chester, who is pleading the baby act, was in a position to close out his trades with a profit of $\$ 70,000$, and was advised to do so, but he knew better like all young traders. His loss was at least $\$ 125,000$, and the present suit is to prevent the foreclosure of a $\$ 30,000$ mortgage held by Mr. Newhall against the mill. Some of the wheat which cost this young man $\$ 1.30$ was sold at 92 cents per bushel. The claim of a gambling debt is too small for our judges, and Mr Newhall is certain of winning tise suit.
Mr. Wm. J. Rairdon has been selected from a number of applicants for manage of the Queen City elevators, and a good choice it is. Mr. Rairdon is a bright young business man with the necessary push bred into him to make a success o these elevators, whish is something tha could not be said of them heretofore His father is well known in Chicago insur nce circles.
The Buffalo millers having the wheat cargo sunk with the steamer Brazil received 106 per bushel for it. There is ome profit in it for the millers, quite bit more than grinding it, still Schoell kopff \& Mathews and A. R. James would prefer the wheat as it was a selected cargo.
The mills in this section are all going full time but on old orders and many of them are still behind a month or two, Urban's mills being among the latter. This new mill is turning out an exceedingly fine brand of flour. Buyers say it far exceeds anything they have used thus far. Mr. Urban is in receipt of many congratulatory letters. Prices are satisfactory, but sellers find it hard work to get new orders at $\$ 5.10 @ 5.20$ for patent spring and 5.00 for winter.

Competition is going to be brisk for the city trade. Pillsbury is in the field making fresh effort to secure new customers. C. J. Bork has moved his office from Attica to Buffalo leaving only a clerk at the mill. The Akron mills have engaged W. P. Andrews to drum up trade for them and Harvey \& Henry are also working like beavers to add new buyers for their best brands.
It was quite a stroke of good business on the part of Mr. C. W. Newman to whom the credit is given of securing the services of so able a man as Mr. Andrews. Wm . P. is known in every grain market in this country as an active honest business man with a thorough knowledge of the trade in all its branches. I predict he will make the best agent the Newman, could have found in the state.

There is something like 300,000 barrels of store here, all receipts, by lake. This is being drawn upon by the roads as fast as possible, and now that the Duluth trade is closed no futher accumulation is likely In my last letter I said we would have a
with all this vast quantity the offerings are very light. An order for 5 boatloads of No. 1 hard could not be filled any day last week, in fact there was only 15,000 bushels for sale in an all rail house. Duluth wheat sellers, to a man, were out of the market this week. It begins to look as if higher prices are expected.
The receipts of Manitnba wheat from Fort Williams for the season foots up $1,600,000$ bushels. This is all destined for Scotland and England via New York and goes in bond. The custom house inspectors have had their hands full taking care of it as every cargo is closely watched until the last car load is under way. Much additional help was engaged by collector Morgan who has done his best to give this wheat quick dispatch. Still the Canadians grumble at delays of a day or two, when a large number of America vessels have been loosing from $\$ 500$ to 8700 per day for a week or 10 days.
Complaints of poor quality of spring flour from the new crop have almost ceased, millers as a rule having caught on to the trouble and it is now said the product is superior to old wheat flour.
Milfeed is both scarce and dull. Spring and winter bran are quoted at $\$ 17.75 @$ 18.00 with little to be had at either price. Rye flour is selling at $\$ 5.25 @ 5.50$ per bl in this market. Such a price was never known before. The difference between spring patent and rye has never been more than $\$ 1.75$ and now it is above the price of patent.
The 300,000 bushels of Dalrymple wheat in store here has not yet been touched. Sandrock has always handled that wheat and made money for its owners. Rochester millers have been in the city looking for engines to run their mills. The far-famed Genesee river has been steadily dwindling in power and in spite of a startling discovery, viz : that the water was being diverted into other streams the time is not far distant when steam power will turn the rolls in all the mills of Rochester
The receipts of grain and flour at this port for the season to date show the enormous increase of $45,000,000$ bushels, estimating flour as wheat, over last year which was the largest by 3000,000 on record. The figures are grain $29,000,000$ bushels, flour $32,000,000$ bushels.
During the past two weeks not less than ,000,000 bushels of grain, and as high as $4,500,000$ bushels were afloat in the creek here on any day. How to dispose of this with the railroads short of cars, the canal closed, and the elevators almost full has kept the grain trade busy thinking and set the elevator men wild. A short cold snap would have settled the question for them, but it did not come. Storage room was at a premium, and as high as $\$ 500$ was paid by vessel captains for the priviledge of going to an elevator first. The present jam is not without its lesson. It will work good to the canal by teaching the shippers that the railroads at this point cannot be depended upon to move the crop in two months. The canal would have helped the matter considerably even during the last two weeks, but the railroads refused to let go of a single bushel. The blockade will result in serious losses and involve no end of litigation. The poor canal did not hold its own during the season, the amount of grain taken being $4,000,000$ less than last year. While the railroads carried $66,000,000$ the canal only took out $43,000,000$ during the same time.
Assistant Secretary Daly, of the Merchants' Exchange, will send in his resignation on the first of January. Playing second fiddle to a poor first is not in his line and his services can command more money besides some slight appreciation anywhere else than in the Merchants ${ }^{3}$ Exchange. His illness and that of the xchange. His ilness and that of the
months, showed the exchange that both of these gentlemen could be dispensed with. The next board of trustees must show a reduction in expenses or the financial standing of the exchange will suffer. Thirty-four certificates were sold at action on the 1st inst. at an average price of $\$ 30.00$ each. This looks very sick.
Mr. George Urban has been elected chairman of the Republican county com mittee. This position is considered a great honor among politicians. Whether Mr. Urban appreciates the office may be inferred from the following answer said o have been made to a friend who, while congratulating, asked why he had gone back into politics again: "Well," replied gentle George, "I did it to complete the deal. You know that when a man ac epts the position of chairman of the Re publican county committee he is buried politically, beyond all possibility of resurrection." Mr. Urban is too much o a family man to take kindly to politica life.
Buffalo, Dec. 10, 1891.

## OUR NEW YORK LETTER.

Breadstuff-The Russian Scare Over-Inter
state Commerce Regulations Not Being O

THE breadstuffs markets have undergone considerable change during the past month, but have left no general or decided gains either with the bulls or bears. The Russian scarecrow that dominated the markets, both of Europe and America, the previous month has had little or no effect on prices, since the prohibition of wheat exports from that countryं actually went into force. This was the first disappointment the European bulls had met with on this crop, since the beginning of which, they had played the bull side of these markets so successfully. This was to have been their highest trump card, as it was their last, and all Europe loaded up in advance of the promulgation of the ukase, expecting that America would do the bulling afterwards, and enable the other side to unload at a big profit. But the bear elements in the situation have all been on this side of the water this year, and the bull influences on the other side; while the buyers have been subject to the latter and the sellers to the former. Hence the anomaly of the bulls being the buyers, and the bears the sellers on this crop, is what has been beating the European longs of late, as it did the Chicago skorts on the early and enormous movement of the new crops, for prices then advanced; whereas they have lately declined on the smallest receipts of the season.

As a result the American and European markets have become suspicious of each other, and have sympathized more closely than they did on the advance of last summer. In fact they have been playing at hide and seek, each waiting for the other to do the bulling; and running away from each other on every decline. This is the result of the continued and heavy arrivals of all kinds of grain, excepting corn, on the heavy forward purchases of the previous six months, until nearly every market in Europe has been buried under oversupplies and increasing stocks, which they are compelled to carry until consumption shall overtake them

Until after the holidays, therefore, Europe has been practically out of our markets as a buyer except to fill all contracts, against which options had been brought months ago, and resold or exchanged for the spot wheat as the shipments become due.
This has been the chief business in the export lines for the past month, except in certain grades of flour which have been taken moderately, for both English and continental markets. These include spring patents and Bakers' extras at abou $\$ 5.00$ in sacks for the former and $\$ 4.30 @$ assured.
4.40 for the latter; while winter straights in sacks have brought 84.50@4.60 and clear winter 84.35@4.45. No. 1 winter has also been taken fairly at $\$ 4.00 @ 4.10$ in sacks, while all grades below, and especially spring, have been neglected, until they have accumulated for the first time on this crop, and declined more than the medium and higher grades, which had been sold ahead by the western mills, direct to the other side, well into January and even February. This has been especially true of the merchant mills throughout the spring wheat sections which have export connections.
The result has been a smaller expor rade in this market on this crop than on the short crop of last year, so far as the flour trade has been concerned. In fact the home trade has been smaller than a year ago. for the reason that western mills have sold enough of their high grades for export to enable them to dispose of the balance of their product to interior and astern markets, at 15 to 25 cents per barrel more than the New York price.
One of our largest receivers made the statement that "were it not for their country mills they would not have stock nough to supply their home trade." anvass of our larger commission house found this state of affairs to be general xcept in the case of agents of a
he large syndicate mills; and it showed that as a whole the flour sold on the New York market has been less on this large crop than it was on the last short crop The reasons given for this are various the chief being that through rates of reight from the west to Europe are said to be sufficiently lower than rail rates to New York and ocean rates hence to Europe combined to enable the western mills to sell direct, on the other side, on c. i. f. terms, at 10 to 20 cents per barrel ore than to send them here to be sol to local shippers. This is claimed to be and of that commission's decision of two years ago, in favor of the Produce Exchange against the Trunk Lines which were instructed that the through rate must be equal to the inland rate to the seaboard and the ocean rate added. But decision and law alike are said to be dead letter and the railroads as usual, law unto themselves. Others say that he law is technically observed by the railroads themselves, who charge full rates to the seaboard, but that the ocea steamship lines pay a rebate on the othe side to the importers there, which is out side the jurisdiction of our laws, and that the railroads here stand their proportion.

