Wisconsin and Iowa farmer, and northwestern cultivator. Vol. 3 1851

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I. A. Lapham

WISCONSIN & IOWA FARMER,
AND
NORTHWESTERN CULTIVATOR.

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MARK MILLER, }

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Post Masters and all others who feel an interest in the circulation of the FARMER, are invited to lend their aid in procuring subscribers and extending its circulation.

The Third Volume of the Farmer.

To the Friends of Agriculture in the North West:

In commencing the Third Volume of the Farmer, we beg to thank our friends for past favors, and to say a few words respecting our enterprise—our future intentions and prospects. The establishment of a new Agricultural Journal is at best a difficult task, but ours was commenced under peculiarly unfavorable circumstances. The North West was but newly and sparsely settled and to a great extent by those whose facilities were not such as to ensure the general reception of an Agricultural paper among them. The field, too, was already occupied by a well established and ably conducted journal, the "Prairie Farmer," which in that field had outlived all previous attempts to share its patronage or responsibilities—and as was thought, by many, must speedily add our own paper to the list of its defunct competitors—as indeed it should if one laborer could do justice to so great a field. This idea, however, we utterly repudiated in commencing the "Farmer"—believing that there was not only room, but a pressing demand for more—that the locality and rising importance of the two New States of Wisconsin and Iowa, and especially of the Agricultural interest in these States, imperatively demanded something more especially devoted to their wants—something that might form in them a neucleus of improvement—that might be the incentive to a most thorough and efficient System of Organization here, among the Friends of Agriculture, such as is enjoyed in many of our Parent States. "In Union is Strength."

And now, Friends, have we erred—shall this promising field be given up after having been at least partially occupied for the past two years? Bethink you of the value of Knowledge, in every department of human affairs, and of the indispensibility of the Press in diffusing it. Look at the comparative condition of Agriculture among us and see if every help, every means of improvement is not demanded—shall not be laid hold of and vigorously employed?

The necessity of this course must be apparent to all, and we therefore hope that our efforts in that behalf will be generally sustained.

True, our paper has not been all that we could wish—strange would it be if in thus starting, it had been—yet, considering its price and adaptedness to our wants we fear not a rigid comparison with any other Agricultural journal in our land. But we shall be unremitting in our efforts to improve it, confidently relying upon the help of our friends to aid us in making it all that is needed.—Surely there can be among us no lack of the means or ability requisite to this, if but the right kind of effort be used to concentrate those means, those abilities. With that effort on the part of our friends we should have, as we ought to have, at least 5000 subscribers and a most noble array of contributors, under whose auspices our paper might be the pride of our Farmers, the very right arm of their advancement. What say you—shall we have them? Is our enterprise worthy of support, and if so will you not help us to obtain it? Travelling Agents we cannot afford to employ, and must therefore trust to the appreciation and efforts of our friends. The honor, its character and success, past and future, are all theirs.

With them and upon them *individually and personally* we leave the responsibility—as our cause and our humble efforts deserve, be their verdict!

We know the times are hard—most severely do we feel their pressure, but shall we not therefore eat? Should not our bodies and souls at such times most of all be nourished and strengthened to grapple with our enemies—yea! is there not a wo upon us as farmers if we do not, firstly, furnish ourselves against their attacks? Then sustain the Press, that mightiest agency of mind over matter—that pioneer, and stay and staff of all modern accomplishment and progress! And—Lastly—if you love us, *let your half dollars be in season!*

For the Wisconsin and Iowa Farmer.

Wisconsin--Face of the Country--Failure of Crops, &c.

Agriculturists should watch the times as do other professions. Causes in nature, as well as in morals and politics, produce effects. And it becomes the farmer as well as the commercial man to observe the signs of the times and seasons.

Wisconsin has suffered for a few years by partial failure in the wheat crop. It has been sufficiently tested to be laid down as a settled proposition, that wheat will not do well to succeed wheat, crop after crop, and it is equally certain that much of the lands in Wisconsin is not so valuable for wheat growing as for some other crops.

And what I propose in this communication is to call the attention of farmers to a few simple truths, which may have been told to many before; but which must be repeated till a change is effected in their husbandry.

The face of the country in South-Eastern Wisconsin is nearly a plain; there are no high hills or deep valleys; and of course there cannot be the exact—the same characteristics in the soil that are found in a less level country; but still we have that here which answers to hills and valleys. We have the dry Prairie, and the wet. We have the oak openings and the marsh.—These dry lands answer to the uplands in a hilly country, and the marshes and wet prairies to the interval and bottom lands in a hilly country. And as the uplands in a hilly country are less productive than the bottom lands, and will not bear cropping so much as the bottom lands, so in a more level country, like ours, the dry lands will fail if cropped constantly for like reasons; and why? Our prairies and openings, before the settlement of the country, were accustomed to be burned over once or twice a year, and the dry grounds of course were burned down close to the sod, thereby nothing but alkali was left to enrich the ground, and even that was carried into the marshes and deposited there by the rains and floods. The fires on the marsh being fed by the luxuriance of the vegetable growth on their surface was more sparing in its progress, and left a considerable portion of the herbage to decompose and to form a vegetable mold, so that it will be found that the agricultural wealth of this country lies as much in the low grounds as it does in the hilly country.

In the hilly countries settlements were made along the streams and the rich alluvial soils were first brought under culture, and then the higlands. And the wash of the mountains was the fertilizer of the valley, for a long time before the high grounds were stripped of the forests. But here the case is different. The first lands brought under cultivation were thoss which have never received tribute from any thing but air, fire, and water; all tending to transport from them all their native agricultural riches. And now, after ages of constant draining, washing and leaching from them all their fertility, they are subjected to the plow, and for a few years, well repay the labor bestowed on them until the vegetable mold produced by the native sward is exhausted, and then they must fail. No one has considered that it was the duty of the farmer to do any thing in return to the soil for his rich harvests, and so careless has he been that the husks and straw have been sacrificed to the flames rather than buried in the soil as an offering to Ceres. If the farmer will but reflect, he will see that the lands he cultivates in this country is on the summit of the high lands; that they have never been manured or enriched by any means; that even the animals have not herded upon them, as is the case at the East in hilly lands; that there has been a constant flow from, and no flood to them; and, that in the nature of things, lands so situated must fail sooner or later; and the only wonder is,

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that they have done as well as they have. But there is no occasion to be discouraged; the riches of ages are stored in our marshes and wet prairies. Let the farmer turn his attention to them—ditch, drain, and cultivate them, and pay back to the dry lands the debt long due them in manure; depasture them, and herd your flocks on them, and in a few years you may draw upon them again for a new instalment and they will answer the draft promptly.

A word on ditching. I suppose every one knows that in order to effectually drain lands the ditch should be in the centre of the marsh and no where else. The surface water must not only be carried off but must be prevented if possible from coming on to the ground to be drained. In order to do this effectually ditches must be constructed about them on the hard ground, and springs that flow upon them cut off and turned into the ditch. By this means the lands drained will become dry and cultivatible, the country around become healthy, and the people more wealthy. M. B. B.

BURLINGTON, Dec. 8th, 1850.

ED. WISCONSIN FARMER:

Dear Sir—I have been favored with an early acquaintance and a late correspondence and receipt of much valuable agricultural information (as I consider it), on dairy husbandry, from the Hon. B. P. Johnson, Secretary of the board of Agriculture in the State of New York, in whose charge are the State Agricultural rooms in Albany, and their depositories.

The information referred to is contained in sundry reports from the most eminent dairy farmers in that State. And I have thought that they, or extracts from them might be interesting and serviceable to Wisconsin farmers in their present agricultural embarrassments. Vast amounts of cheese, the manufacture of New York and Ohio are being consumed in our cities and towns. And if we have all the endowments necessary to a successful competition with any eastern State, (as I believe we have) let them be known. If *their* great reliance is beginning to be on corn fodder green for both fall and summer, and dry for winter use, sown broadcast, surely we can maintain a successful competition with any country of as high a latitude.

Yours, &c., EPH'M. PERKINS.

STATE AGRICULTURAL ROOMS,
ALBANY, Nov. 14th, 1850.

EPHRAIM PERKINS, ESQ.:

Dear Sir:—Absence from the city for the last four weeks, on a tour among the farmers and Agricultural Societies to the South, from which I returned day before yesterday, has prevented an answer sooner to your letter which I found on my return. It gives me great pleasure to hear from you and I give you such information on the subject of soiling as is at hand.

One farmer who has given considerable attention to the subject, says: He has a large yard, enclosed by stone walls, with a pump and trough convenient for watering, and open sheds for the cows to be in in summer. Three times a day, at stated hours, green crops are cut and brought to them, such as clover, Timothy grass, green oats, green rye, green corn stalks, green buckwheat in bloom, turnip tops. Lucerne grass, &c. By way of change occasionally, dry hay and straw cut up and given, mixed with bran sufficient to make them relish it. Salt is always kept within reach of the animals. A piece of land that would support five cows in pasture one week, would furnish the same number, if cut and carried to them, one month. (This estimate I think too large—though I have little doubt it would support them three weeks.)

In the winter, the cows have separate stalls, where they are curried and fed—and turned out in pleasant weather into the yard for a portion of the day. Some do not turn them out at all, but have water brought into the barn and carried in troughs before the cows. Where land is used for soiling, and the herbage is cut often, liquid manure, diluted about one half, should be spread over it after each cutting, so as to preserve the fertility of the land.

This gentleman says that his cows when soiled yielded a larger quantity of milk than when pastured—and such I believe is the experience of those who have tried it.

The Orange Co. butter makers generally churn the milk, though many churn the cream only. The *Atmospheric Churn* is not used to any extent, so far as I am informed in our best dairies. It is believed by our best dairymen that from 40 to 50 minutes is soon enough to bring the butter, and that more is secured and better quality than in the churns which bring the butter

very rapidly. The *Thermometer Churn* as it is called is much used. The barrel churn, and the old dash churn are also used in the very best dairies.

The best grass which I know of for dairy cattle, is the rye grass, so called, with white clover. I saw fields of it in the State of Delaware. It gives a very thick coating to the ground, and can be cut three times or more during the season there and gives a very large yield. It has not been introduced to any considerable extent in this State. The natural grasses for pasture are the best. For Soiling—rye, oats, green corn stalks, clover and Timothy are mostly used. I should suppose the blue grass would do well. Lucerne, a French clover, is excellent. It can be cut 4 or five times in a season—grows very luxuriantly, and is much relished by cattle. I saw the fifth crop of it on a farm in Canada, last week, and the gentleman assured me, that he had cut at each time previous what was equal in his opinion to 2 tons per acre.

I send you a report (No. 1.) I made last winter to our Society on the subject of Dairies, which may be interesting to you. The manner of making the butter stated on the 15th page, is among the best I know of. It certainly is good enough, where a man can command for his butter 23 cents per lb, for ten years in succession.

I also send you another report, (No. 2.) in which you will notice the manner of making butter by Mr. Holbert, who is an Orange Co. dairyman residing now in Chemung Co. He churns the milk. His butter is of the very best quality, commanding by the dairy 24 cents per pound.

I also send you another report (No. 3), on Cheese Dairies, which contains an article by Alonzo L. Fish on making Cheese, which I consider the best ever published in this country. There is also a report on butter, and an account of a very good dairyman, Mr. Hall. You will see, page 30, that he tried green corn stalks for feed, and increased his butter ¼lb for each 100 lbs. of milk, and the butter of superior quality.

I think you will find these reports useful. They contain in my opinion all that is necessary in order to have a first-rate dairy for Butter or Cheese, and if they shall be useful to an old and valued friend, I shall be gratified. I also enclose you a copy of an address which I delivered before one of our societies, which may not be uninteresting to you.

I am extremely happy in being able to answer your inquiries and I hope satisfactorily.

I have samples of the California clover, oats, grass, and wheat, I received from Commodore Jones. We have sown the clover seed and shall give the results as soon as known. I should like to receive from your son some of the seeds he brings, if he has a small amount of each to spare.

I hope when he returns he will be content to dig gold from the rich fields of the West, which in my opinion is far more reliable, safe, and healthy method of obtaining it, than among the sands and hot plains or mountain gorges of California.

Please give me an account of your farming and the state of farming in your region.

With my best regards,

I am truly yours,

B. P. JOHNSON.

Sec'y. N. Y. State Agr'l. Society.

The Reports alluded to by Mr. Johnson, in the foregoing communication will be published in the next No. of the Farmer.

A Mine of Paint.

Yesterday forenoon we spent a short time very pleasantly in an examination of the paint mine, recently opened in West Springfield, by Skinner and Hancox, of this town. The substance from which the paint is obtained is a shelly stone, hard in its natural state, but affected like lime by the air. Ground fine, and mixed with oil, it forms, without other ingredients, a neat, durable, fire and waterproof paint. The stone lies in diamond-shaped masses, and extends through four acres of a bluff on the bank of the Agawam River, opposite the Mittineag factory. Two colors have been obtained so far—slate and freestone. The stone is entirely free from grit, and affords a paint one-half or two-thirds cheaper than lead. We have been shown some very handsome specimens of work done in this paint. An analysis of the stone by Prof. Jackson has resulted in a highly favorable report.—[Springfield Post.

Gravel Block, Milton, Wisconsin.

This block of buildings is made mostly of gravel and lime. The foundation, on the outside, is stone, gravel and lime from the foundation until it gets above the surface of the ground. The length of the main block is 93 feet by 44 feet in depth. This block unites the Hexagon or Milton House, which adds 34 feet to the front—two stories high beside the basement, each story and basement being ten feet in clear.

These cross walls project in front and rear, so as to form pillars 15 inches square, which serve as ornaments, and give a protection between each block, in case of fire, if it should burst out of one set of doors and windows to the next set of doors and windows with side winds. These walls also rise above the roof, leaving a separate roof for each number in the block, so that if one number should burn, the next can not catch from the flames—rendering the building fire-proof. The front and rear walls are but 10 inches thick, as they are filled with doors and windows, and require less casings than thick walls—12 parts of gravel, which is wholly taken from the basements, to 1 part of quick lime mixed with water so as to make mortar, is the material used, by filling into a curb made of plank, and held together by clamps and laid up in warm weather in layers of 10 and 11 inches each day, is the manner in which the walls are made. The fore part of the season is the best for this business as the days are long and drying. These walls are plastered with coarse sand and lime, to level up the surface being floated. On them is a fine coat of half lime and half sand, which is to finish—then white work for both outside and inside. The plastering cements on as hard asthe walls, and cannot be hammered off without breaking the wall. In all this process and work, the gravel should be clean from soil, clay or dirt and the lime well burnt and fresh. Reasons show why such walls cement and become hard lime in the rock, as we find it holds one-third of its weight in combination of carbonic acid gas—this is thrown off or separated by burning the lime in a kiln, and this is all the use there is in burning the lime. Now if a piece of lime burnt and not slaked be immersed in pure carbonic acid gas, it will absorb the gas and become rock—impervious to water—showing the lime to have a strong affinity for this gas. Now whereas the common atmosphere has about one part of said gas to one hundred parts of atmosphere, the lime, when mixed in mortar, comes in contact with the atmosphere, and absorbs the gas aforesaid—re-unites it with the lime, and the lime becomes stone. Now as gravel is pulverized stone, or rock mixed with lime, which by nature becomes rock, then all is one conglomerate mass or rock, but this hardening process is slow, not entering the wall more than three or four inches in a year from the outside. Some failures have been made by building these walls late in the season, and poor lime or dirty gravel, and others by setting them on poor foundations; and here let me say, there is an error too generally practiced by builders in gravel, stone, or brick buildings, which is this: they build the wall thick at the bottom and draw back on the inside and carry the outside up plumb, which throws the most weight on the outside and gives the walls a tendency to lean outward as they settle; hence the use of bolts, screws and nuts, put into the timbers and walls to hold them together, and hence the reason why the walls in burnt districts

in cities fall outward and obstruct the streets. Now reverse this mode of building, set the foundation out at the bottom, and draw in at the surface of the ground and then carry up the wall plumb both outside and inside, and your building will settles together, by its own weight, the cross walls and timbers holding it from coming in too much. Most gravel walls can be built, where the material is plenty as it is here, for one-third the cost of brick walls, and will eventually be used to fence the Prairies.

I have written more than I intended, but as I am, for what I know, the inventor of this kind of building, I feel anxious to have the theory well understood, so that there may be no failure with others in building with this material.

JOSEPH GOODRICH.

Milton, Dec. 18, 1850.

Winter Treatment of Sheep.

The season, when observations such as the following, written by Mr. E. Kirby, of Jefferson Co., N. Y, and published in Morrell's Shepherd, will come into use, is approaching.

In wet weather it is of great advantage to be able to fodder under shelter. I have abandoned the practice of salting my hay except when compelled, by stress of weather, to house it before it is cured. My sheep are salted about once a week the year round, and instead of giving them tar as recommended by some persons, I occasionally strew the yard with pine boughs, which they are fond of.

I regard the fall management of lambs, one of the most important branches of sheep husbandry. Having paid for my experience on this point as well as that of winter shelter, I can speak with confidence. They should be separated from their dams about the first of September, and with a few old sheep that require nursing, turned to the best pasture. Care should be taken that they are not stinted till removed to winter quarters, when they should have a small allowance of grain or oil-meal, in addition to a plentiful supply of good hay. As soon as the pasture begins to fail, the ration of grain should be supplied. By neglecting to provide suitable pasture for a lot of upwards of 100 very superior lambs one season, I lost the greater part of them the ensuing winter. My utmost efforts, after I discovered the error, were of no avail. I gave them a comfortable shed, plenty of litter, good hay, a regular allowance of meal, and free access to water; but they never recovered, and the greater part died before spring.

My bucks and ewes are put together about the first of December. The flock which I keep at my home barn, under my own eye, and from which I raise bucks for the supply of my own, and many of my neighbors's flocks, is managed in this way. The ewes in lots of 20 to 25 are placed in separate pens, and a select buck is turned into each pen, where they are kept together 15 or 20 days. The ewes in each pen are marked with a letter in tar and lampblack, to indicate what buck they were served by. At shearing time, the best buck lambs are selected, and receive a mark to denote their origin.

In my judgment, water is as essential to sheep as it is to any other animal. They will go through the winter on snow instead of water, and so would a man or a horse, if compelled by necessity to do so; but either would prefer to have it thawed before using it, rather than perform the office in his bowels.

When my sheep ran in large flocks without shelter, they were occasionally affected with the scab, but since I have provided comfortable sheds for them, they have been troubled with no serious disease.

From the Plow, the Loom, and the Anvil.

The Baldwin Theory.

We give place with pleasure to the inclosed communication from Dr. Baldwin. Should the theory it maintains be finally established, the discovery will constitute a very striking epoch in agricultural annals. Who has not observed in the midst of the poorest old fields, luxuriant growth of grass coming up through its branches where a bush lies covering the ground? While we should like to know what the scientific have to say to this theory, we have understood that the plain practical farmers in the valley, now believe they can make their lands rich by shading them with anything; accordingly they are covering them with brush, straw, and clover, finding, as it is said,

the raw material better and more profitable than the manufactured article, that is *the shade* to be better than the *manure*.—Ed.

Winchester, September.

Dear Sir: I submit for the consideration of your agricultural readers a few plain propositions. If you are possessed of any facts, which create a doubt of the truth of any one of them, I shall be pleased to see them stated in your journal.

Proposition 1st. Of the various changes which vegetable and animal substances undergo, during their decomposition, the product of the one only which has proved to be the aliment of plants is the residue of putrefaction.

2d. Each change is a distinct and peculiar chemical process, differing not only in the circumstances requisite to produce it, but also in the nature and chemical composition of each product.

3d. The value of each product depends very materially upon the attention paid to the circumstances necessary to generate each peculiar process. This is known to be true with regard to the vinous and acetous fermentations, and is equally true with regard to every other.

4th. That a close, cool, dark, and damp location, with a contact of air, is indispensable to the generation of the putrefactive process. All organic substances experience this change only, when thus located.

5th. No substance whatsoever will undergo the putrefactive process, when exposed to heat, light, and a free circulation of air.

6th. That decay, or eremacausis, is a distinct chemical process. differing essentially from the putrefactive, in the circumstances which produce it, as well as in the quantity and quality of the product, which is invariably destitute of fertilizing virtues.

7th. Putrefaction may be considered the ultimate result of vegetable and animal decomposition, because it forms the only product incapable of any other chemical change, and is consequently indestructible.

8th. That the excrement of animals is not manure. Like the bodies of animals, it never becomes the food of plants until subject to putrefaction.

9th. That the value of manure materially depends upon the perfection of the putrefactive process; that is, the strength or fertilizing qualities of the manure may always be estimated by the density and duration of the shade to which it has been subject.

10th. That the surface of the earth itself will readily undergo the putrefactive process, if favorably located, that is, if densely shaded, which of necessity implies a cool, dark, close, and damp location.

11th. That the fertility imparted to the earth by shade. that is, manure made of the earth itself, is more durable, and therefore more valuable, than that made of any other substance whatever.

12th. It is not true that the impoverished condition of any soil, proceeds from a deficiency in one or more of its mineral constituents, because all soils, alike, may be made exceedingly fertile by *shade alone*.

Yours respectfully,

R. E. BALDWIN.

Jefferson County Dairy Farming.

It would greatly surprise some of the western and southern stock farmers, who boast of their favored climate and rich pastures, to visit this rock-bound county upon the shores of Lake Ontario and the St. Lawrence, to see how much more money is made by the produce of cows in regions where it is very mild, or frost quite unknown.

In my late flying trip to Watertown, N. Y., I had the pleasure of a visit to the farm of Mr Moses Eames, about seven miles from the village, six hundred feet elevation above it, and twelve hundred feet above tide water, and north of latitude 44°. The surface is quite hilly and stony, with underlying rocks, and would be thought by strangers cold and unproductive. Now, August 21, is the season of harvest of wheat, oats, barley, and grass. Mr. E. keeps forty-three cows, and makes a cheese every day that will weigh, when ready for market, ninety pounds; worth six cents a pound at home, or $5 40, besides a liberal supply of milk and butter for a large family. And better butter and cheese I never tasted; nor did I ever sit at a better table than in this farm-house—this American farmer's home. Ah, "Home, sweet Home," indeed.

Disposal of the Milk.

The milk-pails are carried, as fast as filled, to the milk-house, and emptied into a vat of suitable size, say seven by four feet, and two feet deep, made of wood, lined with tin, having a space between, into which cold spring water is drawn at night, to cool the milk and promote the raising of the cream. The vat is elevated upon legs for greater convenience, so that the top is some three and a half feet high. When the morning milk is added, the water is drawn off, and a conducting pipe from a small boiler fills the space with steam to scald the curd, which is made in the same vat. The steam is then turned into a barrel of water, and heats that ready for cleansing utensils without the least trouble.

Taking off the Whey.

Another vat, of a smaller size, with rollers in the legs, is placed along the side, and surface whey dipped off, and then it is rolled to a spot where a conductor, opening through the floor, receives the contents, and carries it down to the pig pen. The curd is next dipped into a strainer in the small vat, and the whey drained off; and then it is rolled alongside of the press, and put into the hoop upon a sliding board; so that the whole is done without any hard lifting. The press is one of Mr. Eames's own make, and, with a small weight, will give seven tons' pressure. In turning the cheese in press, a small wheel table is rolled alongside, upon which it is done with ease. Upon the same, it is conveyed into the cheese-room, where the cheese are kept upon long tables, and turned by rolling upon edge and over, which is generally done by Mr. E. himself, but without great exertion of strength.

The next process, after placing upon the table, is, to bandage with thin muslin, made on purpose, and costing only three cents a yard. The strips are cut two or three inches wider than the cheese is thick, and the edges turned over the corners and sewed so that it is impossible for a cheese to spread or flatten down, as they did before bandaging came into fashion.

The Temperature of the Cheese-Room.

The temperature of the Cheese-Room is kept cool and dry by using a stove to drive off dampness; and then it can be frequently washed with cold water.—[Am. Agri.

Cultivating Stiff Soils.

The importance of pulverization, for stiff soils, can hardly be overrated; yet it is a matter which receives too little attention from farmers in most sections of our country where this description of soil prevails. Considerable improvement has been made in the implements used in cultivating stiff soils; as regards their pulverization, though the best implements for this purpose are by no means common. Much depends on the plow, as to the effect produced on the soil —some producing much more pulverization than others. The first effort towards producing this effect, should be to plow the land *fine*, or in narrow furrows. But in addition to this, some implement is needed which will under any circumstances, reduce the hard soil to the requisite degree of friability. In England, an implement called the "clog crusher" is used for this purpose. It consists of series of iron plates, placed round a cylinder, with notches like deep cut saw teeth at the outer edges. The machine operates like a roller, and being drawn over the ground, breaks down and pulverizes the lumps at once. We can see no good reason why such an implement should not have been brought into use in this country.

A writer in the *Farmer's Magazine* makes some interesting observations in regard to the improvements which have been made in the cultivation of stiff soils. He says—

"We need only reflect a moment on the principles which have to guide the strong-land cultivator, in preparing his soil for the seed, and compare the means he had of overcoming his difficulties, say twenty years ago, with what he has now, and we shall see how very different is his position rendered by the application of mechanical science. We speak not of his profit, abstract or comparative; but we cannot help being struck with the vast difference in his resources of meeting the difficulties of his position. Once he had to plow with three or four horses, and to cross plow with great labor and difficulty, and then to harrow with an implement which produced scarcely any impression on the stubborn clods—to plow and harrow, and plow and harrow, whenever he could, until perhaps he found it necessary to set his work-people, in some

seasons, to complete his operations with the mallet and stone-hammer, to break the unruly clods. He had to *pulverize* and to *clean*—the one could not be done without the other, and the former had to be effected somewhat in this manner; First the unctuous clay was cut in long longitudinal parallel pieces by the plow, and left on edge to dry, being divided by a double wedge called a plow. This mass being sufficiently dry to admit the treading of horses' feet with impunity, is cross-cut into large cubes, and these are subjected to the action of the natural processes. The sun and air dry out all the moisture, owing to the large surface exposed to their action. The moisture abstracted, the clods begin to crack and show here and there symptoms of fissures by the evaporation of the moisture, forming receptacles for the next rains, which one by one again swell out the particles, and slowly the whole is broken down into a friable soil."

He observes that the practice now is, to follow the plow as soon as the soil is suitably dried, "with the clod crusher, or some similar powerful separator of clods, and by once or twice going over the field, the soil is reduced to as fine a tilth as if it had undergone a whole summer's exposure."—[Cultivator.

Cultivated Cranberries.

A farmer friend sat before us on Thursday last, a jar of cultivated cranberries, grown on a patch set out only two years ago on an otherwise worthless patch of hogland, in Salem county, New Jersey. The berries are very large and of a beautiful red color. There is a growing attention to the cultivation of this fruit among farmers in various sections, and we are assured there is no more reliable or profitable crop—a single acre when in full bearing, producing a yield worth in market from five to six hundred dollars. The mode of cultivation is to plant the wild vines in rows, three feet apart, setting the roots firmly in the ground some three or four inches deep. From these settings the vines so branch out that in a few years the ground will be thickly covered, effectually killing out every thing else. Until the vines have had time to grow and cover the ground, the only labor required on them is a little hoeing to keep down the weeds. Wet, low lands are esteemed the best, but we have heard of the successful cultivation of the vines on common farm land. The market for this fruit, which is alwaye ready sale, has, until within a few years, been supplied from the wild and promiscuous growth in swamp lands, at a great distance from our principal cities. There is no greater luxury than this berry, and we are rejoiced at its more extensive cultivation, as well for the profit of the laborious farmer, as for the sake of the palates of the denizens of cities.—[Philadelphia Dollar Newspaper.

Onions.