But a more serious condition of affairs has been produced in the grain trade, by the car famine in the west, owing to which receivers and c.i.f. buyers here are "in a hole," on their deliveries to exporters, as the Trunk Lines gave notice soon after the first of this month or on the close of navigation that they could furnish no more cars for grain to the seaboard :rom Chicago and other interior points until further notice. On inquiry of the Trunk Lines here it is found that most of them have already contracted for all the grain they can haul to the sea board until into February. They charge the fault on the western roads which take their cars and keep them for local trafic in the west and south, instead of return ing them loaded with grain to their owners, the Trunk Lines, with seaboard shipments.

Damage has been charged on their cars borrowed and kept without leave by the poorer western roads and those south which are unable to buy new rolling stock. If the older and wealthier Trunk Lines could get their own cars back they claim they should be able to accommodate even the immense grain movement of this year. Hence they have not until recently ordered the new cars they should have ordered three months ago, when the short crops in Europe and large ones here were

The squeeze here in November corn culminated in an 80 c cash market and some pretty severe losses though the price of old corn has not fallen below 70 c ince, so small is the supply.
The Field-Lindley-Weichers failure had some mysterious connection with this November corner, it was believed, though denied, as well as with the one attempted in September, and unsuccessful. But the mystery of the failure is rather growing deeper than clearer with the lapse of over a week without any statement whatever from the firm or its assignee.
City mills have not changed their stereotyped price of $\$ 5.25$ for West India brands and \$5.50@5.65 for patents, for over three months, except when a break was reported to have been made by Jones $\&$ Co. to get into some new market, when a few thousand barrels were said to have been sold at $\$ 5.00$. They are getting 90 c for their feed.

New York, December 14, 1891.

## OUR ST. LOUIS LETTER.

St. Louis Letter.-Mississippi River Improve-

约HE Mississippi river improve ment question between Mayor Noonan and the Merchant's Exchange has not improved any. The subcommittee of the Merchant's Exchange met last week and after the work of organization was finished the subject of a permanent representation at Washington was taken up. No selection was decided upon, but a majority of the committee favored the appointment of some excongressman. The meeting adjourned subject to the call of the chairman.
Mayor Noonan does not regard his coperation with the Merchant's Exchange iver committee as a promise to do nothing towards improving the river without consulting them, for only a few
days ago he addreessed a letter to Major A. M. Miller of the United States Engineers asking him to prepare a projec and estimate of the cost of the work on proposed improvements made by himself and other municipal members.

A meeting of the North Missouri Miller Association was held at Moberly last Tuesday. Reports of the condition of he wheat crop amount in miller's hands and the amount yet held back were submitted. Out of twenty reports, two ported in crop prospects and eighteen average. The average was said to be about the same as last year, stock on hand was placed at 437,000 bushels in millers hands and 17 per cent of crop unmarketed. These reports. were from some fourteen different counties.

## wheat

Receipts heavy for the season of the
ear and keeping up to a big average even or this record-breaking crop of 1891. We received 496,065 bushels the past week against 451,693 bushels last week, while arrivals so far this year amount to 23,290, 715 bushels, against $10,864,000$ bushels corresponding time last year. Shipments from this point for the week just closed were 319,748 bushels, against 413,257 bushels the week before; and $14,178,499$ bushels since January 1st, against only $3,565,067$ bushels same time in 1890.
Withdrawals from elevators for week ending yesterday were 38,553 bushels for city consumption, 151,178 bushels for rail shipment, but none out via river for

May wheat closed yesterday exactly where it was the Saturday before at $98 \frac{1}{c} \mathrm{c}$, It sold up to $\$ 1.00 \frac{1}{2}$ Friday on the receipt of the Government report, but the marke soon settled back.

FLOUR.
Receipts 27,609 barrels this week against 28,546 barrels last week. Shipments 46,919 barrels. Compared with 50,959 barrels last week. Price of flour
did not respond to the advance in wheat. Although the feeling was firm, nor was here any appreciable increase in the demand while the volume of business publicly transacted on 'change continued small, southern demand ran light, export trade fair. Sales otherwise during the week were in small quantities, buyers taking supplies as their orders called for them. Extra fancy in better request than anything else and sold at $\$ 4.20 @ 4.22 \frac{1}{2}$ Monday, 84.20@4.25 Tuesday, \$4.20 Wednesday, 84.25 Thursday, patents lightly dealt in at $\$ 4.50 @ 4.60$ delivered. Reported sales average only 2,000 barrels daily.

The new crop is not moving with the ush that was expected. But all that comes finds quick sales, the demand is healthy and strong. So eager were buyers, hat prices were advanced over last Saturday's quotations ; yesterday's sales being $1 @ 1 \nmid c$ higher for the week and market tiff at that.

His Eminence Cardinal Gibbons and ther distinguished dignataries of the Romish church visited the Merchants Exchange last week, speeches were made by several of the Bishops, that of Bishop reland, who by the way is a grea advocate of the river improvements, re ferred to the great growth of commerce and said the only drawback was the present condition of our rivers. The venerable Archbishop Kendrick also said a few words it being his first visit to the St. Louis Exchange. President Bernheimer greeted the party and in the name of the Merchants of St. Louis thanked them for their visit.

Daniel Shueth a well known miller of Mascouth died Tuesday, age 37, he was highly respected by all who knew him.
Frank Feiner obtained judgment for \$2,100 against Mountel, Borgess \& Co. this week.

Chas. L. Dean, at one time a fast freight agent in St. Louis but now located in Chicago, was on 'Change last week and says that eventually wheat will sell at \$1.25. Mr. Dean has quite a reputation as a market prophet. Several years ago he predicted a 35 cent advance in wheat and cleaned up about $\$ 40,000$ on his deal. A party here is reported to have a
vessel at an Atlantic port awaiting the corn to load it with, and the demurrage charge upon this vessel is 8250 a day. The charges now amount to $\$ 3,500$ and no more show for obtaining cars than two weeks ago.
President Bernheimer, of the Merchant's exchange, and all our leading merchants are busy getting subscriptions to present the poor of this city something in the way of wearing apparal for Christmas; the right ones have it in charge and meeting with great success.

Future Great.
St. Louis, December 14, 1891.

## OUR LONDON LETTER.

nsettled Condition of the Markets Caused Partly by the Russian Imperial Decree-
Flour Quotations-United States Supplied Flour Quotations-United states Sopplied
the United King lom With Two-Thirds of the Flour Imported Last Year, and so far
This Year Over Three Fourthoo Its Imports Millers This Month-Tricks of the TradeThe Action of the Hungarian Millers They Ma
Buyers.

Iconsequence of the issue of an Imperial Decree, prohibiting the export from Russia of all kinds of grain except wheat, an advance took place on the first Mark Lane Market Day in the month of November, of two shillings a quarter on wheat and foreign barley, oats and maize, and by the ninth of the month prices had advanced without indicating millers had bought largely of wheat for forward delivery and are now fairly stocked for the winter months. During the third week of November it was onily the pub-
lished threat circulating ihrough Europe
that a Russian prohibition of wheat was probable, that kept the prices of the week previous up, although the heavy deliveries on the market by foreign sellers and
home farmers had the effect of making the Russian prohibition of wheat export which was published on the 21st November fall very flat. On Mark Lane on the 23d there was not much change, and it was only towards the close of the market that the top-price millers advanced their flour from 39 shillings to 42 shillings on the strength of the hardening in the price of wheat. Tuesday however saw a reaction in business, and to effect sales a little less money had to be taken for wheat. Wednesday and Thursday registered further weakness all over the country, and last Friday sixpence less was taken on Mark Lane for wheat. Saturday's country markets gave way one shilling, and yesterday on Mark Lane every one was in a "fog" and the price of wheat again fell, although no concessions were made in flour. At the close of the market there were signs of reviving confidence, and before Christmas prices will be higher.
The following table shows the weekly sales and average prices of wheat, barley and oats sold in 187 towns making returns to the Inspectors and Officers of Excise during the past $t w b$ months:

## 11111111



The following are the quotations of American flours on offer on Mark Lane yesterday; Pillsbury best, 34s.; Pillsbury Improved Straight, 31s. 6d.; Morrison's
Superlative, 33s. 6d.; Washburn gold medal, 34s. 6d.; Washburn, No. 1, 31s. 3d.; Iron Duke, 31s.6d.; Christian's Extra 32s.; Sterns' patent, 32s.; Daisy Mill Tip Top patent, 33s. 6d.; Mangeold patent 32s. 6d.; Yaeger Milling Co.'s Anita Patent,
34s.; Yaeger Bros.' best, 34s.; Yaeger Bros.' Crownpoint, 33 .
The returns of the importa of wheat and flour into the United Kingdom, which has just been published in detail, show that
the United States last year sent the United Kingdom out of a total from all countries of $6,309,334$ sacks of flour, $4,811,320$ sacks of 280 lbs ., whereas Germany, Austria and Hungary together only sent $9(55$,890 sacks of flour. And during the first nine months of the present year-1891out of a total of $4,873,328$ sacks of flour, $3,873,241$ eacks were from the United States 523,952 sacks from Austria, Hungary and Germany.
The National Association of British and Irish Millers are thinking of holding a general meeting this month, at which it is proposed that two papers connected with milling should be read and discussed. It is, however, not yet decided that it will
be held, as some members think that a month of two later would be a better time to call it.
The following advertisement is cut out out of The Miller of the 23d of November, and will give the American miller some idea of the tricks played in the Flour Trade on this side. To be certain of creating a higher class of American flour the manufacturer and not the factor should register a Trade Mark, and advertise their brand in the English papers, so that the bakers may demand the brand and be sure of getting it, and not be palmed off with an inferior flour, as is often the case when the flour asked for is above the price the factor wishes to supply the baker with. Competition has become so keen in the United Kingdom, that there are firms who will if they can obtain a profit, sell an inferior article as that manufactured by a well known mill, whereas they know anything

## follows :

DERPETUAL INJUNCTION DAMAGES AND COSTS 1891. A 276 .

IN THE CHANCERY OF THE COUNTY PALATINE
OF LANCAETER ILVERPOOL DISTAICT).
 HEREAS I, the above-named Defendant. JOSEPH FRANCE, of St.
Helons and Nigan Corn Dealer, have sold
Flour in sacks of Messr. JOSEPH APPLE-
BY \& SONS, of Enfid M Hlls, Acerintor.
 mark, which I represented to be their well-
known "S Standard" quality but which
flour was not made or selected by them, and
was of inferior quality to their flour; and was of inferior quality to their flour, and and
whereas Messrs. JOSEPH APPLEBY menced the above action against me for a perpetual injunction to restrain me, my
servants, workmen, or agents from selling or from offering for sale in bags marked with Messrs. JOSEPH APPLEEBY \& SONS' trade
mark, or with any imitation or collourabe mark, or with any imitation or colourable
imitation thereof, any flonr not manufactured by or selected by or imported by them,
so as to induce purchasers or intending pry chasers to believe that the said flour was flour manufactured, selected, or imported by
Messrs. Joseph Appleby and Sons, and from olherwise infringing their trade-marks Now I hereby inform all persons that I have
consented to a perpetual injuction consented to a perpetual injunction against
me in the terms above mentioned, together with
tend
 and in their sacks, marked with their trade
name, which was not their flour. This
Apology is advertised as full reparation as nossible may be done to
Messrs. JOSEPH APPLEBY \& SONS for Dated this 31st day of October, 1891.
JOSEPH FRANCE.
Witness to the signature of Joseph France:-
JoHN S. Hopwood, Solicitor, Wigan. BARRELL, RODWAY, BARRELL \&

## 14, Solicitors fo Sons.

It is to be hoped that the lesson Mr . France has had will stop others from con foreign flours.
Your correspondent has noticed during the past two months indications of labor disturbances in different parts of the United Kingdom, and in several instances in the milling and corn trades the men threatened to strike if their masters did by their unions. Some idea of the state of the labor market can be obtained from the report published by the labor correspondent to the board of trade, which states that during the month of October
the labor market continued to be in a disturbed condition with more frequent strikes, and the report goes on to state hat the total number of strikes recorded for October was eighty-one, whereas dur-
ing the month of September the total number was sixty-four.
The bakers are delighted with the action of the following sixteen firms wno manufacture Hungarian flour and export Steam England, namely the Concordia Mills Co.; First Budapest Steam Mills Co., Lim. (Erste Ofen-Pester); Gizella Steam Mills; Henry Haggenmacher, Steam Flour Mills, Budapest; Louisa Steam Mill Co., Budapest (Hungary) Pannonia Steam Flour Mills; The Pesth Cylinder Flour Mill Co., Lim. (Pesti hengermalom-társaság-Pester WalzmühlGesellschaft); The Pester Millers and Bakers Steam Flour Mills Co., Lim., Bud apest; United Steam Mills of the Hun garian General Credit Bank; "Victoria" Steam Mills, Budapest; Losonczer und Hatvaner Dampfmühlen in Losoncz; The Borsod Miskolez Steam Flour Mill Co. Lim., in Miskolez; "István" Steam Mill Co., in Debreczen; The Nagyvárad "Las zlo" Cylinder Flour Mill Co., Lim., in Nagy várad; The Szatmâr Steam Mill Co., in szatmár, who have reduced the number of their grades of flour and established a fresh standard, and in order to protect their new ty pe flours they have as a body caused a conventional trade mark to be registered. The flour manufactured by the above named firms will consequently henceforth only be sold and supplied in acks sealed with leads bearing the reg istered trade mark, which consists of the
number of the grade of the flour sur-
wheat ears on the side of which the letters M. T. are to be seen. The other side of the lead seal is used to stamp the name of the firm who manufactured the flour.
Four millers are serving this year which commences on the 9 th of November the office of Mayor in their respective cities, namely Mr. William Smith of Messrs Walmsley \& Smith at Lancaster, Mr. J Richardson the well-known miller of Sunderland, Mr. Wilson Marriage one o ur foremost millers in the Eastern Countries at Colchester and Mr. Yeat man at Poole. Although millers do not mind giving up a portion of their time to municipal duties we have not one miller who occupies the position of member of arliament.
The returns of the imports and exports of Sweden for the nine months ending the 30th September continue to show some alling off in trade and the only article which shows an important increase is the xtort of oats, which during the nine months increased from $14,079,000$ kilos in 1890 to $152,628,000$ kilos in 1891 . In the ame period the importation of wheat has ncreased from $31,801,000$ kilos to 55,126 , 000 kilos which should be particularly noted just now by those engaged in the Amtrican grain trade as Russia cannot supply any wheat on account of the ountry.
London, December 1st, 1891.

## inquiry.

La Crosse, Wis., December 8th, '91. Editor United States Miller:

Dear Sir-I have heard it stated that a yield can be taken daily, if necessary, without weighing up the wheat (by
portable scale or otherwise) taken in portable scale or otherwise) taken in
while mill is running. In fact that the amount of wheat in the mill before and after the yield has no bearing upon the Will you please make ion you please explain, for the informa is brought about?

A Northwestern Dusty
In reply to our correspondent we will say that in order to get a satisfactory yield by the method he refers to, certain requisites re necessary. The mill must be so ar ranged that all the offal and the flour can be packed simultaneously ; and the conditions regarding the amount wheat and neal in transit through the mill must be he same at the time of packing out as when the test was begun. Then the only element of uncertainty is the amount o absolute waste, such as evaporation and in the weight of the offal.
Every miller knows, or should know bout the amount of total wastage his mill produces. This item varies from four to en pounds per barrel.
We will suppose you start to take yield at six o'clock a. m., flour and feed bins empty simultaneously. They are emptied in the same manner every morning, and each morning a record kept of the barrels of flour and the amount of feed made during each twenty-four hours. The amount of material in transit through the mill under such conditions will vary but trifle
We will say the wastage is six pounds per barrel. This multiplied by the number of barrels of flour made and added to the weight of the flour and the weight of the offal will give you the number of pounds of wheat ground in each twentyfour hours. Reduce this to bushels and divide by the barrels of flour made and ou have the yield of wheat per barrel.
We know of mills taking their yield in this manner every twelve hours, and the flour yield taken at grinding out, varies so little from the daily yield, that when a mill is fitted to carry out the system, the method is considered a very accurate one. There is no extra expense or labor in connection with this method. It is simply a strict adherence to a very satisfactory system.

## MILLS, MILLERS avD MILLING.

The Attica flour mills have proven a success since Chas. J. Bork, of Buffalo, became its proprietor. Mr. Bork bought the mill about sixteen months ago; its capacity at that time was 300 barrels per per day. At the end of six months the business demanded a much larger output in order to keep up with orders. To do his it required more power, to supply which Mr. Bork purchased a 250 -horse power Tift Corliss engine. While this was being placed, Head Miller L. C. Schroeder made a general overhauling, added two pair $9 \times 24$ inch rolls, one new purifier, one Smut machine, ten dust collectors, and two round reelswith this new outfit the mill is making 00 barrels per 24 hours, of which Buffalo consumes about half, the local trade outside of Buffalo takes on the average 100 barrels per day, and the balance finds ready sale in Boston, Hartford and Rhode sland. Three qualities of wheat are used. Their experience has taught them that "blended" flour su ts their trade best or bread making. About 10 per cent. ow grade is turned out, which finds a ready sale in Boston, at good prices. The mill has, in addition to its 500 barrel capacity of wheat flour, a complete buckwheat outfit. The Attica mills buckwheat flour has a wide reputation. An order for two tons for Albany, Texas, is now being filled. A few days ago they shipped an order of 1,000 pounds to Jamestown, Dak. They also manufacture granulated meal. All offal is sold at the mill door, the mill being unable o supply the home trade for feed, the deficiency is shipped in by car from the West. The mill is doing a good paying business. L. C. Schroeder, head milBork, cashier.
illespie maeder, hea

Some Oshkosh Mills.
Brooklyn Mills, Roller Process, Schmidt Bros. \& Co., proprietors, report business fair. Local trade taking their flour, as its reputation is well established. Trade in feed good. Buy their wheat from farmers; price 93 c to 95 c ; quality averaging about No. 1 Northern.
Reliance Mills, Roller Process, Ferdinand Laabs, proprietor, says, trade Fairly good. Buys wheat on stre:t for his needs; price 90 c to 95 c , grade running from No. 1 to No. 2 Northern; winter 85 c . Finds market at home for most of his product, though shipping some Baker's and some brands to New York and Chicago; capacity 125 barrels in 24 hours.
Wakefield Mills, Roller Process, the Foote-Cornish Milling Co, limited, proprietors; capacity 200 barrels. Brands, "Pride of the West," "Straight Grade," "King of the Forest," "Queen of the Valley." Trade satisfactory with fair margins. Buys some wheat at other points. Street prices range from 90 c to 95 c at mill door; quality comparing fairly with No. 1 Northern. A portion of product goes to Bristol and Glasgow and the seaboard.

## MILL CHANGES.

The Luxury Flour Mills, of 949 and 951 North Ninth street, Philadelphia, Pa., bave been purchased by the Mechling Bros'. Chemical company, which proposes expending $\$ 200,000$ in improving the plant and extending the flour business in connection with the manufacture of chemicals.