To the Committee on Root Crops:—I find the piece of land, planted with onions, to which I asked your attention, to contain one hundred and five poles, and to have produced the present season four hundred and forty-eight bushels of onions fit for the market; being about three and one-third bushels to the square rod. The onions were not extraordinary large, but were remarkable for uniformity of size, and excellence of quality. They are as handsome as any I ever raised. They are of the species called silver skin. They are thick and plump, which form has been produced by careful attention in selecting such seed for several years; I raise my own seed, and am particular to set only such for this purpose as I wish to raise. I find, in this way, that their form can be modified as I wish.

The land on which they grew is part of a field of 13 acres, on Collins plains, a light soil free of stone. For the last ten years it has been under good cultivation, and freely manured,—most of the time this parcel has yielded onions. Barn manure, compost, ashes, and muscle bed have been the principal applications. Ordinarily when we plant onions, we apply 5 or 6 cords of manure, to the acre. In 1849, finding the crop to have failed on this piece, yielding short of 300 bushels to the acre; I thought it needed some other nutriment, and as soon as the crop was gathered I sowed it with oats, using a cultivator to cover them.—These grew luxuriantly, and late in the fall, just as the ground was about to freeze, I turned them under, using a *side-hill plow*, running the furrows about eight inches deep. The entire crop was buried by the furrow

and so laid until spring. On examining it then I found the oats as sound as when turned in; consequently I could not plow the land. I went over several times with a cultivator, and then applied a moderate dressing of manure from my hog yard to the surface say about two and a half cords to the lot, and mingled it with the soil as well as I could, taking care to remove all obstruction to the even distribution of the seed; and then planted with a machine in the usual way. It came up evenly and grew well through the season, being kept entirely clear of weeds. The appearance of the plants through the season was uncommonly good—manifestly deriving much aid and support from the decaying green crop nnderneath. This is proved by another piece of onions in the same field, cultivated and manured in the usual way, where the crop was not more than two-thirds as large as this. I am the more particular in describing this experiment with the oats, because it has succeeded beyond my expectations. I have seen other fields of onions where they grew to a larger size than these, and have no doubt mine would have be larger, if I had put on more manure. but as a whole I have never seen a handsomer yield. They sell at the present time for $1.25 per bbl. delivered in Boston. I have so long been accustomed to keep my land clear of weeds, that the labor ot taking care of onions is not more than twice as much as required for Indian corn. I had no thought of offering this crop for premium until requested so to do. If this plain statement of facts shall be thought worthy of your notice, I shall feel much gratified.

—[Cultivator. DANIEL BUXTON.

Danvers, Mass., Oct. 21st, 1850.

Experiments in the Culture of Buckwheat.

In our issue of August, 1849, we published a few paragraphs on this subject, in which we described an experiment then about to be made with buckwheat and rye, seeded together in the cornfield, at the time of laying by the corn crop. Half a bushel of each were shown in the corn rows, and received no other covering except that afforded by running the cultivator through the balks. The land (half an acre) is chiefly hillside and ravine flat—that is to say, it slopes from near the top of the hill to the margin of a spring branch. The buckwheat soon vegetated and appeared, with its young, but broad leaves, above the surface of the ground, and quite regular, when we consider the manner of putting it in. The rye could not be seen except by closely inspecting the soil. The two crops, however, grew up together; the buckwheat, of course, taking the lead and overshadowing the rye. The crop of corn was taken off at the usual time, and the two other crops remained. So soon as the frost of winter prevailed, the buckwheat was killed and its stalks, stems, leaves and buds all fell upon the ground, as so much enriching vegetable matter. Under the protecting foliage of the buckwheat, the young shoots of rye had, by this time, acquired root and strength sufficient to enable them to pass through any winter. They matured early, and the crop was cut off, fully ripe, before the most forward wheat of this year was ready for the sickle. The stalk was exceedingly tall, and the grain firm. The product from half an acre was seven bushels, or fourteen for one of seedling. If, however, we consider the half a a bushel of buckwheat as thrown away, the increase is seven for one—not so bad. But the seed buckwheat was not thrown away, since it returned more than an equivalent of vegetable manure to the land. So much for rye and buckwheat.

The present year, half an acre was cut off from the corner of a field and the clover there growing (which was luxuriant) not cut. The plan intended for the remaining clover was to cut the first crop and plough in the second preparatory to sowing wheat. This half acre was fallowed and buckwheat sown upon it. At the time of the present writing (August 15) the crop is of vigorous growth, and bids fair to give a large yield of grain. It will be harvested for seed at the proper time. This experiment is instituted to determine, 1st. Whether the sacrifice of a first crop of clover is not compensated for by having it turned under the sod, and by the buckwheat (grain) which is reaped for use. 2d. Whether the lands do not, by this mode of treatment, become better prepared to receive a wheat crop than if it were fallowed in the latter part of August, re-fallowed in October, it being of course exposed to the action of a hot sun during the entire interval between two fallowings.

3. Whether the ground will not be in better order for seeding wheat after the buckwheat is cut clean, than it would be if fallowed (clover or weeds) once, and that immediately preceding the seeding. We hope to present the result in the Planter, when the time for ascertaining it shall have arrived.

The use of buckwheat—a few grains being scattered along the drills—is familiar to some of our best turnip growers, as a preventive of the ravages of the turnip fly, which dislikes and avoids it. We know that it had efficacy in that particular last year, which was a highly favorable year for turnips, particularly the ruta baga. On the same farm, where patches contiguously situated were sowed, one with and one without buckwheat, the latter was superior.

In another experiment, not made with reference to buckwheat, but to try the effect of fallow in summer cow-pens, it held its own against the well known black-eyed pea. Three spots adjacent, upon each of which cows had been penned during the night for two weeks, and then removed were taken and two of them fallowed late in September. One was seeded with buckwheat and one with peas. Neither afforded any green manure worth speaking of, because the frost cut down both crops. The third lot was left undisturbed. Corn was planted on all three this. That upon the lot which was not ploughed up last fall is decidedly the best; whilst the buckwheat and pea fallows stand about equal.—[Southern Planter.

Symington Flax Factory.

We are glad to learn, says the Milwaukee "Sentinel & Gazette," that the culture of Flax, commenced some two or three years since, in the town of Mukwonego, by John Galbraith, Esq., has thus far, prospered beyond his expectations. Some samples of the Flax raised by him were exhibited at the recent Fair of the American Institute, in New York, and a gold medal was awarded to him by the Institute, "for 96 acres of Superior Flax."—Mr. Galbraith's establishment is on the road from Waukesha to Mukwonego, eight miles from the former place and is well worth a visit, especially from those who take an interest in the culture of Flax.

Sugar Manufacture.

The process of sugar making in the South is described by a correspondent of the Louisville Christian Advocate, as follows:

They had finished making sugar here, before my arrival, but Mr. H. took me all through the sugar mill this morning, and explained the whole operation of sugar-making. The building is of brick, with a good steam engine, the whole costing about $20,000. Behind the mill is a large shed, under which the cane is thrown, so that the mill can be run in all kinds of weather. The cane is placed upon an endless chain, which conveys it into the mill and between the rollers, where it is crushed. When thus deprived of its juice, it is called *bagas*. The juice, by means of troughs, is conveyed into large vats or tubs, and from thence, as it is needed, into the kettles, which occupy a separate room. There are five of them of different sizes; the first the largest. When the juice comes to a boil in this, it is skimmed and dipped into the next; then into the third, &c. By the time it is boiled in the fourth, it is what is called *scro*, or syrup. It is granulated in the fifth, and then conveyed into vats, where it soon forms a crust upon the top, which has to be broken and stirred three times. It now forms a wet mush, which is shovelled into hand barrows, and thrown immediately into the hogsheads which are arranged in rows in another room. This room is very large, and the whole of it, underneath the hogsheads, is one vast tub to hold the molasses which drips from the wet sugar in the hogsheads. A view of this dark "sea of sweet," with the thought of the dirt that must necessarily drop into it, and the flies, mosquitoes, bugs, rats, and mice, which are probably drowned therein, I think would cure the fastidious, at least, of all fondness for sugar-house molasses. It should always be boiled over before using, which greatly improves its taste, as well as purifies it. The planters never use the molasses themselves, but use the *sero* or *golden syrup*, as we call it in Kentucky.

Companions of Civilization.—Crows, swallows, henhawks, foxes, rats, cockroaches, bedbugs, and some other *bugs*.

HORTICULTURE.

F. K. PHOENIX, EDITOR.

The North-West as a Fruit Market.

Such a tremendous and yearly-increasing importation as there is of green and dried fruit among us—if the amount thus expended for the past twelve months could only be ascertained, we think it would startle not a few of us! Hard times or no hard times, folks will have apples if they can get them, which is to be sure the most natural thing in the world; but then the way they take to get them! a penny apiece, $1 per bushel, or $2 50 per barrel, and paid for in hedgerow at from 20 to 50 cents per bushel!! and all this too, in a country settled some eight or ten years by New Yorkers and New Englanders, numbering at least 100,000 families, not one in one thousand of whom have yet any thing like a decent supply of fruit! We do feel ashamed of ourselves, and must own up. Isn't this a flourishing State—(of things?) Must it continue? Shall we forever neglect to put out trees because they don't produce a crop the same season?

Candidly, *is*, and is to be, hedgerow the summum bonum, the ultima thule of all our expectations and efforts? Heaven save the mark—and our posterity likewise, if such policy is to prevail for the next ten years to come! It is very plain to us that we must either reform or "slope"—and the quicker the better!

In connection with the great deficiency and demand above mentioned we beg to present the subject of

MARKET ORCHARDS.

In discussing the practicability and profitableness of which we shall take a very short method:

1. As to its practicability—this country was made to be inhabited by tillers of the soil—and if so—

2. It was made capable of producing the indispensables of human sustenance among which is fruit—which it does also produce naturally—and has, moreover, produced artificially and readily in numberless instances.

2. As to its profitableness:

(1) There is a great and increasing demand for fruit here.

(2) Fruit brings a great price here compared with the cost of its productiveness—therefore,

(3) Fruit-growing, for market, must be very profitale here.

Not but that our climate and soil have their peculiarities, as we have often remarked in the "Farmer"—if they had not, every body would be raising fruit, and the chance would not be half so good for shrewd planters of market orchards as it is now, while those peculiarities are not understood. "A word to the wise."

For the management of trees, we refer to other numbers of the "Farmer," our present object being more particularly to call attention to the subject of growing fruit for market, and give lists of some of the best market varieties of fruit—in the selection of which, profit, we understand to be the great object aimed at. Here, in our list of apples for a market orchard, we name a goodly proportion of early fruit—too large doubtless if to be planted in a very retired district away from market towns or facilities.

For a market orchard of 50 apple trees, for this section, we should select out of the 3 or 400 sorts in cultivation, so far as we are now acquainted with them, something like the following list, named in the order of ripening. 15 *Early*, viz: 2 Early Harvest, 3 Red Astracan, 2 Golden Sweet, 3 Early Strawberry, 3 Carolina June, 2 William's Favorite. 15 *Autumn*. 2 Hocking, or 2 Summer Pearmain, 1 Spice Sweet, 2 Lowell, or 2 Porter, 1 Haskell Sweet, 2 Autumn Strawberry, 2 Bailey Sweet, 3 Rambo, 2 Mother.

20 *Winter*. 2 Belmont, or Vandeveer, 3 Yellow Bell-flower, 2 Perry Russet, 3 Domine, 2 Tallman Sweet, 2 Ladies' Sweet, 2 Northern Spy, 2 Red Canada, or Tart Miami, 2 English or Winter Russet.

But several of the above are very new, and we therefore name another list of more common sorts:

Early. 4 Early Harvest, 4 Red Astracan, 2 Golden Sweet, 3 Early Red Margaret, 2 Sops of Wine, or 2 Sapson, or 2 Summer Rose.

Fall. 4 Maiden's Blush, 3 Spice Sweet, 2 Fameuse, 2 Fall Pippin (Holland Pippin of most Nurseries,) 4 Rambo.

Winter. 2 Seek-no-Further, or R. I. Greening, 4 Yellow Bell-flower, 3 Vanderveer, 2 Pomme Gris, or 2 Winter Pearmain, 2 Golden Russet, (English,) 4 Talman Sweet, 3 English or Winter Russet.

But why do we not include the famous Spitzenburg, Baldwin, Newton Pippin, and Swaar, in our list? Because we are not as yet fully satisfied in regard to their adaptation to our climate and soil—so with many other sorts—and indeed it is impossible as yet to tell what kinds will prove best for our section.

In regard to planting Pears, for market, we would commence moderately as we have yet to learn the best kinds for this section. In growing pear trees here we think every thing of very low, compact tops—heading back if need be in order to get them—*a rich undisturbed, shaded soil*—to secure which heavy manuring will sometimes be necessary and mulching indispensable. For dwarfs, on quince, we should try salting liberally and manuring highly. As to varieties, try *Early*, say Bloodgood, Tyson, Muscadine and Red Bergamot, of Mr. Bell's and our Catalogues, *Autumn*, Flemish Beauty, Virgalieu, Urbaniete, Oswego, Beurre. *Winter*, Pound, Lewis, Cross, Buerre Eater, Vicar of Wickfield.

Of growing Plums, for market, we think very favorably—providing hardy kinds are planted and the trees managed aright—in regard to which the above directions for pears will apply in every particular.

Try Bleeker's Gage and German Prune, of Wisconsin, Nursery, Washington Imperial Gage, Duane's Purple, Smith's Orleans, Lombard, Imperial Ottoman, Hudson Gage, Lawrence, Red Gage, &c., &c.

In regard to our views of Peaches, and Cherries, in this section, we refer to Previous Nos. of the Farmer.

For Grapes we have some most splendid natural sites; our elevated calcareous slopes, whether Northern or Southern, we think will be found admirably adapted to the Grape—indeed nearly all of our soil, with manuring and mulching will grow them readily.

The Isabella is by far the most popular grape in this latitude, but is badly troubled some seasons with mildew. In Central Illinois it is being utterly rejected on account of its liability to mildew—the Catawba being greatly preferred on all accounts save that it is later. Wherever the Catawba will ripen at the West (which it may not always do, so far North as this) it will, we think, be preferred to the Isabella as a standard variety. The vines of the Clinton and some of the New England Fox Grapes are perfectly hardy here and well worthy of trial as our list of cultivated varieties is very small.

In regard to the smaller fruits, their cultivation in a large and systematic way for market must be very profitable near our large towns. Of *Currants*, we would name, as but for market, the Red and White Dutch, Victoria and Black Naples. Speaking of Black Currants why do not our people more generally cultivate them? For *all* uses, they are to our taste, and that of many others, decidedly the best of all—besides being so large, productive, and easily grown. Though like the tomato, disagreeable to many at first, they are fast coming into general favor. Of *Gooseberries*, for market, we name Houghton's seedling, and two valuable sorts, we have from Buffalo, called White Amber and Monmouth, the names of which we doubt the correctness of. There is also a small, profusely bearing sort considerably cultivated among the farmers in some vicinities, which came to us as the "Pale Red"—a reliable and valuable sort. Several other sorts are highly spoken of, but untried here, so far as we know.

Of *Raspberries and Strawberries*, we have also spoken in previous Nos. of the "Farmer."

Working Heart Cherries on Morello Stocks.—It will be recollected that in an article on Cherries, in the August No., we remarked that the Common Red Cherry would not answer as a stock for the Heart Cherries. Such has been, in fact, the Uniform testimony of our Horticultural authors, and such the conculsion we came to after several experiments. But we find that some of our Western Nurserymen think very differently, both in this State and Illinois. While in Central Illinois, last summer, we saw several hundred beautiful Cherry Grafts of different kinds, on the Red Morello, a very poor and very common Western Cherry.

Grafting on that stock is said to make slower growing and much hardier trees, which we do not doubt. It is therefore to be recommended for trial.

For the Wisconsin and Iowa Farmer.

Farmers' Club of Kenosha County

At a Meeting of this Association, held at Ingal's, in the town of Pleasant Prairie, on the 11th inst., the following individuals were chosen Officers for the ensuing year, viz:

LEONARD CROCKER, *President.*
Peter Martin, *Vice President.*
James Selway, " "
Hiram Johnson, *Secretary.*
Harvey Durkee, *Treasurer.*
Henry Johnson, *Corresponding Sec'y.*

On motion, it was

Resolved, That the Meetings of this Club be held semi-monthly, and that when we adjourn, shall be, to meet at this place on Monday evening next.

Resolved, That the subject for discussion at our next meeting, be that of Grasses.

Resolved, That a synopsis of the proceedings of this Club be transmitted to the "Wisconsin and Iowa Farmer" monthly, for publication.

At a subsequent meeting, held pursuant to adjournment, the subject of Grasses was taken up and discussed at length. Early seeding, with Mixed Grasses, was generally recommended, and that too, before the land is impoverished by producing year after year, and without receiving any thing in exchange to enrich it. The value of Clover, for its nutritious qualities, and its apparent adaptation to our soil, was strongly urged. On motion it was

Resolved, That the subject for discussion at our next meeting be, "The Propriety of Taxing Dogs."

On motion, the meeting adjourned to meet at this place on Saturday Evening, the 28th.

LEONARD CROCKER, *Pres't.*
HIRAM JOHNSON, *Sec'y.*

Pruning and Budding Knives.

These instruments, as denoted by Nos. 1, 2, and 4, are of good and convenient form for pruning young trees and are made strong and heavy for that purpose.

No. 3 represents the best and most approved form for budding. The edge of the blade is rounded at the point, and will shut up as a pocket knife. At the other end is permanently fixed a thin flat ivory lifter, with which the bark is loosened and raised, after being cut to receive the bud.

4 3 2 1

Pruning and Budding Knives.

PRAIRIE LA CROSS, Nov. 15.

Mr. WRIGHT:—By the Yankee, I send you a turnep* raised on the farm of Mr. Franklin Pettit, of Praire La Cross, in this county. Mr. Pettit broke the first piece of prairie La Cross valley about the 20th of May last, between which time and the middle of June, he broke, fenced and planted about 20 acres, from which he raised a crop of corn, oats, potatoes and other vegetables, equal to the best I have seen any where in the country.

The case of Mr. Pettit is strong evidence of what may be done in this rich country by a man of energy and industry. On the first of May last Mr. Pettit commenced farming twenty miles from the nearest neighbors, and in the incredible short time of six months he has a good farm opened, consisting of about 60 acres broke and fenced, with good houses and many of the conveniences of an old settled country, and without hired help. Yours, &c., T. B.

* The turnep weighed 14½ pounds, and was 33½ inches in circumference.

—[Prairie du Chien Patriot.

Remarks on Wheat Culture.

All lands with a soil impervious to water, will heave out wheat on the breaking up of winter. It is caused by the surface soil being surcharged with water, which the night frost congeals, forming an infinity of icy pillars raised two or three inches above the surface, with the wheat plants embodied in them, and torn up by the roots; the succeeding day thaws the ice, and leaves the wheat on the surface to perish. Whenever wheat is much heaved out, it rarely escapes the rust, and the crop is either destroyed or greatly injured. The first object of the agriculturist, in such soils especially, should be to draw off the surplus water.—He will so plow the fields in lands, that the last furrow on being opened by the plow, after harrowing, will drain off the water.—No water should stand on a wheat-field. The spade and shovel should both be freely used. But after all this is done, he will find it only a partial preventive. Sub-soiling would be highly beneficial in such cases; as that would give a greater depth for the water to sink from the surface. The sub-soil plow is an important implement of the age. But the most effectual, though it is the most expensive preventive, is under-draining. All the superabundance of water can be readily discharged by under-drains.

Early sowed wheat is less liable to freeze out, than late, but is more subject generally to the attacks of the fly. The Rochester wheat, called in this county, the white chaff bearded, requires to be sowed early—from the first of September till the 20th. The red chaff may be sowed much later on an inferior soil, and succeed well; but the fly is more destructive to it than any other. The Mediterranean wheat so far as it is known to me resists the fly better, than any other kind, and being about 10 days earlier is not liable to rust; but it is much endangered by late frosts in the spring, and it would be advisable, if it be rank in the early part of March, to feed it off with sheep or calves. I greatly prefer the Rochester wheat to the Mediterranean, on a wheat soil that is in good order. But it should never be sowed on fields, which heave out wheat much; or, late in the season. It is highly important to sow wheat in good season, that it may have time to take deep root to resist heaving out. I recommend it to be done if your ground should be considerably too wet. The succeeding winter will prevent its baking. But the same practice would be very deleterious in the spring.—[Mr. Pow's address before the Mahoming County O. Ag. Soc'y.

Smut in Wheat—Its Cause and Prevention.

Messrs. Editors:—I have read, in the Genesee Farmer, several articles concerning smut in wheat, written by J. H. H. I suppose him to be one of what I call "never-sweats"—that he is rich, and has nothing to do but hunt up bugs and bottle them, and has thereby made the great discovery that a certain bug will eat smut in wheat. I have hogs that will eat corn; but they do not produce any. This great discovery is so foolish, that I am constrained to write an easy and simple remedy for smut in wheat, and will tell the cause of it. The practice I have followed over twenty years, and it has never failed. First, select your seed wheat standing in the field, that is clear of smut; let it stand till it is pretty ripe; cut it in the middle of the day, when it is perfectly dry; shock it up and let it stand till it is thoroughly cured; then draw it into the barn and put it on a Scaffold over the floor, or where it can not possibly heat; thresh it when you please, clean it well, and screen out all the little kernels—save none but the best; and I will warrant you will have no smut. You may sow early or late, wet or dry, on any land you please, and J. H. H.'s bug will starve.

Now, the Cause of Smut. Farmers generally are in a hurry when mowing commences, and will try to get as much of the clover and lodged grass mowed as they can before harvest, and put it into the mow, many times too damp. Then when harvest comes on, they are in a hurry to get their grain cut and drawn in, and very often draw it rather damp, and mow it right on the hay. Then it becomes heated, and the top of the mow is heated as much perhaps, as any part. Most likely they will then take off the top of the mow, and thresh for seed. This wheat, or any that has been heated, will produce smut according to the amount that it has been heated.

If there is any smut in the mow, you are sure to have some smut. A certain man in my neighborhood, about ten years ago, had a fallow of about seven acres. He saved his seed, and stacked it when pretty green, and it heated, except a small portion which he sowed with one and a half bushels that he got of me. When the wheat was grown, that sown with his was at least one-third smut, while not a head of smut could be found on that sown with the seed procured of me. It was all sown the same day.

[Gen. Far. C. C.—Starkey, N. Y., 1850.

New Way to Cultivate Potatoes.

Wisconsin is a great country, and has a great many great farmers. What other than a Wisconsin farmer, who obtains his prolific soil at so small a price, could be made to believe that the most profitable way to cultivate land was to HALF cultivate it? What other than a Wisconsin farmer could get along without barns—losing one-fourth of his grain crops by threshing them upon the ground, and the balance by exposing them to the elements? And what other than a Wisconsin farmer could content himself with munching wild plums and crab apples, fall after fall, without ever thinking of putting out fruit trees? Depend upon it, "it takes Wisconsin!"

But decidedly the greatest discovery in Wisconsin agriculture which has lately come to our knowledge, is that touching the cultivation of that excellent and indispensable esculent, the potato. This is a very simple and labor-saving discovery, and many of the farmer in the southern counties of this state, who have given it the test of years, are fully prepared, we doubt not, to certify to its superiority over the method practiced in LESS enlightened portions of the country. It is, briefly, as follows:

1st. Plough the ground but once, and plant the hills at least six feet apart. This saves horse-flesh, elbow grease and seed.

2d. Do not hoe the potatoes after they are planted. This gives more time for fishing, gopher-hunting and loafing.

3d. When harvest time arrives, apply a fire-brand to the luxuriant crop of dry weeds with which the ground is sure to be burdened. This will afford delight to the children, make a scampering among the gophers, essentially scorch the massuage and expose the dwarfish hills to view.

4th. Split the hills with a plough. Here again, labor is saved.

5th. The final result of this method of cultivation will be, "small potatoes, and few in a hill." But this is not without its advantages. There will be fewer potatoes to pick up, fewer to sell, and fewer for the family and pigs of the farmer to eat, and fewer to freeze for the want of a proper shelter.

This is no "fancy sketch." Hundreds of farmers in this state cultivate their potatoes in this way. Men of such industry and intelligence are sure to thrive—"in a horn"—[Watertown Chronicle.

Agricultural Productions of the United States.

The extended area of the United States, covering, as it does, some twenty degrees of latitude, and about fifty-five degrees of longitude, all in one compact mass, renders the most favored nation on the face of the earth, in the variety of its agricultural productions. There is nothing essential to the existence of man, and but few of the luxuries which gratify his palate, which are not raised in the United States. But this is not the only advantage which our people possess in the production of food. In the article of breadstuff, the staff of life, a deficiency in the supply of which is productive of so much misery in many countries, how wide is the extent of territory, comprehending so many degrees of latitude and longitude, which is planted, that a famine is an event which is almost placed beyond the bounds of possibility. If the crop fail in one section, the surplus is so great in another that the failure is scarcely felt. Instance the article of wheat, the principal staple of breadstuffs. This grain is raised in *every* State and Territory in the Union. So also with rye, Indian corn, and potatoes. Barley is raised in all the States but Louisiana. Buckwheat in all but Louisiana and Florida. All the Southern States, with the exception of Maryland, as well as one or more of the Western States, produce rice. Every State except Delaware makes sugar. Of the articles necessary for the production of meat, such as hay, oats, &c., every State produces more

ss. These facts prove that our nation ed be dependent on no other for the ne- ssaries of life, even in the most unfavor- le season. How much more favored are e in this respect than our great commer- l rival—Great Britain! There, the hole commercial system is liable to be sarranged by a year of comparative fa- ine, or by the failure of a single crop.

Ohio raises more wheat than any other tate; Tennessee raises the most corn; ennsylvania the most rye and buck- heat; South Carolina the most rice; and ew York the most barley, potatoes and y. The production of wheat has been r many years extending on the West and ntracting on the East. The wheat lands New York, Pennsylvania and Maryland, e becoming in a measure exhausted, and eir yield per acre is much less in pro- rtion than that of the newly cleared and rairie lands of the West. The Western tates, indeed, are now, *par excellence*, the heat growing States of the Union, and it is them that the future millions must look r the principal means of sustenance. It ill be centuries before the United States ill teem with a population which, like at of England, will require all which can e raised from the soil to support life, or efore they will be forced to depend upon y other nation for the staple articles of od. Indeed it may well be doubted hether science will not keep pace with e growth of population, and teach farm- rs the proper materials to restore the ex- austed fertility of the soil, thus rendering n acre as productive as double the quan- ty of land as at present cultivated. When e consider the almost countless millions of uman beings who will ultimately, at the resent ratio of progression, find subsistence ithin the present limits of the United tates, we are lost in the mazes of specu- tion at the future destiny of our beloved ountry.—[Boston Jour.

Ringbone.

In a preceding number of the Cultivator, discovered a number of communications n the subject of ringbone in horses. I ave been in the habit, for the last fifteen ears, of operating on horses for this com- laint, which has caused me to notice what ind of horses are most afflicted with it, and I find those that are the longest jointed are the most numerous subjects. Seldom do I see one on a French horse, and never, with but one exception, on a mule. Hence the careful necessity of attending to this particular point in breeding.

The cause of ringbone are numerous; such as standing on a hard floor, running in the pasture, leaping fences, and in horses of mature age, being put to heavy loads, &c., &c. These causes produce a leakage, and the sinovia, or juice of the fetlock joint, issues into the bladder or spongy substance at the back part of this joint, and it is from thence conveyed by two conductors down on each side nearly to the edge of the hoof, where it becomes ossified and gradually increases until it forms what is very justly called a ringbone.

I extract this spongy substance, or bladder, taking particular care at the same time to cut the conveyers off—thus stopping the escape of the sinovia.

In answer to "W." in your march number, as it respects all operations not being equally as successful, I know of no reason why they should not be, provided they were skilfully done. I know of no cases where I have operated, but what have proved equally successful under similar or like circumstances. Where the complaint has been of a long standing, and as a natural circumstance the foot has become much contracted, of course the lameness will not be cured until the hoof arrives at its natural state. If the complaint occurs in a colt, and the operation is performed as soon as the bunches are perceptible, he never will be lame at all.