The Salem Manufacturing and Power company, of Troy, N. Y., has just been incorporated with the secretary of state. Its objects are thus set forth: To manufacture chairs, furniture, lumber and woodenware, and to sell the same; and to lease power and mill and deal in grain, flour, feed and plaster. Its capital stock is placed at $\$ 5,000$, divided into 100 shares of $\$ 50$ each.

## INCORPORATIONS.

The Fulton County Farmers' Milling Co., Ohio, was incorporated and articles filed at Columbus, Ohio, Nov. 18.
New Milling Company.-The Home Milling Company of Wapakoneta, Ohio, was organized and incorporated here Dec. 8 th with a capital stock of 820000 . The officers are as follows: President, F. J. McFarland; vice -president, Alois Bausch; secretary, Charles Kuhn; treasurer, John Connaughton; general manager. Frank McFarland; directors, S. W. McFarland W. J. Murray, Leon Kahn and Geo. R. Davis.

## FIRES.

The "Sun Grist Mill" at Middleburg, Vt., was destroyed by fire Nov. 22.
John Wenger's flour mill at Halloway, Ont., was burned Nov. 2. Loss, 822,000 .
J. A. Leatherman's mill, Beaver Dam, O., was destroyed by fire Nov. 15. Loss, 820,000.
Alton Leavitt, of Limerick, Me., sustained a $\$ 3,000$ loss by the burning of his mill Nov. 20.
The flour mill of Thos. Williams, Pontiac, Ill., was burned Nov. 17. Loss, $\$ 25,000$; no insurance.
A flour shed and dock at Gladstone, Mich., was burned Nov. 29, together with its contents, 10,000 barrels of flour.
The City Flouring Mills, owned by Joseph Kern, Hicksville, O., were destroyed by fire October 31; loss, $\$ 7,000$ aside from this 1,000 bushels of whea therein.
The mill of Goins \& Gawler at Scio, Ore., burned Nov. 28. Its contents included 500 barrels of flour and a quantity of wheat. Loss, $\$ 25,000$. Insurance,
$\$ 8,000$ on mill. The stock was not insured.
The flouring mill and grain elevator of McManness \& Arnold, Findlay, Ohio, was totally destroyed by fire, November 11th, as were all the contents, including 25,000 bushels of wheat. Loss, $\$ 40,000$; insurance, 812,000 .
On the morning of November 10th the grist-mill of Richardson \& Whitmarsh, at Westfield, Pa., was destroyed by fire, together with the barn and sheds adjoining the mill. Nothing was saved from the building. There was an insurance of $\$ 3,000$ on the property. Supposed to be incendiary.
The large four-story steam flouring mill owned by J. A. Leatherman and located at Beaver Dam, six miles northeast of Lima, $O$., was totally destroyed by fire November 7 together with a large quantity of wheat. The loss will reach $\$ 15,000$. There is considerable insurance but the amount cannot be learned. The fire started in the boiler room.

## chops, stocks, etc.

New Orleans ships 134,000 bushels of wheat to Europe- 100,000 bush. to Rouen and 34,000 bush. to Liverpool; also 15,000 bush. corn to latter.

Imports into United Kingdom during the week ended Nov. 28 : Wheat 484,000 qrs.; corn 112,000 qrs.: flour 202,000 brls. For the week ended Nov. 21: Wheat 431,000 qrs.; corn 60,000 qrs.: flour 168,000 barrels.
California Stocks of Grain.-The San Francisco produce exchange has prepared its semi-annual statement of the total stocks of wheat and grain in California to Dec. 1. This shows $9,965,000$ centals of whent, against $12,169,000$ centals on the same date last year. Barley $2,383,000$ centals, as against $1,616,000$ centals this same time last year, and flour 140,000 barrels as against 118,000 barrels Dec. 1 last year.

Wisconsin Wheat Still Profitable.Wm. Godfrey, of Lima, thinks that raising winter wheat in Wisconsin is a paying business. He had twelve acres of that grain last summer, which produced $551 \$$ grain last summer, which produced
bnshels, or nearly 46 bushels to the acre.

The crop was marketed at the Stone mill in this city at 90 cents a bushel, realizing $\$ 49613$ or $\$ 41.34$ per acre. This comes pretly near being net profit, not counting interest and taxes, as the straw is probably worth fully 85 to the acre. O course this result was not reached withou good, intelligent farming and good land, but the opinion prevails hereabouts that more money has been made in this section he past ten years in raising winter wheat or than spring wheat. In the few cases where it is killed out, the farmer knows it in time to putin other crops and suffers only the loss and labor of the seeding in the fall.-Whitewater Register.

## FOREIGN CROP SITUATION.

Dornbusch reports that during the week ending 23 d ult. 84 wheat cargoes passed Constantinople, making a total of 1,646 since January 1, against 1,905 in the corresponding period of last year Cable advices from Victoria speak more favorable of the crop prospects in that colony.
The amount of wheat and flour on passage for G:eat Britain last week decreased $2,728,000$ bushels, and for the continent decreased 816,000 bushels, making a total decrease of $3,544,000$ bushels afloat, and with a decrease of $1,613,000$ bushels in the visible supply, making a total decrease of $5,157,000$ bushels on sea and land.
Imports of wheat and flour into Great Britain last week were equivalent of $5,010,000$ bushels, and adding farmers' deliveries of native wheat $-1,359,000$ bushels for the same period-the total addition to supplies was $6,369,000$ bushels against a weekly consumption of $4,400,000$ bushels, indicating that stocks have increased to the extent of $1,969,000$ bushels.
The London Daily News of latest mail date says the Russian prohibitory decrees have sbut off $17,000,000$ qrs. $(136,000,000$ bush ) of wheat, rye, barley, corn and oats. "America is thus rendered mistress of the situation, and placed in a position to almost dictate prices." "Europe will be under the necessity of obtaining weekly from the United States during the next four or five months, something like 650, 000 qrs. of wheat and flour."
Bright weather, without severe night frosts, has enabled farm work to be again got on with; but the arrears are still serioue, and there must be a great deficit in the area sown to winter wheat, says
The London Times. Still, if the season only continues as it is up to Christmas there is no reason why a good deal of tillage work and sowing should not be done. The hardening of the wheat market continues, and should be helped by the prohibition of wheat exports from Russia.

Congress of Russian Millers.-It is eported from St. Petersburg that an invitation will shortly be sent out to all the arge millers and flour merchants throughout Russia to a cougress to be held early in December. The object of this assembly, says an exchange, "is to consider reports now being prepared by specialists and expert millers who have returned after some months of careful study of milling practice and the flour trade in England, Holland and Belgium. Particular attention will be paid to the ques-
tion as to the best way of developing the tion as to the best way of developing the port of Russian flour."
Italian Crops are Good.-The Department of Agriculture announces that telegraphic reports from all parts of Italy place the crop of rice for 1891 at 6,740 ,000 hectolitres, against $6,303,900$ in 1890 . This completes the reports of the crops for 1891, which may be summarized as follows: Corn, fair; wheat, good; rice, wine and oil, most abundant; and the other minor crops satisfactory. The imports for the ten months ended October 31 were 966,000,000 lire, or $133,000,000$ less than for
exports during the same time were 753 ,000,000 lire, or an increase of $36,000,000$. The aggregate of both shows an unfavorable balance of trade to the extent of 208,000,000 lire. But the unfavorable balance during the corresponding period of 1890 was 370,000 lire. The treasury receipts for the first time in many months, show an increase, having been in October 1891, $5,800,000$ lire more than in October 1890. But notwithstanding the diminution of the unfavorable balances of trade, the excellent crops and the economies intro-
duced by the ministry the premium on duced by the ministry, the premium on d continues to advance.

Bulgaria has a good wheat harvest, estimated at $39,000,000$ bushels, of which $18,000,000$ will be a vailablefor exportation. The provinces of Roumelia and Albania also have good crops, and the Asiatic much spoilt, however, by harvest rains.
The French septennial average of wheat production, including 1891, is returned at theequivalent of $299,202,836$ English bushels, and the average yield of rye, which includes meteil, at $79,480,000$ bushels. Food wants are put at $340,000,000$ bushels of wheat and $80,000,000$ bushels of rye and $232,401,181$ bushels of whens are given at 000 of rye and meteil.
The official returns of the German cereal harvest for 1891 were published on Wednesday, and showed that the autumn sown grain had fared badly almost everywhere, while the spring corn had mostly done well. Wheat for the entire empire is returned at 18 per cent under average, and rye at 20 per cent under average, while barley is 3 per cent over average. and oats 12 per cent over average. The total yield of all cereals in the German empire is about 5 per cent less than usual.
The liberal exports of Russia and India are said to have discouraged the American holders from a rise, so that red winter wheat and possibly also Californian, may be pressed on sale shortly at a lower price than has hitherto been accepted. This is the opinion now held in America, but the American market varies in its moods from week to week, and almost from day to day. The latest returns in reference to maize indicate a very big yield. This was the tenor of previous advices, but the crop has now been secured and the opinion is largely
based on shelling out the grain in the more forward regions. America has thus far escaped the wet autumn from which we are suffering, and the new maize is dryer than usual, so that deliveries are expected to become heavy by about December 1st, instead of the more usual date of the midmonth.
The imports of rye into the United Kingdom have never amounted to 3,000 ,000 bushels in a single year, though in 1888 they reached 2,664534 bushels. The average quantity imported is about 1,500 ,000 bushels. France imports about 2,000 ,000 bushels in a year when the home crop is deficient, but in some seasons1887 for example-her imports and ex ports practically balance. Austria-Hungary in 1887 imported $3,000,000$ bushels of rye, but only 103,608 bushels were imported in the following year. Belgium sometimes imports over $5,000,000$ bushels but $4,000,000$ bushels is about the average Holland's net imports are from $8,000,000$ bushels to $12,000,000$ bushels, and about 10,000,000 pass through Holland on their way to other countries. Norway, Sweden and Denmark import more rye than they export. Germany's import needs vary very considerably. In 1887 they were about $25,000,000$, in 1888 the same, in 1889 they were $47,000,000$ bushels. Russia in 1889 exported $51,000,000$ bushels while South-eastern Europe from the Danube to the Egean, exported $13,000,000$ bushels.