But I have known many instances where the operation did no good at all, and what is still worse, entirely ruined the animal. Hence the necessity of the operation being performed by one skilled in the art. I know how much prejudice exists against this method of treating the ringbone; but I know it will effect a cure if performed rightly, as many instances can attest the fact.

S. G. Cone.

[Cultivator.

Jamaica.

The Island of Jamaica contains about 4,000,000 acres——about one-sixth the area of Ohio. Not more than 500,000

acres have yet been occupied—and that, too, while there cannot be found two adjoining ten acre tracts not susceptible of the highest and most profitable cultivation.—The natural wealth and spontaneous productiveness of the Island are so great, that no one can starve whether he labors or not. And yet all the productive power of the Island is running to waste; the finest land in the world can be had for any price, and almost for the asking. Labor receives no compensation, and the people seem not to have found the road to market. Every interest is prostrated.

At the time of the emancition of Slavery in 1834, there were 653 sugar plantations, of which 150 have been totally abandoned. This has thrown over 200,000 acres of land out of cultivation.

The reason of this prostration is, that labor lies under a curse on this Island. It was so degraded by the institution of Slavery, that when it was abolished, not only were all the whites as anxious as before to escape the disgrace of work, but all the freed blacks shared the same sentiments and desires—those of them who were strong enough lived in idleness, and forced others to produce their support. This is the reason of the prostration of that fertile and heavenly Island.

The climate is celestial. Sitting there amid the ocean, it is fanned by the regularly shifting breezes, and the climate does not vary ten degrees between summer and winter. The productiveness of the Island may be known from the fact that, by laboring one-seventh of the time, an abundance can be produced—this was done by many slaves who had one day in the week to cultivate their own patches of ground.

It has a great variety of fruits in profuse abundance—such as the pine-apple, shaddock, orange, pomegranate, fig, grenedillo, banana, tamarind, cocoa-nut, olive, date, plantain, and every variety of melons, grapes, pears, plums, mangoes, &c. In such a climate, where fruits are so abundant, and where almost every thing can be produced, why should there not be a bright state of enlightenment and happiness?

One main reason for the prostration of every interest, is that the landholders reside in other countries, and manage their estates by agents. As an agent to manage 200 is as expensive as one for 2000 acres, the aim has been to hold large plantations—and accordingly we find the farms of Jamaica averaging 1,500 acres. The small proprietors are driven out. There is no middle class there—none who add labor to the possession of capital. There are two classes—the capitalists and the poor laborers, and the capitalists generally reside somewhere else.—[Selected.

Result from Sub-Soil Plowing.

Mr. Jacques, of Rahway, New Jersey, speaking of sub-soiling says: On 4½ acres of shelly land, he raised 530 bushels of corn, which was a much greater yield than he anticipated, the season, soil, and all into the account.

The ground was prepared by plowing about four inches deep with a surface plow, which was as deep as the implement could be made to go, owing to the compactness of a shelly sub-soil. The sub-soil followed immediately after, loosening the earth some twelve inches deeper. Had he not made use of the sub-soil plow, he thinks his crop would have proved a failure, as the roots could not have penetrated the sub-soil, and consequently would have perished by the severe drouth. J. B.

Plank Road to Fort Winnebago.—The building of a Plank Road from Madison to Ft. Winnebago is contemplated.—The distance, by the route which has been looked out, is less than 32 miles, level, and a portion over prairie. When the improvement of the Fox and Wisconsin Rivers is perfected, this road will be of incalculable advantage to the trade of this vicinity, as offering the easiest communication with the eastern market, besides supplying facilities for obtaining lumber from the Wisconsin pinery, the want of which is now severely felt.—[Madison Democrat, 16th ult.

Strange, but True.—Who would have believed that a grain of wheat was so tenacious of the principle of life, as to grow after having lain three thousand years in the swaddling clothes of a mummy. Yet such is the fact. There is wheat now growing in Princes Park, similar to that described in Pharoah's dream, (Gen. XI: 5.) The parent grains from which it was raised were taken out of a mummy in the Belfast museum, five or six years ago.

Michigan Sod and Sub-Soil Plow.

It will be recollected that this plow received a special premium, equal to the highest offered, at the trial of plows by the N. Y. State Agricultural Society in June last. The figure of the implement, as given in

our October number, represents it as first constructed. The accompanying cut shows it with several improvements which have been added. The forward share has been somewhat altered, and a cutter attached to the share, substituted for the former lock-coulter. An improvement has also been made in the attachment of the plow to the beam, and in the gearing belonging to the wheel. Newell French, Rome, N. Y., is the proprietor of the patent for the above plow.—[Mich. Farmer.

First Overland Mail

From Prairie du Chien to Willow river—Through in Eight Days!

The mail arrived this afternoon just as our sheet was going to press, brought by M. P. Ormsby, the enterprising Mail Contractor. He was warmly greeted by our citizens, and Mr. Augustin was immediately despatched by our villagers with a boat containing the Stillwater mail.

The mail leaves for Prairie du Chien tomorrow at nine o'clock, A. M. Mr. Ormsby returns on Saturday, to take measures for improving the road and establishing stations on it. Much credit is due to him for the energy with which he has pushed through the mail for the first time on this new route. The following is a brief statement from him of the road and face of the country from Prairie du Chien to Willow-river:

Left Prairie Du Chien on Thursday of of last week. Came, first day, to Bad Ax P. O., Round Praire, 40 miles. Good road all the way and settled; tolerable farming country with oak openings. Second day, came through prairie nearly all the way to Pettit's on La Crosse river; settled by thirfty farmers; the country filling up fast. Saw many pieces of fine wheat on the ground. Good land, and very good road for the most part. Next day, came to Black River Falls, 24 miles; road not so good, being generally poor. From Black river to the Chippewa at the mouth of Oclair, 50 miles road good with the exception of about 50 miles, which is wretched beyond description, nearly impassable for man or beast; but, am in hopes that, through the public spirit of the citizens of Willowriver and the inhabitants generally along the road, we shall be able to improve it. In this distance there is no house; but I trust some one will be induced to settle on Beef river, 22 miles from the Oclair, which is a beautiful river and full of trout, surrounded by a good farming country, with a small grove of pine. Crossed the Chippewa in a ferry; thence to the Menomenee at S. Gilbert's mill, 24 miles good road, with the exception of two streams that should be bridged, though the ford here is not difficult; country good, many barrens.

From Prairie du Chien to this place, came with a two-horse wagon; thence to friend Brock's on the Ogally, 18 miles. Timber all the way, and the greater portion fine land, and road good when properly cut out, but now rough. Mr. Brock has a valuable location in the finest body of pine that I have seen in the country; and I wish him all the success in the world, for I believe he deserves it. From his place timber extends five miles, when fine prairie is presented to view which continues to Willowriver village —as fine land as the sun ever shone upon for 24 miles.

On the whole, with the repairs mentioned above, and the station on Beef river, this will be no difficult or unpleasant route to travel in almost any way, and will be a very important one in a short time, as it is being intersected by a number of roads from the large towns on Green Bay, Lake Winnebago, and the city of Milwaukee via Madison. The accommodations on the road are as good as can be found in any new country; the people who keep houses of entertainment are attentive and obliging.

I learn iron ore is found in large quntities, consisting of great masses, near the Falls of Black River of the richest quality; and that a company is already formed in

Milwaukee, and are expected to commence operations next summer.—[St. Croix, Inq.

First Railroad Ride in Wisconsin.

EXCURSION TO WAUWATOSA.

Yesterday afternoon, pursuant to an invitation from the officers of the Milwaukee and Mississippi railroad company, a number of our citizens took a ride on the cars to Wauwatosa. The company included the mayor and common council, the president and directors of the R. R. company, a representative from each of our city papers, and a few other invited guests; making about two car loads in all. The locomotive Wisconsin started with her freight shortly before 4 o'clock, and in Twelve minutes brought up at Spur's tavern in Wauwatosa, going at the rate of 30 miles an hour, without any special effort. The track was found to be in capital order, solid as a rock, and comparing favorable in all respects with the best of eastern roads. Among the guests we must not forget to mention our former mayor, Solomon Juneau, the founder and first settler of Milwaukee, who yesterday, for the first time in his life, saw a locomotive and enjoyed a ride on a railroad! He did enjoy it, and when our readers remember that but sixteen years ago he was the only white man living here, where now we can show a city of 22,000 inhabitants, with five plank roads and one railroad, "penetrating the interior," they will admit, we think, that he had good cause to do so. After a brief stop at Wauwatosa, and with a fair addition to their number, the guests were whisked back to the city, in fifteen minutes, all highly pleased with the excursion, and proud of so good a beginning for our railroad to the Mississippi. We heartily congratulate the intelligent and energetic president and directors of the road, at their successful progress thus far, and cordially wish them God speed in their great work. The enterprise is one which commends itself to the good wishes and hearty help of every citizen of WISCONSIN.—[Sent. & Gaz.

☞ We are informed by Mr. Arnold, a successful farmer at Osceola, Wis., thirty miles above here, that not only his corn, of which he has ten acres, but his spring wheat, potatoes, and rutabagas have all done remarkably well. His corn will yield about fifty bushels per acre. He sowed seven bushels of spring wheat on six acres of land and found it abundantly thick; it was a stout growth, long heads, and was not affected by the rust. He is of opinion he will harvest 600 bushels of rutabagas, from their present appearance, and says, farming is the safest and most profitable business a man can follow in the St. Croix valley.—[St. Croix Inquirer.

Plans adopted in the States to Stimulate improvement in Agriculture.

Professor Mapes, editor of the "Working Farmer," published in New York, in the course of an article on Agricultural Improvement, says that;

The plan adopted by the State of Maryland for disseminating agricultural information seems to embrace much that is valuable. The legislature of that State have appointed a State Agriculturist, whose duties are to deliver lectures in each county every year, and to assist in forming County Agricultural Societies where none exist, to report to the legislature each year, with a view to its publication and dissemination among the farmers, said report to contain all the current improvements in agriculture, &c. &c. This plan has given rise to great results, and a general spirit of advancement seems already to pervade the farming community.

We have been similarly engaged in New Jersey, having delivered seventy lectures on agriculture during the last twelve months and have been highly gratified with the results. In one township alone, the amount of increase of crops is stated to be $25,000 during the last year, as compared with those of former years, and our table is loaded with letters from farmers who have tried our recipe with success. The keepers of agricultural warehouses, plowmakers, &c. assure us of increased sales of sub-soil plows, and other improved tools, and we do not fear to assert that the increase of crops in some counties of New Jersey, is not less than ten per cent.

Horses will often do more for a whistle than a whip: as some youths are best governed by a rod of love.

EDITOR'S TABLE.

Acknowledgments.

FRUITS.—We are under many obligations to Messrs. Copps, Phelps, Harkness, Overmans and Wilson, of Fulton and Peoria Counties, Illinois, for a box of splendid specimen Apples, embracing some 60 kinds, which were originally put up for the Ohio State Fair and Pomological Congress, but on account of their postponement, presented to us. There were several choice new kinds among them which we shall notice at large in a descriptive list of apples we purpose giving.

Also, to Oliver Lynch, Esq., Mount Pleasant, Racine County, for exceedingly fine specimens of Apples, Pound Sweet, a showy and popular variety—Black Gilliflower, handsome, and a favorite with some, but too dry for us. A fine, large Russet, which in the multitude of Russets, we cannot positively name. Rambo, one of the most popular and late fall and early winter apples ever grown. Also, a large and showy fall and winter apple, of fine quality, name unknown to us.

To our correspondent, D. Matthews, Esq., of Brighton, Kenosha Co., for a fine sample of the Worthington Grape, so called, the vine of which was procured from the Wisconsin Nursery. The fruit is good, and the variety apparently a valuable one—berries black, medium sized, roundish. Mr. M. states that it is productive, quite hardy, and tolerably free from mildew—season rather late

PERIODICALS.—The Western Horticultural Review for November is received—a good number, though with too much local matter to be so generally useful as could be desired. In looking over the lists of varieties of fruits and flowers exhibited at the annual show of the Cincinnati Horticultural Society, we are led to propose a question that has often occurred to us: Is there not some way to dispense with so many repetitions of those names in the Reports of our Horticultural Society Meetings? If a contributor bring in any variety of special interest and in premium lists the name should always be given, but to us it does not seem worth while to rehearse the names of old, common sorts so much—at least it seems a waste of valuable time to give them.

No. 7, of the Journal of the N. Y. State Agricultural Society for Nov. is received, for which we are indebted to the Secretary of the Society, R. P. Johnson, Esq. In this Periodical we find besides reports of the meetings of the Com. Correspondence and a general record of the doings of the Society, many interesting and valuable hints and contributions from a variety of sources.

CANADA AGRICULTURE IN THE UNIVERSITY OF TORONTO.—We are informed upon good authority, says the "Canada Agriculturist," that Professor Nicol has given notice to the Senate of a Statute for filling up the Chair of Agriculture. The Statutes, we understand, provides some fifty acres of the University grounds, free of any charge, for the purposes of an experiment or illustrative farm, to be subjected to the control of the Board of Agriculture, that is about being formed, under an Act passed during the last session of Parliament. There is now some hope, that our Provincial University, will soon become directly useful to the great mass of our community—the tillers of the soil.

CANADA WHEAT.—The crop in Canada this year surpasses that of most former years. The "Toronto Colonist" says, that a correspondent writing from the Western part of that Province, assures us that the yield of Wheat this season in that section of the country, is greater than it has been known on any previous year. He states that he has seen many samples which weighed two and three pounds more than the weight of the standard bushel (60 lb.) Mr. McGregor, of the township of Howard, had a field of ten acres, which produced 50 bushels to the acre, each bushel on an average 62 lbs. He also mentions several other farmers in the Western District whose crops produced equally well.

CHEAP WASH FOR COTTAGES OF WOOD.—Take a clean barrel that will hold water. Put in it half a bushel of fresh quick-lime, and slake it by pouring over it boiling water sufficient to cover it 4 or 5 inches deep, and stirring it till slaked. When quite slaked, dissolve in water and add 2 lbs. of sulphate of zinc (white vitriol,) which in a few weeks will cause the white-wash to harden on the wood work. Add sufficient water to bring it to the consistence of thick white-wash. To make the above wash a pleasing cream color, add 4 lbs yellow ochre. For a fawn color take 4 lbs. umber, 1 lb. Indian red, and ½ lb. lamp black. (Lampblack, when mixed with water colors should first be thoroughly dissolved in alchohol.) To make the wash grey or stone color, add 1 lb raw umber and 2 lbs. lampblack. The color may be put on with a white-wash brush.

PUMPKIN PUDDING.—Take a pint of pumpkin that has been stewed soft, and pressed through a colander. Melt, in half a pint of warm milk, a quarter of a pound of butter, and the same quantity of sugar, stirring them well together. If you can conveniently procure a pint of rich cream, it will be better than the milk and butter. Beat eight eggs very light, and add them gradually to the other ingredients, alternately with the pumpkin. Then stir in a wine-glass of rose water and a glass of wine mixed together, a large teaspoonful of powdered mace and cinnamon mixed, and a grated nutmeg. Having stirred the whole very hard, put it into a buttered dish, and bake it three-quarters of an hour. Eat it cold.

EFFECTS OF RAIL-ROADS ON AGRICULTURE.—It is stated in a late English paper, that in consequence of the introtion of rail-roads, the number of horses in England has been reduced from 1,000,000 to 200,000. Now it is computed that it requires as much land to subsist one horse as it does to subsist eight men. Consequently, it would appear that the 800,000 horses displaced by rail-roads make room for an additional population of 6,400,000.

IMPORTATION OF ALDERNEY CATTLE.—The New York "Agriculturist" says, "Nine cows and one bull arrived here on the 17th of August, in the ship Splendid, from Havre. They were selected from the best stock in the Isle of Jersey, by Mr. John A. Taintor, of Hartford, Ct. and are designed for himself, and Mr Daniel Buck, Jr. of the same place. This breed of cattle is famous for their rich milk, it averaging, usually, from 20 to 25 per cent. of cream. We shall make a visit to Mr. Taintor soon, and will then give a full account of this stock.—Suffice it for the present to add, that they are genuine, thorough-bred Alderneys, and look something like, and are about as handsome as a jenny, or a female ass."

To Make Hens Lay.—The "South Carolinian" says, a neighbor states that hog's lard is the best thing that he can find to mix with the dough he gives to his hens. He says that one cut of this fat as large as a walnut, will set a hen to laying immediately after she has been broken up from sitting, and that by feeding them with the fat occasionally, his hens continue laying through the whole winter.

Rock County.—The farmers of Rock County meet at Janesville on the first Monday of this month to form an Agricultural Association for their mutual benefit. We hope to see similar movements in other counties, where organizations have not already taken place; and, above all, an efficient State organization.

Marquette Mercury.—Such is the title of a new paper just started at Berlin, Marquette County, by Cooley and Wells. It is a well conducted sheet. We believe it is Democratic in politics, but from the tone of its columns should think it more devoted to the growth and prosperity of the region about its locality than the advancement of any party. This is as it should be.—Let the people of Northern Wisconsin give it a liberal support.

The School Journal, Published and Edited at Madison, by J. L. Enos, assisted by S. Randall and Ira Mahew. Price 50 cents a year.

We have received the 1st and 4th Nos. of this Journal It is well conducted, and bids fair to be a valuable auxiliary to the cause of education. The names of the gentlemen connected with this enterprise, are familiar to all who take any interest in education, and are a sufficient guaranty that the Journal is just what every family in the State should have as a monthly visitor.

Journal of the New York State Agricultural Society.—The 8th No. of this Monthly is at hand. The design of this work is to give, monthly, the proceedings of the Executive Committee of the Society, and such communications and articles of interest as are recived from time to time.

Mr. Editor;

I have in my garden two thriving Plum trees—blossom full every year—no fruit hangs on to come to maturity. Will some of your correspondents tell us of the cause, through the columns of your paper. If it is the Circulio, what is the remedy? J. S.

☞ The readers of the "Farmer" will perceive that it enters upon the 3d year of its publication with an entire new dress. To do this we have incurred a heavy expenditure in procuring types, rule, and other materials. To meet this outlay will require not only a renewal of all former subscriptions, but a large addition of new ones.—We wish all to send in their names as soon as possible, in order that we may determine the number of copies to commence the 3d volume with.

Cultivation of Tea.—Janius Smith, who is successfully cultivating the tea plant in South Carolina, has received direct from China, a large quantity of plants, and almost all are doing well.

New Trade.—Vessels are taking alluvial soil from Louisiana to Turk's Island, and exchanging it for its weight in salt.

Small Farms.—There are thousands of farms in the New England states, varying in size from twenty-five to one hundred acres, upon which thousands of families not only live, but are well to do in the world, and have reared large families in comfort and prosperity. It is true, the children, for want of room to work, have to go to *contriving*, and it is this necessity that has filled the whole country with Yankee contrivances of all kinds, from a basswood pumpkin seed to a steam engine.

One of the greatest crops of the diminutive farms, is, that inventive genius which characterises the whole nation. No Yankee clock ever run with more regularity than the whole of the operations connected with some of the small farmers. Look at their cattle, horses, hogs, sheep, geese, ducks, and chickens. There is an appearance of unmistakable thrift about every thing animate and inanimate, upon some of these places. It is true, many of the occupants work with the same old-fashioned tools their fathers did, and follow all the same time-honored practices; but the next generation will be more alive to the spirit of improvement.—[Agriculturist.

Cereso.—This point, says the "Oshkosh Democrat," bids fair to make a promising town It is a beautiful site for a village, and is a natural center for one of the richest and most productive portions of country we are acquainted with. The water power here, and in the adjoining village of Ripon, affords manufacturing facilities which few other towns in the State can boast of. They have stone quarries and brick yards in their midst, giving them good materials for building. The two towns aside from their names, are in fact but one, and should be identified in interest.

CONTENTS.

McCORMICK'S
PATENT VIRGINIA REAPER.

From the Albany Eve. Journal, Oct. 17, 1850.

Circuit Court of the United States for the Northern District of New York.—October Term, 1850, at Albany—Before the Honorable Samuel Nelson.

CYRUS H. McCORMICK *vs.* WILLIAM H. SEYMOUR AND DAYTON S. MORGAN.—The plaintiff is the inventor and patentee of the Reaping Machine, known as "McCormick's Reaper," which for several years past has been extensively used throughout this country for cutting grain. The defendants reside at Brockport, in this State, where they have been engaged in manufacturing reaping machines, alledged by the plaintiff to be an infringement upon his letters patent. For this he claims twenty thousand dollars damages. That his machine is one of great importance, particularly where large fields of grain are to be cut, is unquestionable. It appeared, by an account which the defendants had been ordered to furnish, that they had during the present year made and sold about three hundred reaping machines, for more than thirty-two thousand dollars.—When the case was called, their counsel moved to postpone it on the ground that they were not ready for trial. The motion was opposed by the plaintiff's counsel, who, after adverting to the importance of the questions and amount involved, urged that under no circumstances ought the cause to be postponed, unless an injunction issued, restraining the defendants from the further manufacture of the machines. It appeared that a motion for an injunction had been fully argued, before Judge Nelson, in June last, and that he declined granting it in July, on condition that the defendants should keep and render, on oath, a true account of all machines made and sold by them, and at the same time ordered the plaintiff to bring a suit at law. The defendants objected to the granting of the injunction, but the Court on postponing the cause until the next term, ordered the defendants to pay the costs of the term, and also, directed an injunction to issue restraining them from making any more reaping machines, such as they had been making and known as "Seymour & Morgan's Reaping Machines." Sam'l Blatchford, of Auburn, E. W. Stoughton, of New York, and Sam'l Stevens, of Albany Counsel for plaintiff. H. R. Selden, of Rochester, Counsel for defendants.

[The following is copy of the Injunction Writ issued as stated in the foregoing extract from the Albany Eve. Journal.]

COPY ENDORSEMENT.—*Circuit Court of the United States for the Northern District of New York—Cyrus H. McCormick vs. William H. Seymour and Dayton S. Morgan. Allowed by the Court, Oct.* 15, 1850.

Writ of Injunction.

The President of the United States of America to William H. Seymour and Dayton S. Morgan and to your counsellors, attorneys, solicitors and agents, and each and every of them, Greeting: WHEREAS it hath been represented unto us, in the Circuit Court of the United States for the Northern District of New York in equity on the part of Cyrus H. McCormick complainant that he has lately exhibited his bill of complaint in our said Court in Equity, against you the said William H. Seymour and Dayton S. Morgan to be relieved touching the matters therein complained of. In which said bill it was stated, among other things, that you are combining and confederating with others to injure the said plaintiff touching the matter set forth in the said bill, and that your actings and doings in the premises are contrary to equity and good conscience. We, therefore, in consideration thereof, and of the particular matters in the said bill set forth, do strictly command you the said William H. Seymour and Dayton S. Morgan and the persons before mentioned, and each and every of you, under the penalty of twenty thousand dollars, to be levied on your lands, goods and chattels, to our use, that you do absolutely desist and refrain from any further constructing or causing to be constructed, using or causing to be used, or vending to others to be sold or used in any manner the improvements described in the Letters Patent of October 22, 1847, in the bill of complaint mentioned, and from making, constructing, using or vending any reaping machine or machines constructed in any respect upon the principle or plan of those described or referred to in the said letters patent, or according to the same or to the specifications accompanying the same as set forth or stated in the said bill, and also from further constructing or causing to be constructed and from selling, transferring or disposing of, or delivering, or suffering to pass from their hands or control, any of the reaping machines in the said bill mentioned which are now in process of construction, or which have heretofore been constructed by them or under their direction, and especially from so constructing, vending, using, or transferring, or causing to be constructed, sold, used or transferred, any reaping machine or machines or improvements of the kind, description or on the principle of those mentioned in the said bill as being or having been constructed by the said defendants, in violation of the rights or claims of the said complainant under his said patent.

WITNESS, the Honorable Roger B. Taney, Chief Justice of the Supreme Court of the United States, at the city of Albany, the 15th day of October, in the year of our Lord one thousand eight hundred and fifty.

A. A. BOYCE, Clerk.

SAMUEL BLATCHFORD, Solicitor for Complainant.

CHICAGO, Nov. 5, 1850.

I have heretofore given public notice, and especial notice to all persons infringing my right as PATENTEE of the "Reaper," that I should hold those who pirated my inventions to strict legal accountability. I instituted legal proceedings against SEYMOUR & MORGAN of Brockport, N. Y., who in disregard of such notice, were found to be much the largest operators in this respect, and who had manufactured the Reaper three years previously under contracts with me. The foregoing paragraphs show the proceedings already had in the Chancery Suit, also, without further comment, the probable consequences to all concerned therein.

Certain interested persons, abettors in the pirating of my inventions, whose motives will be readily understood, have invented and set afloat various false rumors respecting my Patents, Among them, a man employed as *Counsel for Seymour & Morgan*, is known to have figured conspicuously. Knowing *the man*, it is only necessary to know his connection with the business, to furnish the *motive*, and thus make the whole matter understood. These falsehoods are part and parcel of the iniquitous *system of operations*, devised to prejudice the public against me and my inventions, *for the purpose* of aiding those violating my Patents in palming their spurious and unlawfully manufactured machines upon an uninformed and so far innocent community, and thereby defrauding me (as well as the community,) of my rightful reward of time, money, labor, &c., bestowed upon my "Reaper" to render it valuable to the country.—When it is understood that all persons *using* a machine illegally made or sold, in violation of the rights of a Patentee, are equally as liable as the manufacturer or seller, and can be sued and made liable to pay damages to the Patentee, and can be prevented by injunction from *using* such machine, it will be perceived that the *system of operations* above alluded to has not only been a *fraud upon me*, but is a gross imposition and fraud upon those to whom machines are thus sold. Purchasers of such machines are not allowed to plead ignorance of the Patent as a justification for the infringement of the Patentee's rights. When these things are understood by the farmers of the country, and when it has been ascertained that with all the effort that has been made to compete with my "Reaper," none has been found equal to it, and that the closer the imitation of it, the better the machine: when, as in years past so it has still been found in the last harvest, that notwithstanding the great pretensions of other *proposed* improvements *prior* to the harvest—backed too, of course, by glowing certificates—the more prominent of these have, by *signal failures*, only resulted in additional admonitions to those to which the public have from time to time had of the unreliableness of certificates, puffs or partial trials, or of premiums and medals based upon them: when it is seen that "McCormick's Patent Virginia Reaper" has not only sustained its superiority over all others, but has from year to year, sold by thousands throughout the wheat growing portions of the United States, given "*increased satisfaction*," as is admitted by *competitors*, and which is the best certificate that can be given of its success and value:—when all these things are recollected, I say, the Farmers of the

country, having already been so grossly humbugged in *divers ways*, should look well to it, that in future they purchase Reapers that will in the first place *operate right*, and secondly, that they have a right to *use* them when purchased—two things, verily, that are of some consequence to be understood in purchasing a Reaper!

I need only repeat here, that, having now gone as far in the prosecution of my suit against Seymour & Morgan as I at present can go, and sufficiently far for all practical purposes, as will be perceived, suit is about to be brought against several other concerns for infringments of my patents, (unless they not only desist from further, but make just reparation for past infringements,) which the farmers of the country would do well to observe.