## TRANSPORTATION, FREIGHTS, ETC.

There are thirty lines of ocean steam ers running out of New York City.

What New Órleans Expects to be. The papers of New Orleans are prophesying that their port will become the greatest shipping port of the country within the next ten years-greater even than New York. They say that the producers in the northern states west of the Ohio river and in the southern states west of the Alabama river have found out that they can ship grain, cotton and pork to Europe from New Orleans more cheaply han from any other port. A few days ago a committee of the Kansas Millers' association visited New Orleans to make arrangements for exporting Kansas flour to foreign countries by way of that port at the rate of $10,000,000$ barrels a year.
Another Grain Blockade.-The Pennsylvania and the Chicago \& Grand Trunk on December 7 notified their western connections that they could no longer receive shipments of grain to be recognized at Chicago for eastern points. These were the last of the roads east of Chicago to give such notice, and the movement of grain is checked, as none of the western lines will allow any more of their cars to be taken east. Of course the latter anticipated the action and the majority of them have been preparing for $i$. The Burlington more than a week ago instructed its western agents to receive no more grain consigned to eastern points ines. loaded in cars owned by eastern ines. The result is that 150 Burlington elevators in Nebraska are filled with grain awaiting shipment, and the farmers are clamoring in vain for cars. At St. Louis it is said the situation is the same as at Chicago. Relief is looked for only when the lake and rail shipments are all out of he way, and that will probably not be for five weeks to come.
A Petition to Maintain Permanent Lights on the Lakes.-A petition is to be presented to congress this month, signed by a large number of ship-owners and others in all the lake cities, asking for increased appropriations for the purpose of maintaining lights of a permanent character on the lakes, and a greater number of lighthouses seem to be much needed, and also an increase in the number of light-ships and beacons. The inrease of commerce in the last few years has been so large, and the number of vessels now employed and the value of their freight is so great that more attention to this point is really warranted, and it is to be hoped that the petition will be effectual. A government survey and wrecking vessel is also much needed, and should be provided.

## ballways and transportation.

Sault Ste. Marie, Mich., Dec. 8.-The work of closing up the canal commenced his morning. At $5 \mathrm{p} . \mathrm{m}$. the upper and ower guard gates were closed. The pumping out of the lock chamber was immediately started. There is no ice in Mud Lakc. The weather is mild; wind southwest, light.
Duluth, Minn., Dec. 8.-The business of the Sault canal for the year that closed yesterday is given below. Two years ago the Sault passed the Suez in amount of business done, and, while this year does not equal 1890, it probably exceeds the Suez canal. The decrease of tonnage for the year is about $\frac{2}{2}$ per cent, but the showing is excellent when the dullness in the ore trade, the fact that vessels did not start out till May 15, and he loss of a week by the blockade after the sinking of the steamer Peck in the Sault river, are considered. The following are the figures of the year and of 1890 in comparison:
$\begin{array}{llrr}\text { Number of passages...... } & 10,162 \quad 10,557 \\ \text { Number of lockages }\end{array}$ $\begin{array}{lr}\text { Negistered lonages......) } & 4,956 \quad 4,970\end{array}$ $\begin{array}{lll}\text { Freight tonnage (tons) ... 8,884,413 } & \mathbf{9 , 0 4 1 , 2 1 3}\end{array}$ $\begin{array}{lll}\text { Passengers............... } & 16,166 & 24,856\end{array}$

The *Sault business for November showed an increase of 223,000 freight tons over November, 1890.

## milwaukee notes.

The flour production in Milwaukee during November was 229,250 barrels, against 243,300 in October, 198,200 in November of 1890 and 186,775 in 1889.
The Milwaukee \& Eastern Transit Co., of Milwaukee, and the Cincinnati, Wabash \& Michigan railroad are building an elevator at Benton Harbor, Mich., with a capacity of 55,000 bushels.
Prinz \& Rav, manufacturers of separators, smuttere, and other milling machinery, report a good trade in their specialties; sufficient to keep their works running full time. Prinz always had the reputation of building a first-class machine.
B. S. Potter, who formerly operated a flouring mill at Barton, Wis., has about consummated a contract with the Edward P. Allis Co., of this city, for a 125 -barrel roller process flouring mill, at West Bend, Wis. This mill will be located on the Milwaukee river a few miles from Barton.
Won'r Allow Any Deduction.-The
directors of the Chamber of Commerce, directors of the Chamber of Commerce,
Milwaukee, on the 8th, adopted a resolution "that the board regarded it inexpedient to comply with the petition of millers and other grain buyers to allow any deduction from the actual weight of grain as officially determined by Chamber of Commerce weighers.'
Milwaukee Milling Machinery, always noted for its superior excellence, is meeting with large sales, and the manufacturers are seemingly doing a very thriving business. Among sales reported the past month are the following :
The Superlative Purifier Mfg. Co., of this city, have orders for New Era Scalpers to be shipped to W. H. Varner, Philipsburg, Pa.; Zemer Bros., Ansonia, O.; W. H. \& L. O. Stapp, Blandville, Ky.; A. R. Sprague \& Co., Springfield, Mo.;
Hummel, Heuke \& Co., Dubuque, Ia.; W. K. Wagaman \& Co., Pella, Ia.

The sales of flour mill machinery by the E. P. Allis Co. for the past year has approximated $\$ 800,000$, while the engine
sales during the same time have been sales during the same time have been
over $\$ 2,000,000$. ,
The Superlative Purifier company, of Milwaukee, Wis., have made recent shipments of New Era Scalpers to Carter, Shepherd \& Co., Hannibal, Mo., (third order); Pfeffer Milling company, Lebanon, II.; C. R. Cooley \& Sons, Hartford, Ind.;
Gill \& Shryock, Meadville, Pa. (two maGill \& Shry ock, Meadville, Pa. (two ma-
chines); J. Kuhn, Des Moines, Ia.; R. Cottingham, Benton, Wis.; Nordyke \& Marmon company, Indianapolis, Ind-; Russell's Roller Mills, Nevada, O; Portland Milling company, Portland, Ind.;
Model Roller Mills, Cohocton, N. Y., and Model Roller Mills, Cohocto
G. H. Baldwin, Urbana, O.
A $\$ 15,000$ flour mill contract from Linares, Chili, s. A., has been sent to the E. P. Allis Co., of this city, and also a $\$ 5,000$ flour mill contract has been received from Paczua, Mexico.
The Cockle Separator Manufacturing company, of Milwaukee, Wis., have recently shipped Kurth Cockle Separators
to W. S. Varner, Philipsburg, Pa.; Eisenmayer Milling company, Springfield, Mo.; Hoyt \& Aiken, Chaseburg, Wis.; A. T Parker, Mason City, Ia.
The Allis Co. are building a 50 -barrel roller mill for Loek \& Rhode, of Richland, Wis., and they have also been awarded the contract for a 30 -barrel steam mill by the United States government, which is to be erected at the Pima Indiian Agency at Sacaton, Arizona.
The Cockle Separator Manufacturing company, of this city, have made recent shipments of Morgan Scourers to Hutches, Angel \& Co-, Morning Sun, Ia.; Hummel, Henker \& Co., Dubuque, Ia., and E. Siegmund, Fort Howard, Wis.

## fecent milling patents.

The following list of Patents for Milling The following list of Patents for Milling
and Grain Handling Appliances, granted in


Popular Night School. Seven Departments. Day and Evening Sessions.


November, 1891, is specially reported for the United States Miller by H. G. Underwood, Patent Attorney and Solicitor of Patents. No. 07 Wisconsin street, Mwau patent named, to any address for 25 cents. patent name, , 462,560, Rotating Grain Measurer, J. W Kershaw jr., Burnside, Iowa.
Golay, Paris, France. 62,680, Grain Meter, E. N.
. E. Lovejoy, lortland Me
62,810, Screening Machine, Lewis Detar Louis Munshower, Shelocta, Pa
din.407, Automatic Grain Weighing M chine, H. P. Parish, New York, N. Y. A urora, Ill.
Aurora, Ill .
463,689, Dust
A ppleton. W is.
ppleton. Wis. tur, Ill., assignor of C. J. Hartley, Deca Warren \& B. K. Durfee, same place.

## sunday items.

Perry $\cdot$ Brigham is building a feed grist mill at Lewisville, the building being nearly enclosed.
Our old friends, the Richmond Manufacturing Co., of Lockport, N. Y. still "hang their banner on the outward wall.',
Their make of special mill machinery cannot be surpassed by any on earth We speak by the card.
Wonders will never cease. The present century has been filled with them in the constant progress of science, art and mechanics. Elderly men remember when there were no matches, steel pens, spool cotton or wood screws; when spectacles were considered impertinence hooted out of a thearre ; when gas was an outrage on
daylight and whale oil, and railroads an insult to common sense and horse flesh. The most astounding of the latter day surnrises have been the beautiful gifts of the unknown, but most prolific force we
call electricity. One of the most delightful of the minor accessories it furnishes to the household is the newly invented "Electric Lighter". Manufactured and sold by the Barr Electric Manufacturing Co., Broadway, New Yosk. See their ad. on other page.