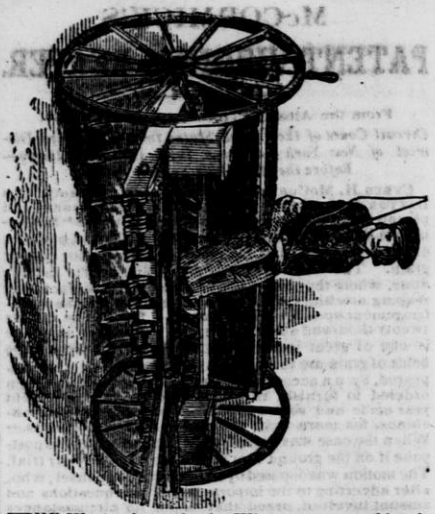
While it has, for some years past, been deemed unnecessary to publish Certificates of the operation of my Reaper, (although thousands could be given,) I may say that I received the Gold Medal of the American Institute, in 1849, and the Certified Diploma of the same Institute in 1850, for my Reaper, one of which has been exhibited there preparatory to its exhibition at the Great World's Fair in London, in May next, and its immediate introduction into Great Britain, where it has recently been patented. It has been introduced into Austria, and arrangements are being made for its introduction into South America and other countries.

I will only add that of the 1600 Reapers manufactured the present year, many have been sent into the states of Maryland, Pennsylvania, Delaware, New Jersey, New York and Ohio, and that thus they have been so favorably introduced into this territory, not heretofore supplied from this manufactory, that, from the estimates of Agents in those states, a large demand for the next harvest may be calculated upon there; and that, in view of the continued encouragement received from the farming community, for which they have my acknowledgments, I design to have manufactured for the harvest of 1851, about the same number that I had for the last harvest—and that, having on hand a large quantity of lumber and other materials of the best quality, with the advantage of my large experience in the business—which is indispensible in perfecting the details of a Reaper—I hope still to improve somewhat in the construction of my machines, which will be guarantied superior in all respects to any other machine of the kind. And no pains shall be spared to prevent a possibility of disappointment on my own part, as well as that of purchasers, on account of the negligence or bad faith of shipping agents and others.

I have also had very favorable accounts from the operations of my Mowing Machines and intend to manufacture a considerable number of them. Further particulars in relation to which will be furnished in due time.—And I also intend to manufacture for the next season a considerable number of Threshing Machines, Horse Powers and Seed Drills, of the most approved designs, of which more particular notice will be given when arrangements for the same shall be completed.

The co-partnership between O. M. Dorman, Esq., and myself having expired by our articles of agreement, the business will in future be conducted mainly under the superintendence of my two brothers, (Wm. S. & L. J.) who have had much experience in it, and who will at all times be found in place—and in the name of the proprietor. C. H. McCORMICK.

A. P. DICKEY, Esq., of this city, principal traveling Agent. dec3 47



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AND

NORTHWESTERN CULTIVATOR.

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MARK MILLER, }

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Post Masters and all others who feel an interest in the circulation of the FARMER, are invited to lend their aid in procuring subscribers and extending its circulation.

A Talk for the Times.

It is a truth, vastly unpleasant, perhaps, but not the less obvious, that indebtedness has been rapidly increasing among us of late, at a rate that threatens, ere long, to work an entire revolution in the present ownership of property. This is a great social evil, and as such has its cause and cure, and as such bears heaviest upon the masses and their avocations. Being identified with them as an individual and a public journalist we feel it our duty to investigate this subject.

The great cause, in our opinion, of this trouble is to be found in our own improvidence—we have not lived within our means, which, as society is organized, we are bound to do if we would not run the risk of becoming bankrupt or beggared. True, there have been serious failures in our wheat crop, for the past few years, but in addition to the great error (to which we have before alluded) of relying so exclusively upon that one uncertain crop, we have. it is to be feared, been guilty of another not less destructive. *The diminution of our income has not been followed by a corresponding diminution in our expenses.*, and the consequence is that debt has been incurred with all its hideous train of embarrassment and suffering. Not that debt can always be avoided, but either our country is too poor to afford us a living, or in thus running behind we are living too fast.

Than debt, there is, there can be no greater clog to the prosperity of the individual or community, for by it every effort, every nerve is paralyzed, and happiness, and improvement are alike beyond our reach.

To be sure, this land of the West is youthful and vigorous, but youth and vigor are not proof against all exposure, and there is no decrepitude so utterly hopeless and lamentable as that of youth. If we would then escape, let us not impose upon ourselves such burdens of debt and care—and as fast as possible undo those already upon us. *In short, we must get out and keep out of debt!* To accomplish this will doubtless require the exercise of great firmness and economy; but were not even rigid self-denial preferable to the state of perplexity and vassalage that encompasses the debtor? We would there were among us infinitely more of that stern, old Republican independence and simplicity that characterized our forefathers—and more there must be if we would worthily affect the mantle of their greatness. To be the slaves of luxury and fashion is more degrading and dangerous than to be the slaves of a superior brute force, and a state of dependence and vassalage to a monied power is more irksome and destructive, oftentimes than that to a foreign power.

Eternal vigilance is the price of liberty; so is strict economy the parent of pecuniary independence. Let us therefore practice it—*let us ascertain our income and live within it*, though it cost severe "retrenchment and reform." "To be sure," says Mr. Somebody, "that's just what I am in for—and fact, I don't believe I can afford to take the Farmer another year." Exactly so, friend, like the boatmen in a storm, who flung out the oars the first thing to lessen the load! Sensible, weren't they?

Not only does economy become the poorer, but the wealthier classes, whose respon-

sibility and influence are so much greater. Let them not so studiously affect to display and patronize, to eat, drink, and wear the richest and best of every thing.

Such attempts are utterly at variance with all the dictates of prudence, republicanism, and religion—and if persisted in, must, it would seem, eventuate in a tremendous social and political revolution.

The best field for "retrenchment and reform" we shall not attempt to discuss—every individual, as his own proprietor and manager, can but decide upon that for himself. But one thing we feel bound to mention, in this connection—that in our candid opinion, if those worse than useless things—intoxicating drinks, tobacco, tea, and coffee; and last, though not least, *the retail credit sytem* were dispensed with, a very important advance would be made towards the entire redemption of society from its present grievous inflictions.

A Glimpse at "Merrie England."

EXTRACTS FROM MR. DOWNING'S LETTERS FROM ENGLAND.

A. J. Downing, Esq., a well known and accomplished writer on rural matters, having lately visited England, has given through the Horticulturist, a most charming series of letters descriptive of English scenes and manners, from which we present the following extracts:

After giving a sketch of the Royal Gardens at Kew, he says: "Now that I have perhaps feebly given you a *coup d'eil* of the whole, (omitting numberless leading features for want of time, and space,) you must, in order to give the scene its highest interest, imagine the ground, say at 2 o'clock, filled with a thousand or twelve hundred men, women and children of all ages, well dressed, orderly and neat and examining all with interest and delight. You see that they have access not only to the open grounds, but all the hot-houses, full of rare plants, and flower-gardens gay with the most tempting materials for nosegay. *Yet not a plant is injured*—not the least harm is done to the rarest blossom. Sir William Hooker (the director) assured me that when he first proposed to try the experiment of throwing the whole collection open to the public many persons believed it would prove a fatal one; that in short, Anglo-Saxons could not be trusted to run at large in public gardens full of varieties. It has, however, turned out quite the contrary, as he wisely believed; and I learned with pleasure (for the fact has a bearing at home,) that on days when there had been three thousand persons in a garden at a time, the destruction committed did not amount to the value of four-pence! On the other hand, the benefits are not only felt indirectly in educating, refining and elevating the people, but directly in the application of knowledge to the arts of life. I saw, for example, artists busy on the gardens who had come miles to get an accurate drawing of some plant necessary to their studies; and artizans and manufacturers in the museum, who had been attracted there solely to investigate some matter connected with business in the productions of the loom or workshop.

In short, I left Kew with the feeling that a National Garden in America might not only be a beautiful, but a most useful and popular establishment; one not too dearly bought, even at the expense bestowed annually upon Kew."

Most infinitely preferable, indeed, were National Gardens, Agricultural Bureaus and Institutes, and Scientific Exploring Expeditions to Military Schools, (Bear Gardens, we had almost said,) Magazines and Expeditions, *especially in a Republic*, whose only salvation lies in cultivating the arts of peace, in elevating and refining the masses.—[Ed. Farmer.

Here is something for the Ladies:

"I must beg you to tell my lady friends at home, that many of them would be quite ashamed were they in England, at their ignorance of gardening, and their want of interest in country life. Here, for instance, I have been walking for several hours today through these beautiful grounds with the Countess of H., who, though a most accomplished person in all other matters, has a knowledge of everything relating to rural life that would be incomprehensible to most American ladies.

"Every improvement or embellishment is planned under her special direction. Every plant and its culture are familiar to her; and there is no shrinking at barn-yards—no affected fear of cows—no ignorance of the dairy and poultry-yard. On the contrary,

one is delighted with the genuine enthusiasm and knowledge that the highest class (and indeed all classes) show in the country life, and the great amount of health and happiness it gives rise to. The life of an English woman of rank in the country, is not the drawing-room languor which many of my charming country women fancy it. Far from it. On the contrary, it is full of the most active duties and enjoyments."

There, now, was ever such vulgarity heard of!! An English Countess *walking for hours*—planning and directing improvements, making her great ladyship's self familiar with plants and their culture! and Oh, horror of horrors—tackling barn-yards even, if need be!! What heathen—are they not fit subjects for special efforts, yea, missions, on the part of our American lady fashionables! With so much wealth and such noble blood too—what a pity—if they only *could* be civilized!

But, seriously, we rejoice in such evidences of true nobility and therein we find the secret of England's strength—for it is plain that she has wives and mothers. Most earnestly do we commend her example—most profoundly would we bow to English fashions in these respects. Gladly do we add our mite in the way of disseminating such useful lessons, and most heartily do we commend Mr. Downing for his earnestness and eloquence in presenting them. Herein is one of the greatest fields for improvement we know of—may it be most speedily and successfully explored.—[Ed. Far.

In regard to Landlords and Tenants, Mr. D. writes—"Farming here is a vastly more scientific and carefully studied occupation than with us; and the attention bestowed upon landed estates, many of which yield a revenue of 50 or $60,000 a year, and some much more) is, as you may suppose, one of no trifling moment. Hence the knowledge of practical agriculture by the owners of many of these vast English estates, is of a very high order; and I am glad, from considerable observation, to say, that the relations between owner and tenant are often of the most considerate and liberal kind. No doubt the present free trade prices of corn make a hard market for many of the tenant farmers of England.

Yet, as the interests of the landlord and tenant run in parallel lines, it is clear that rents must be modified accordingly. Upon this estate, this has been done most wisely and judiciously. The good understanding that exists between both parties is therefore very great; as proof of which I will mention, that the Earl gives a dinner twice a year to which all of his tenants are invited. At the last festival of this sort he took occasion to speak publicly of the low prices of bread-stuffs, and the complaint so frequently made of the high rents at which farms were still held. To meet the state of the times, he added, that he had from time to time, altered the scale of his rents; and had now resolved to make a still further reduction of a certain number of shillings per acre to all who would apply for the same after that day. He now mentioned to me, that although nearly two months had elapsed *not a single application* had been made; and this perhaps solely because the tenants appreciated the justice and liberality with which the estate had been managed, and knew that the free trade policy, where this is the case, falls as heavily on the landlords as on themselves."

What a picture this presents as compared with leased farms in our country—and not in respect to leased farms alone, but our whole social and pecuniary fabric. There, notwithstanding the vast inequality betwixt the rich and poor, we find no social warfare, no disposition on the one hand to oppress because in possession of the power or means to do so, and on the other, no disposition to take advantage of kindness and lenity shown. The whole seems based on mutual confidence and personal stability and contentment. Here, how different things shape up—we are sorry to say it, but we cannot shut our eyes to the truth, that there seems to be a growing social discontent and jealousy betwixt men and classes in society that proves very subversive to our happiness and improvement. To drive a good bargain—to get all you can, is the great aim, no matter at whose expense or at how mean a sacrifice of one's own sense of right. In this mad scramble—diamond cuts diamond, and almost every body is defeated, while disappointment, vexation and evils infinite are engendered in the strife.

In regard to leasing farms in this country, as generally done, it amounts to about this, as somebody has very pithily defined it—the chance to earn one-half of the produce of a farm *and use up* the other!—Ed.

For the Wisconsin and Iowa Farmer.

Agricultural Schools.

Every true-hearted and patriotic American citizen, imbibes, in his early years, a deeply fixed prejudice against tyranny in every form, whether exercised by church or state, or individual; and, he is ever ready to raise his voice and his hand to repel the least appearance of oppression, and to strike the tyrant to the earth. Consequently he feels a hatred towards the nation, or community, or individual, exercising that tyranny. He detests the source from which emanates the power that binds the conscience of his fellow man to any particular form of worship, or fetters him in his political action, or makes him a slave, to drudge and toil for an unfeeling master, until death releases him from his sufferings. Then ought not the cheek of every American citizen to crimson with shame, when he finds, among the royal decrees of the despots of Europe, a more patriotic devotion to the principles of liberty, than that which characterizes the proceedings of our own National and State Legislatures? Shall Catholic Spain, dark, bigoted, and benighted as the civilized world has considered her for ages past, become our teacher in the science of agriculture? Shall it long be said, that Prussia is our model in the work of Education? Respect for those who fled from the religious tyranny of the old world, and became the *real* founders of our wide-spread republic—for those who set at defiance the power of British tyranny, and "pledged their lives, their fortunes, and their sacred honor," for the defence and protection of their civil, religious, and political freedom—for those who originated our present unequalled system of government, should stimulate to the proudest exertion, to promote and protect every interest of our country, over which the exercise of tyranny can be felt, even in its most pleasing form. One great error has fastened itself upon the minds of our citizens.—They do not reflect, that they may, in national as well as individual action, become guilty of *non-feasance* as well as *mal-feasance;* and, that while they suppose they are remaining stationary, or advancing in the different national interests, they may be really on the retrograde in reference to the rest of the world. This is particularly true of agriculture. While we, as a nation, are scarcely able to advance a single step, in the promotion of that science, by the establishment of agricultural Schools, and the adoption of other necessary measures, the despotisms of Europe are rapidly advancing, by liberal expenditures of the public funds.