A stock company, with a capital of 825,000 , will be organized at Carlton, Outagamie county, Wis, to be known
the Carlton Flouring Mill Company.
The flour mill of Martin L. Dunn, near Bordentown, N. J., has been idle for a few days, the big turbine wheel refusing to move. An examination found the wheel choked with єels. Nearly a bushel of them had to be cut out with a chisel and hammer.
The longest shaft in the world in one piece, or in any number of pieces, is in the Washington navy yard, Washington, D. C. It is $3 \frac{1}{2}$ inches square, 460 feet long, and transmits power to traveling cranes. It runs at 160 revolutions per minute.
Aluminium has been substituted for cast iron in the specifications for the dome of the tower of Philadelphia's new City Hall. It will save the constant expense of painting and reduce the weight of the tower about 400 tons.
On Nov. 10th, the Waters-Pierce Oil Company, St. Louis, the local representative of the Standard Oil Company, made its thirty-fifth reduction in the price of oil since in 1888 it inaugurated a fight against the International Oil Company of this city. Since the beginning of the fight the price of oil in St. Louis has been reduced $6 \frac{1}{2}$ cents a gallon. The International Oil Company announces it
pany's representatives and the fight will continue.
The Erie Road Withdraws.--The Erie Railroad, Dec. 8, served formal notice on he Trunk Line Association that they had withdrawn from their agreement made last spring, and will on the 10th instant resume their former relation with the Chicago \& Alton Railroad, selling tickets and checking baggage over that road.
A Bank Teller Insolvent.-Frank Savage, of Lee, Mass., is a petitioner in insolvency. Mr. Savage recently sold out his laundry business in which he had met many reverses. He lost heavily in his Holyoke laundry business, through an untrustworthy partner. He is a trusted official at the National bank, where he has held the position of teller for many years. His creditors are mostly in Lee, with sums from $\$ 5$ to $\$ 1,000$, although Holyoke and Springfield credtors also have claims.
Delegates to the Waterways Meet-ing.-Gov. Merriam, Dec. 8, appointed the following delegates to the Deep Wateways Convention which is to be held in Detroit on Dec. 17: J. J. Hill, St. Paul ; C. A. Pillsbury, Minneapolis; Gen. S. B. Jenni son Red Wing; F. B. Dougherty, Duluth, Minn.; and Earl Youmans, Winona.
Farmers' Co-operative Flour Mill.About fifty members of the Farmers, Mutual Benefit Association assembled at a called meeting in Muncie, Ind., Nov. 28. One of the objects was to hear a report bly in Indianapolis recently. But the main object was to canvas the matter of establishing in this county a co-operative milling system. The plan that was adopted is to organize a stock company of $\$ 20,000$, the stock to be taken by the farmers throughout the country, and buy or build a mill and large warehouse in this city, to be operated on the co-operaive plan. The members will use the immense warehouse to store their grain in until the markets are favorable for its disposal to the best advantage. The scheme is being considered by most of the organ izations in the great wheat state of Indiana.
Many millers will read with real interest the condition of affairs in the Millers National Insurance Company, which we reprint from the "United States Miller." It seems almost incredible that a number of intelligent millers would allow the affairs of their company to fall into the sole change of any one official, howeve competent he might be to manage all its affairs, including proprietary and deliberative functions with the purely clerical functions of a secretary. This particular company seems to have upset all former ideas of the management of business concerns. Millers will do well to study the career of such an organization.-Milling World.
Rainstorm in the Northwest.-At St. Paul, Minn., a warm rain has been falling heavily since the middle of the afternoon of December 13th and from reports received the storm seems to be general in Minnesota and extending over into South Dakota. The unseasonable snow of last month had disappeared several days ago and this rain is being rapidly absorbed. In South Dakota there is more moisture in the ground than has been known before at the same season.
Hard Metal In Soft Drinks.-During
the last quarter the Aberdeen public analyist examined thirty-one samples of aerated beverages and only ten were found aerated beverages and only ten were found
to be pure. One quantity of lemonade

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contained as much as 4.3 grains per gallon of lead, another 2.25 a third 2.25 and a fourth 1.2 grains, while the others contained .90 to .04 grain per gallon. Two samples contained heavy traces of iron, but this impurity is decidedly less objectionable than the other. No wonder lemonade is sometimes contemptuously described as "liquid stomach-ache."

## insuriance gossip.

Quite a number of companies are bidding for the reinsurance of the Neptune of Boston, whose affairs we discussed last week. The directors met last week and discussed the reinsurance question.
The Prudential, of Boston, has not reinsured, but Secretary Hill has the matter in charge, and ere long may get an offer worth taking. Whoever gets Hill will get a good man.
The Packers' and Provision Dealers' Insurance Company, of Chicago, had only about $\$ 15,000$ net surplus on January 1. It has been quite a free winter. Will its forthcoming statement be interesting?
The name of the gobbler of the Union of Louisville will be announced in a few days.

The Enterprise, of Cincinnati, will probably be reinsured by one of the prominent English companies, according to Cincinnati men.
Want Their Insurance.-Toledo, O., Dec. 2.-In Judge Pugsley's court the case of Chas. W. Pelsue et al vs. J. P. Childs et al, is on trial. The plaintiffs were the owners of a flouring mill at Centralia, Mo., which was destroyed by fire. They had an insurance in the Seneca County Mutual Insurance company, and this suit is for the purpose of enforcing its payment.

## FLORIDA AND THE SUNNY SOUTH

## THE BIG FOUR ROUTE.

To all persons contemplating a southern rip the Big Four Route offers special attrac tions and advantages possessed by no other ine. Solid Vestibuled trains, heated with steam and equipped with palace sleeping cars, reclining chair cars and elegant parlor café dining cars run daily, making connecion in Central Union Station, Cincinnati, with through express trains of the Queen \& Crescent Route, Louisville \& Nashville, Kentucky Central and Chesapeake \& Ohio Rail ways, avoiding the tedious transfer necessary via other lines, and affording practically through train service to Old Point Comfort, Asheville, Chattanooga, New Orleans, Savannah, Jacksonville, St. Augustine, Tampa, Indian River and all winter resorts of the
South. Tourist tickets via the Popular Big South. Tourist tickets via the Popular Big
Four Route at special low rates are Four Route at special low rates are on sale
at all coupon ticket offices throughout the at all coupon ticket offices throughout the
country. Ask the agent for tickets via the country. Ask the agent for tickets via the
Big Four Route. D. B. Martin, General Passenger and Ticket Agent, Cincinnati, O.

## LEGAL NOTES.

Construction of Open Contract.-Under a contract by which it is agreed to sell a specific amount of goods at a certain price, "and as much more as may be ordered at the same price, atter nearly wice the ameunt specified has been sold, no action can be maintained for a failure
to furnish more goods at the same price. Bryant v. Smith, Supreme Court of Mich igan, 49 N. W. Rep. 889.
Purchase of Goods by Sample.-Where the purchaser of merchandise or produce by sample, after refusing to accept on the ground that it was not up to sample, agrees to accept it without any new arrangement as to price, he becomes liable for the contract price, and, if he afterwards fails to accept, and the seller sells at auction, he is liable to the seller for the difference between the contract price and the price realized at such sale, together with costs of storage and other expenses necessitated by his failure to accept.-Woods v. Cramer Supreme Court of South Carolina, 13 S.E Rep. 660.

Shipment of Goods over Connectin Lines.-In pursuance of an inquiry from a shipper, a railroad company informed him of the through rates of transportation of certain goods to a point beyond its own line. The goods were subsequently delivered to the company, and received by it addressed to such point, which the company could reach by means of connecting railroads. These facts were sufficient to sustain a finding that the company had agreed to transport the goods beyond its own line to the place to which they were consigned. The carrier, which had entered into a contract with the shipper for the transportation of the goods to the place of destination, had no right to make inconsistent stipulations with the persons who afterwards delivered the goods for the shipper. A provision in the shipping bills that the carrier should not be responsible for delay in the transit of the property does not relieve it from liability for delay occasioned by its own negligence.-Jennings v. Grand Trunk Railway of Canada, Court of Appeals of New York, 28 N. E. Rep. 394.
Fixing Prices by Pool Combination. -Where goods are bought without a stipulation as to their price, a price fixed by all the managers of the goods of that kind, who have combined for the purpose of fix-
ing and maintaining the price, cannot be considered the market price. A marke price is that which is regulated by the laws of trade, and competition is one of the main forces operating on the result. In such a case the reasonable worth and value of the goods may be recovered. Lovejoy v. Nichols, Supreme Court of Michigan, 49 N. W. Rep. 901.

Defective Condition of Railroad Yard.-Where a railroad company sets apart a portion of its yards for the delivery and reception of freight directly from the teams of shippers, it thereby invites them to drive upon its premises, and it is liable to them for any damages they may sustain by reason of obstructions or excavations in that portion of the yard so set apart and which were not properly guarded.Chicago \& I. C. Railway Co. v. De Boum, Appellate Court of Indiana, 28 N. E. Rep. 447.

Infringement of Trademark.-The use of a trademark different from that of another person but arranged so as to resemble it, with intent to imitate it closely enough to mislead casual observers is an infringement. One trademark was the letters G F. while the other was G. \& F. with the sign \& as large as the letters as regis-
tered. In this however, the second parties printed the sign \& very small, so as to resemble the other. This was an infringe-ment.-Garon v. Gartner, Circuit Court of the United States, Southern District of New York, 47 Fed. Rep. 465.

Legal Aspects of Option Contracts.Contracts for the sale and delivery of grain or other commodities, to be delivered at a
future day are not of themselves unlawful where the parties in good faith intend to perform them according to their terms. But contracts in form for future delivery, not intended to represent actual transactions, but merely to pay and receive the difference between the agreed price and the market price at a future day, are in the nature of wagers on the future price of the commodity, and void. The burden of establishing the illegality of such transactions rests upon the party who asserts it. The form or language of the contract is not material, but inquiry may be made into the facts and circumstances attending or connected with it, in order to determine its real character. The law will not enforce contract in favor of a party who has entered into it for an unlawful purpose. A broker or commission merchant who makes advances for his principal and aids him in "operating in futures," with notice of the unlawful intent of the latter and of the real character of the transactions, cannot recover his commissions and advances; and in order to show that he is cognizant of the illegality, evidence may be received on the trial, and considered by the jury, showing the nature of the transactions, the relations of the parties, the course of deal ing between them, the occupation and financial ability of the principal, and other material facts tending to prove notice. In the absence of proof of the statutes of another State the common-law rule will be applied in determining the legality of contracts made in that State.-Mohe v Miesen, Supreme Cuurt of Minnesota, 4 N. W. Rep. 862.

Endorsement "without Recourses." The contract of a person who endorses note "without recourses" is, that the sig natures of the persons on the note before him are the genuine signatures of the per and that such note is their valid obligation. An endorsement "without recourses" relieves the endorser of all responsibility for the performance of their obligations by the other parties to the note- it is merely a guaranty of the genuinenes of the note itself.-Palmer v. Courtney, Supreme Court of Nebraska, 49 N. W. Rep. 754.
Compensation of Managing Partner. Where one of two partners was employed y a third person on a salary, which he did not put into the partnership business, the other who devoted his whole services to the joint business, is entitled to pay for such services without any agreement therer. Such services cannot be said to be erly keep the firm books, when it was equally the duty of the other partner to look after the books.-Morris v. Griffin, Supreme Court of Iowa, 49 N.W. Rep. 846.
Ratification of Unauthorized Acts
Agent. - Where an agent secures for of Agent.- Where an agent secures for
his principal the notes of others upon certain conditions and stipulations, although he may have had no authority to make hem, the principalis bound to them by the acceptance of the notes. If the principal accepts the fruit of his agent's efforts, he must at the same time accept their conse-quences.-Wheeler \& Wilson Manufg. Co nia, 22 At. Rep. 667.
Evidence of Partnership.-An exist ing partnership was dissolved, and the business which had been conducted by it was continued under the name of the senior partner of the old firm with the addi-
tion of "\& Co." It was generally understood in the community that an employe of the former firm represented the "Co." and he knew that such was the general assumption. He never denied that hewas a partner, admitted specifically that he was, and consented to the publication of a statement in a local newspaper that he was a partner. This not only precluded him from denying that he was a partner, but is sufficient to warrant a jury in find ing as a matter of fact that he was. Wright v. Weameister, Supreme Court o Michigan, 42 N. W. Rep. 870.

## RECIPROCITY WITH SPAIN.

As an evidence of the benefits that have already been realized from the operations of the Spanish reciprocity treaty which went into effect only two months ago, the following statement has been received at the state department. It shows the increase of shipments made by the Ward line steamers from New York to Havana for the months of September and October last as compared with those made during the corresponding months in 1890:
 since the treaty went into effect they have had to charter three extra steamers esides their regular sailings and that very ship without exception has gone out full. The shipments of machinery or the manufacture of sugar have been greater than ever known before. They eport that the leading provision merchant in Havana estimates that when the treaty provision as to reduction of duty on flour takes place January 1 next, the imports from the United States to Cuba will reach $1,000,000$ barrels per annum or more than double the present total consumption. Judging from present indicaions the company anticipates that when the treaty is fully in force they will have to increase the number of their sailing or ships.
Results of Reciprocity.-The South American Journal of London says: "The business results of the reciprocity meas ures of Mr. Blaine are already discernable in the trade of the United States. Even English companies operating in Brazil are now purchasing their supplies largely in the United States to secure the benefi

## news of the day. <br> vel-headed farmer.

为the Farmers' Institute held at Plainfield, in December, Chas.
R. Beach of Whitewater, a Wal worth County farmer, made a telling argument against the practice of a large class of farmers who are called grumblers with their own business, and who claim that the laboring man, including the farmer, is a constant sufferer from the aggression of capital. P. Goiryman of the North-west, had related his experience with his herd of cows for 1890. He said his cows produced an average of 320 pounds of butter each, which cost him 13 cents a pound to produce. He had charged the cows the market price for all they consumed, interest on all the capital invested in stock and farm, and for all
labor done. The result showed a net profit above all cost, of over $\$ 53$ per cow. Mr. Beach took these facts for a text and Mr. B
said:

Mr. Goodrich tells us that he got over $\$ 1,000$ from his herd of 20 cows, besides interest on capital invested, good pay for his labor and the market price for all the food they consumed. Does that money belong to Mr. Goodrich? He tells he did not earn it. He received lawful usury and pay for his labor aside from that. Has he a right to keep it? or is it his duty to turn it over into a general fund for the benefit of that class of poor farmers who, through a lack of skill and a knowledge of their business, are unable to knowledge of their business, are anents and
make a profit on their investment
pay for their labor? By that accomplishment Mr. Goodrich has removed himself from the farmer class, in the generally accepted term, and has placed himself with that class commonly called robbers of labor and of the people. He has joined Vanderbilt, Gould, Phil. Armour and the railroad corporations of the country. He has made over 100 per cent profit and has put in his pocket that which he has not earned. He has reaped the fruit of his acquired skill and of wisdom applied to the management of his business. That is exactly what the grear corporations and capitalists of the country are doing. Mr. Goodrich has applied to his business that skill which has enabled him to increase his production far beyond the average, and at the same time proportionately decrease the cost of his product. The railroad corporations of the country are applying that skill to their business which enables them to do the transportation of the country on a basis which both decreases the cost and increases their carry-
tances to make a profit amounting to wore than legitimate usury on their capital invested.

There is a class of persons in this country who tell us the farmers of the country are all going to the devil-if they haven't already got there. They tell us the corporations and monopolies are robbing the people, and some go so far as to say they eaght to be compelled to turn into a general fund for distribution among the people all of their profits, above a certain per centage. If that is good doctrine as applied to corporations and capitalists, why not apply it to Goodrich the farmer? He has made over 100 per cent profit on his capital, while the statistics prove that the railroads of the country don't make 7 per cent. Will any man stand up and
tell us th. tell us that Mr. Goodrich's $\$ 53$ protit on
each cow in his herd does not rightfully belong to him? I tell you it does belong to him, and no just law under heaven could take it from him to disburse as a premium on slothfulness. You will all agree with me on that point, and the principle which applies to Mr. Goodrich applies also to every other man or combi-

## ation of men

"We pray 'Thy kingdom come,' but he Great Teacher tells us the kingdom of heaven is like a man who was going into a foreign country, and calling his servants about him, gave them various sums of money, commanding each to invest and use it for his benefit until he should return. When he returned those who had so used he funds placed in their hands as to make profit were commended and given more, but he who had not made judicious use of his portion was condemned to the loss of the original sum. Was the depriving of that man of his money an arbitrary act? or was it in accordance with the law of the universe? If there is any trouble with the farmer, isn't this key to it? If we all labor to acquire knowledge of our business and wisdom in the application of that knowledge or skill, and then do the best we can, we can all do as well as Mr . Goodrich has done, and he, a armer, has provit on his capital invested than any capitalist in the country can make on his investment. Neither Phil. Armour nor the railroads can show such profits on their capital and labor as he. The point to solve in the financial question is not a division of acquired wealth, but in putting skill into your business and getting pay for it. Mr. Goodrich put skill a hundred
business and it yielded him a fold, and more. It is he who fails to put skill into his business who fails to reap a
profit. Mr. Goodrich has not got a dollar of my money, nor of yours; neither has Phil. Armour nor the railroads. They have simply solved the problem of putting skill into their business and getting a profit out of it, and every farmer of Wisconsin can do as well if he will work as hard as they do, put skill into his business and conduct it wisely. Mr. Goodrich has not a superior dairy farm, nor the best herd of cows in the counry, but he has got the been possible for him to obtain.

## OHIO MILLERS.

## Meeting of the Northeastern Ohio Association

,MEETING of the millers of Northeastern Ohio Millers Association was held in the parlors of the Windsor hotel, Akron, Ohio, Dec. 4th. The state has for several years been divihed into district associations, all under the control of the State Associaion, and this is the yearly meeting of the above named association.
Frank Griffith, of the Orrville Milling Company, called the meeting to order in the absence of the regular president, Mayor Blake, of Canton. A number of matters were discussed, but of minor importance. The question of buying sacks produced general discussion, but nothing definite was decided upon. Reports showed that wheat was not going into the Winter in so good condition as last year and that stocks still back in farmers hands were about the same as last year. Owing to delay in trains the meeting was not called to order until late.
Among the millers in attendance were the following gentlemen:
L. C. Miles, F. Schumacher, F. A. Schumacher, Akron; W. D. Ty ler, Wooster; E. F. Shelley, Loudonville; T. A. Parry, Lucas; Jacob Schmidt, Loudonville, O. W. A. Craig, Shreve; J. B. Thompson, Gann; B. B. Swartz, Danville; W. H Hecker, Millersburg; J. S. R. Overholz, Wooster; J. L. Van Hatter, Canton; Mor gan Maehauser, Hartville; Howard Clingston, Ashland; K. Plank, Galion; S. B Leiter, Mansffeld; B. A. Paxton, Ashland J. T. Pierce, Nankin; Allen Greely, West Salem; J. P. Smith, Polk; Geo. H. Hay, Creston; J. W. Southern, Wadsworth; W Salem, West Salem; R. J. Cochrane, Burbank; A. L. Clapp, Lodi; C. A. Williams Kent; J. M. Waugh, Mansfield; Corley, Alliance; W. Rudeth and Alf. Slutts, Fredericksburg; W.H. Reinhocht Marshallville; M. M. Rollins, Youngstown; D. F. Griffith, Orrville; J. A. Dyer Creston: M. H. Howe, Cuyahoga Falls; J. A. Neggle, Lodi.

One of the principal objects of the meet ing was a complete reorganization of the association which for some time past has not shown that vitality supposed to be consistent with the aims of the organization. With this end in view a new constitution and by-laws were adopted and arrangements made to get every miller in the work being done.
F. A. Schumacher, of the American Cereal Company, of Akron, O., was elected president of the association. Frank Griffiths, of the Orrville Milling Company, was elected secretary and treasurers. The association then adjourned to meet for its quarterly session on Jan. 23, 1892. While the place was not decided it will probably be Akron which is almost the center of the territory under the control of the association

## VARIETY.

The rent of land in England 300 years ago was about one shilling per acre.
The yearly income of the Church o England is nearly $£ 10,500,000$ sterling.
The latest estimate of Russia's population places the number at $110,000,000$.
A water famine has made New York realize that water is some good;' after all.
There are 18,000,000 farmers in France, the total population of the country being $38,000,000$.
Official statistics show that Colorado has over 20,000 square miles of coal, and the product in 1890 was about $3,000,000$ tons.
The proportion of travelers killed in railroad accidents in the different countries is as follows: In France, one to every $24,000,000$; England, one to every $21,000,000$; Germany, one to every 9,000 ,000 ; Belgium, one to every $6,830,000$; United States, one to every $2,800,000$.

A useful invention, tending to lessen the possibility of accidents in factories, is now being extensively adopted in England. The breaking of a glase, which is adjusted against the wall of every room in the mill, will at once stop the engine, an electric current being established beween the room and the throttle valve of the engine, shutting off the steam in an instant. By this means the engine was stopped at one of the mills recently in a few seconds, and a young girl, whose clothes had becoma entangled in an upight shaft, was released uninjured.
A case decided a few days ago in New York upsets some ideas long entertained as regards deadhead travelers. Hitherto the general rule has been that one traveling on a pass could not recover damages in case of an accident, but that idea has been now set aside and damages awarded. It is rather rough on the companies to et nothing for the transportation, and hen be liable to the individual whenever crash shall come; but, on the other hand, many a holder of a pass will lie back and find an added charm thrown round his journey
A New Use for Aluminum.-Accord ng to a Pittsburg dispatch, an order for ive hundred tons of aluminum has been placed with the Pittsburg Reduction company, to be used for the equipments of he German army. Capt. Hunt, of the Pittsburg company, is reported as saying: The emperor desires the canteens of his soldiers to be made of aluminum. There are two reasons for this, namely: its lightness and cleanliness. It will be used also for buckles, and it may be brought into use in the manufacture of cartridge shells. The new smokeless powder cartridges have brought about a demand for aluminum, and other European powers are also considering the advisability of using it.'
The Largest Fresh Water Steam shir. -The keel of the largest sueamer on fresh water in the world will soon be laid the ship yard of the Chicago Ship building company in South Chicago. She will be 330 teet keel, 350 feet ove all, 43 feet beam and $24 \frac{1}{2}$ feet deep, and will carry on the ordinary stage of water in the lake canals over 4,000 tons. With an increase of depth of water on the Great Lakes, as now contemplated, the new boat will carry without trouble ove 85,000 tons. She will be built for the Minnesota Steamship company, for which the two steel steamers constructed last winter at the Chicago shipyard were also built. A sister boat of exactly the same dimensions will be built at the same time at the Globe Iron works, in Cleveland. Both steamers will be given power to drive them 14 miles an hour. They have triple expansion engines, $24,39,63$ inches by 48 -inch stroke, and will be fed by three $12 \times 12$ feet boilers. They will be ready for service at the opening of navigation next year.-Iron Trade Review.

## MECHANIGAL.

Iron has been rolled to the thinness of 1800 of an inch. This excessive tenuity will be understood when it is considered that the thinnest tissue paper measures $1-1200$ of an inch.
Boiler Scale is Expensive.-Experiments made 20 years ago on the nonconducting properties of boiler scale gave astonishing results. The effect of the scale accumulation is given as follows $1 / 16$ inch thick requires 15 per cent more fuel $; \frac{1}{d}$ inch 60 per cent more fuel, and $\frac{1}{2}$ inch thick 150 per cent more. To produce steam at 90 pounds pressure, in a clean boiler, only 325 degrees of heat are required, but with heavy scale this temperature must be increased 200 to 300 degrees. For $\frac{1}{2}$ inch of scale the heat must be 700 degrees, or almost a low red heat for the iron.
Cement for Iron.-The following is given as a mixture for joining pieces o iron together: Equal parts of sulphur
and white lead, with about one-sixth pro-

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JfHIS Cleaner has been for five years past subjected to the most severe and varied tests with artesian well and all othe waters impregnated with every known element of incrustation, from the Lakes to the Gulf and on the Paciflc Coast. It has never failed to answer in every case the demand made upon it. Having thor oughly proven its entire efficacy, we offer it to the steam-using world, confldent that it is the best and only sure apparatus and method for removal and prevention of scale in Pipes and Boilers, using no Chemicals.

ISEAMANS \& WHITNEY, Agents, 84 New Insurance Building, MILWAUKEE, wis.
portion of borax, are the constituents of to eighteen inches from the bottom of the the mixture, and the three should be fire box, corrosion had eaten the plate thoroughly incorporated together so as to away round the whole circumference of form one homogeneous mass- When the the boiler; in some places, about 13 or 14 composition is to be applied it should be inches from the bottom, to the thickness wetted with strong sulphuric acid, and a of $1 / 18$, the original thickness being $7 / 18$ of thin layer of it placed between the two an inch. This explosion is an excellent pieces of iron to be connected, these being illustration of a very important fact, at once pressed together. The Chemical which is, that the hammer test, to be of Irades Journal says: "It is stated that value, must be applied by a man who the cement will hold so firmly as to resist has had long experience in such work. the blows of a steam hammer, and dry so A novice might pass over a very dangercompletely in a few days as to leave no ous spot with the hammer, and not derace of the cement, the work then pre- tectit; while, on the other hand, we have senting the appearance of welding.
The Yorkshire Boiler Insurance Company of Bradford, Eng., send us a copy of Mr. John Waugh's report on the explosion of an upright boiler at Huddersield, Eng., on June 3, 1891. The boile was internally fired, and a hammer test was applied to it (not by the Yorkshire company, however), on June 2d, the day before the explosion. Next day, the fire box collapsed, killing one man and injuring several others. The rupture revealed the fact that for a distance of six seen experienced inspectors detect flaws with the hammer where the novice could perceive no difference in the sound. We oo not recommend the hammer as a substitute for thorough internal and external examination, but it is very valuable when applied by an experienced person, on boilers that cannot be thoroughly examined in any other way, either on account of their design or their small size; and we believe in applying it on every ccasion, in addition to the regular internal examination,-The Locomotive.


## LITERARY MOTES．

The next number of Horper＇s Weekly， published December 16th，will con－ tain a four－page map，giving a bird＇s－ eye view of the exposition grounds and buildings at Chicago．
Colonel Thomas W．Higginson will contribute a charming paper，entitled ＂The Lilliputian Theory of Woman，＂to the forthcoming number of Harper＇s Bazar．

It is safe to predict，if not a long＂run，＂ at least a large number of productions on the amateur stage，for＂Bobby Shaftoe，＂ the comic operetta by H．C．Bunner，pub－ lished in the Chrtsmas number of Har－ per＇s Young People．

Out with his Own Diamond，a novel by Paul Cushing，author of The Blacksmith of Voe，will be the next volume in＂Harper＇s Franklin Square Library．＂It will be published about the 15th of December．
Wonderful nights in Old Egypt．－ Nights there were，too，full of enchant－ ment－such nights as Cleopatra once out－ watched on some wave－washed Alexan－ drian terrace－when the moon，burning with a white fire unknown to the North， hung over her own perfect image in the water；or when the sky，＂clad in the beauty of a thousand stars，＂was mirrored in the still river below，and we seemed to float through a starry world．In the crystal－clear air the great constellations flamed with unwonted splendor；above， Orion blazed；the Hyades and Pleiades glittered like diamond fibulæ in night＇s dark cloth；Canopus＇s great lamp burned with a mellow light；Berenice＇s shining locks hung on the vault like a votive off－ ering；Cassiopeia queened it in her silver chair，while Gemini＇s twin beacons flared and paled．
Under such a sky，from the terraces of the Alexandrian Museum，King Ptolemy＇s astronomers watched these gleaming worlds in their ordered march through space，seeing in each planet a divine chorister in the infinite symphony，and hearing faintly the prelude of the celestial harmony centuries before it thundered in Galileo＇s ears as he stood at midnight on the brown Tuscan tower among the olives．
Most precious of all these experiences is the remembrance of the hours spent on deck at what the Arabs call＂the time of evening prayer，＂when the sun dipped behind the Lybian chain，and Mustapha＇s fire rose in pale yellow flame against the violet water．The mountaintops still glowed，the desert was ashes of roses，the high bank turned to bitumen，the sky to molten gold，and darkly silhouetted against its splendor，a frieze of living bronze against a golden wall，the ever charming figures of the Egyptian pastoral －Canephore，on their stately march； Chloe，lithe and slender，driving home her sheep；Daphnis herding his goats； the gleaners of Virgil；the husbandmen of Anacreon，passed before us in the glamour of the evening light；every low－ browed profile outlined in sharpest relief against the glowing west．－From＂Afloat on the Nile，＂by E．H．and E．W． Blashfield，in December（Christmas） Scribner．
The Breeders＇Gazette，published by J H．Sanders Publishing Co．，of Chicago has now in preparaticn a fine Christmas edition，which will be prized by our many readers interested in live stock or farming．Price for Christmas number 25 cents；regular subscription， 82 per annumn；with U．S．Miller，one year 82.50 ．
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