I am gratified to find, that a more liberal spirit is beginning to pervade the minds of our public functionaries; and that the Secretary of the Interior, in his recent able report, has recommended that a farm be purchased in the vicinity of the national metropolis, to be tilled and managed under the direction of an agricultural bureau, which he recommends to be established by the present Congress; and, that, Mount Vernon, the former residence of Washington be selected for that purpose. This seems to partake of that progressive spirit of the age, which characterizes the advancement of every other pursuit. But it falls far short of the measures which should be adopted to fulfil the agricultural destiny of our country. It does not favorably compare with that liberal encouragement and protection which has been extended to other branches of industry.

What branch of industry ought to receive the highest encouragement? That which is most important to our interests as a nation. What branch of industry is most important to our interests as a nation? That in which a majority of our citizens are engaged.—What branch of industry engages a majority of our citizens? Agriculture. Then is not agriculture entitled, at least, to equal encouragement and protection with other branches of industry? The *hobby-horse* of politicians is, "the greatest good of the greatest number;" and to this the people will all say amen.

Other professions have their schools and their colleges; but, the youth, who would spend his days in the noblest occupation upon the footstool of the Almighty, must content himself with the *incidents* and *accidents* of learning and literature. While the legal student is favored with the privilege of moot courts in his college life, and can avail himself of the experience and instruction of the most able advocates and jurists of the age, in attendance upon the courts of his country; and the follower of Esculapius is led, step by step, through the labyrinth of disease, and drilled from year

to year, in the science of "dead men's bones;" the youth, who would cultivate the earth understandingly, is compelled to combat the prejudices of the age—the erroneous opinion, that agriculture requires no study—that any improvement upon the common practice of that profession is an innovation not to be tolerated; and, then "book farming" is a sort of witchery introduced to cheat honest and ignorant persons. Would to Heaven, that honesty and ignorance could thus be imposed upon throughout the length and breadth of our land.

The Lacedemonian, when asked what he knew how to do? answerd, "I know how to be free" Do all Americans know this? If they know it, do they practice the means which tend to perpetuate the freedom of their country, and enable the generations which may come after them to enjoy the privileges of which he boasts such knowledge? Does he believe freedom consists in the elevation of one class of his countrymen, and the oppression of another? If so, he has mistaken the history of the old world, where the same course has produced a different result. "History," it is said, "is philosophy teaching by examples;" and no saying contains more truth. Certain causes are sure to produce certain effects, as well among nations as individuals. Ignorance is sure to produce tyranny; and, the more gross the ignorance, the more high-handed will be the tyranny. We have tyranny exercised in our own country; although the oppressed do not seem to be aware of the oppression, so quietly and adroitly is it exercised. It is like the spell of the serpent, which charms its victim, and plunges its deadly fangs into its bosom. The agriculturist is a slave to the "pampered few," and this, because he *will* be ignorant.

It has been said, that "money is the sinew of war." "Knowledge is power"—power to elevate, or power to oppress—power of its possessor to tyrannize over the minds of the ignorant. Such power as this we do not want in a land of freedom.—Here all should stand upon one broad platform of equality. This was the intention of the originators of our government. They did not anticipate, that our Congress should legislate for any particular class of our citizens, to the prejudice or exclusion of others. Nor did they contemplate a sin of omission in our government in this respect. But, where one set of men obtain the ascendency in the councils of the nation, or in any particular privilege, they are sure to retain that ascendency, unless by some tremendous effort—some upheaving of the substratum of society, they are displaced. It is thus in this country of ours. The learned professions are the strong holds of tyranny. The multitude, the bone and sinew of the land, are kept in servile obedience to the power of the few. This should not be. No American can say that he knows how to be free until he understands the wants and necessities of every class of his countrymen; and no man knows this, until he is willing to confess that one great platform is erected for all, without distinction of rank. The following classes, and especially the agriculturist, should arouse, like the lion from his lair, and shake off the fetters which have so long bound them. They should think and act for themselves. They should establish agricultural schools throughout the Union. They should pursue the study of the science of agriculture with the same zeal that is manifested by the students of other professions, in the acquisition of their professional knowledge. And, as they are now dependent upon the lawyer and the physician, in case of disease of the purse or the person, let them elevate the standard of agricultural education beyond the reach of the other professions, that a degree of independence may be established, and a reciprocity of respect produced. This can be done, and, I hope the movements of the masses will justify me in saying it *shall* be done. "We had better spend gold in teaching men to become good citizens, than to bring them up in ignorance, and support their crimes." One branch of education should not be preferred to another of equal importance. Yet, there should be a strife, a competition between the different professions, the different branches of industry in our own country—between our country and the world. Nations have not yet ceased to strive for political mastery. But there is a contest more mighty than that of arms; one which should pervade every grade and avenue of existence—a contact of mind with mind, as well national as individual—a strife, not to destroy, but to upbuild and develope—the perfection of education.

Although this is a subject, the discus-

sion of which should not be confined by the narrow limits of one state, or one nation; although it embraces the foundation and superstructure of society, and the universal elevation of the character of the laboring classes, yet, there must be a local feeling, a local interest manifested in different portions of our country and of the world.

Let us then, here in Wisconsin, make one effort to raise the standard of agricultural education. That effort may redound to the honor and glory of our common country. We possess one of the most magnificent school funds in the world. Let us devise proper means for expending it.—What means would be more useful and proper than the establishment of an agricultural professorship in the University already founded by the State? Arrangements have already been made for the establishment of professorships of Law and Medicine. Let us have model farms, too, where young men can learn the art of cultivating the soil, and by which they can render their homes upon the broad prairies, and in the lofty forest, as much the abode of science, as the city homes of those who practice other professions.

Yours, Respectfully,
SOLOMON LOMBARD.

Greenbush, Wisconsin, }
Dec. 27th, 1850. }

The following reports, upon the manufacture of Butter and Cheese, are the ones referred to in the communication of B. P. Johnson, Esq., published in our January No., pages 3 and 4. They are somewhat lengthy for the size of our paper, but we do not know of any thing that we can publish of more interest and importance to the farmers of Wisconsin than the information these communications contain:

Statement of Horace Clapp.

Farm located in Turin, Lewis county.—Three-fourths of it upland. Latitude, 43½ Farm contains 200 acres under cultivation, 125 acres in pasture, 50 acres in meadow. Soil, loam. White clover for pasture; timothy for hay. My meadows are top dressed, in the fall, with muck (or common earth,) mixed with manure of equal parts, thirty loads to the acre. Average of hay, from 1½ to 2 tons per acre.

Commence making butter 15th April, close 15th December. Average quantity of Milk per cow during the season 12 lbs. per day, from whole herd, 480 lbs; 5½ lbs. of butter to 100 lbs. of milk. Quantity of milk during the season from the whole herd 115,200 lbs. Average quantity of butter per cow for the last ten years from 165 to 180 lbs; quantity the last season, 6,800 lbs. Rear no calves: generally keep swine, one to four cows. No feed, (usually,) except grass and hay.

Treatment of milk and cream.—Milk strained into pans, stands from 30 to 48 hours, (as the weather may require.)—Cream put into a tin cooler, made expressly for the purpose; kept cool and sweet with ice. Churn every day.

Mode of churning.—Use two churns, each containing 90 gallons; part of the season I churn a good share of the milk by water power; the churn used for cream is one of my own invention, has a tin inside with a space of four inches between the tin and wood, to receive water and ice while churning. Temperature 50°; churn from 50 to 100 lbs.

Mode of making butter.—It is taken from the churn with a ladle and put into a wooden machine or brake to extract the milk from butter *without washing,* salted and placed upon ice for 12 hours, then worked the second time, and packed in the tub. Use a refrigerator to keep the ice and butter before packing in the tub, and keep the butter *clean.* (Great care should be taken so that the butter is not overworked so as to injure the grain.) Use Bonaire ground salt, 5 to 6 lbs. to 100 lbs. of butter. No other substance used. The butter from the dairy has been sold in Boston for the last ten years at 23 cents per lb. Milk room 30 by 24, in basement, three sides under ground with free circulation of air. Milk set upon stone.

No. cows, 40: breed from ½ to ¼ Durham cross with native. Cows calve from 1st to 15th April. The difference in the milk of different cows in the extreme is ¼ average ¼ between those giving the best milk and those inferior. White clover pastures produce the most and best milk. Cows feed in one pasture, which is deemed preferable to change of pasture, with a full supply of running water, and free access to salt, kept in a close trough at all times. It

requires from 3½ to 4 acres of land to keep a cow *in good condition* through the year.

Remarks.—The principal causes of poor butter is attributed to the following errors, viz:—1st, For want of a proper place, cool and airy, to keep the milk. 2d, Want of neatness throughout the entire dairy. 3d, Want of strict attention. 4th, Suffering milk to stand too long before it is skimmed. 5th, Cream not kept sufficiently cool, and standing too long before it is churned, consequently the butter becomes soft, sour and worthless, and unfit for use by any who like good butter.

HORACE CLAPP.

MAKING BUTTER.

I take care to have my cellar thoroughly cleansed and whitewashed every spring. I keep milk in one cellar and butter in another. Too much care cannot be taken by dairymen to observe the time of churning. I usually churn from one hour to one hour and a half. I put from one to two pails of cold water in each churn, before commencing to churn, and one pail more in each when nearly done, in order to thin the milk, and make it produce all the butter it contains. When done, take the butter out, wash it through one water, then set it in the cellar and salt it, then work it from three to five times before packing. Butter should not be made quite salt enough until the last working. Then add a little salt, which makes a brine that keeps the butter sweet. One ounce of salt to a pound of butter is about the quantity I use. I pack the first day, if the weather is cool; if warm, the second day. If the milk is too warm when churned, the quantity of butter will be less and the quality and flavor not as good as when it is cool at a proper temperature. I have always worked my butter by hand. Last fall I bought a butter worker, but I disapprove of its use entirely, and recommend the hand ladle in its stead. In packing, I fill my firkins to within two inches of the top, then lay a clean cloth on the top of the butter, and put salt on the cloth and keep it covered with salt and brine all the season. Great care should be taken not to let the milk stand too long before churning, as in that case in hot weather, it becomes too sour, and the butter will be sour also, and in cool weather it becomes bitter. All of which can be prevented in cool weather by putting about one quart of buttermilk, and in hot weather by churning as soon as the milk becomes thick and moist on the top of the cream. I use Turk's Island salt of the Ashton sacks. I have never used any of the solar evaporated salt, or steam refined salt from the Onondaga salt works.

Experiments in the Management of Cheese Dairies.

BY ALONZO L. FISH.

B. P. Johnson, Esq., Sec'y:

Dear Sir—At your earnest solicitation, I have attempted to give a condensed account of my observations and experiments in cheese-making for several years past; in which I cannot be as brief as may be desired, and allude to the variety of circumstances which have a bearing upon the intricate science of cheese-making.

Having been personally engaged in 1845, in some sixty dairies, which were located in thirteen towns, and four counties, and more or less in the same manner the past two years, I have observed a marked difference in the capacity of soils for producing herbage, under different modes of culture, and the various conditions and treatment of cows, affecting their capacity for milk, both as regards *quality* and *quantity*. The inconvenient and improper fixtures, in many instances, for making and curing cheese would not be practicable, even with the most proficient cheese-maker; because,

In the first place, milk is a very sensitive fluid, and liable to be varied in quality by impure water, by damp and unventilated stables, change of diet, excess of feeding, excitement of temper, irregular milking, salting, &c., which destroy its susceptibility to produce like practice.

2d. Cheese, when pressed and exposed in a *curing process*, is no less sensitive, and equally liable to be varied in texture and flavor, by size of cheese, exposure to excess of heat, bad air, &c., the effect of which I shall hereafter notice. There are, however, leading principles which form the basis of operations, and should be closely adhered to *in all cases*, in the process of manufacturing cheese. *Salt, rennet, heat* and *pressure*, are the principal agents used in converting

milk into cheese, the flavor and texture of which is determined by their proportionate use. Their proportion is varied by different dairymen, according to their notions of propriety, as best adapted to their fixtures, experience, &c. Hence arise the great inequalities in dairies, in the same neighborhood, and even in the same *dairy-rooms* may be found as many different qualities of cheese as there are of fruit in an apple orchard. Some of these are matured at an early period, while others mature later, and are unsuited to the same market.

Much of the cheese being contracted for before it is (made, in the early part of the season) both buyer and maker are liable to be disappointed, in the cheese being suited to the market for which it is designed, destroying the confidence of purchasers, and injurious to the best interests of the dairyman. It is therefore necessary, that makers should have sufficient knowledge of the science to determine the result of their practice which cannot be learned from verbal instruction. It is by *practical experience* and *close observation only*, that the maker can learn to adapt his practice to the frequent and extreme changes to which our climate is subject, varying the quality of the milk, and materially affecting cheese in process of curing.

I will suggest a plan, (in the following table,) of keeping a dairybook, or memorandum of each day's practice, which I have adopted in my dairy for several year's past, and which has greatly enabled me to investigate the science of cheese-making, being a table illustrating the experiments made by me the past season:

Statement of B. A. Hall.

B. P. Johnson, Esq:

Sir—In making a statement respecting the products of my dairy, and farming operations connected with it, I will glance at the causes that contributed to lessen the number of lbs. produced. They consist in the small quantity of snow that lay upon the earth during the last severe winter, and the late backward Spring of 1847. Sward of meadows and pastures being constantly exposed to such intense frosts, and thin coats of ice, they have produced much less than an average quantity of herbage. The consequence of which is, so far as I am informed, much diminished quantities of butter and cheese. In the operations of butter making, the season past, I have made some experiments, to ascertain the exact degree of temperature, necessary to produce the *very best* butter. Previous to trying the experiments I became satisfied that one great cause of bad butter, was the high degree of temperature, at which cream was frequently kept and churned.—I applied the thermometer, and churned the cream at different degrees varying from 55° to 66° and found, I invariably obtained the best butter, when the temperature was below 60° say 58°. The great anxiety of dairymen to churn quick, is at the expense of a first rate article. Any person, at all conversant with butter making, has observed the whitish yellow color and oily appearance it will present when taken from the churn, whenever the cream has been, or is too warm when the operation of churning commences, thus forever destroying its rich flavor and keeping properties. The buttermilk cannot be expelled without working too much, which makes it sticky and oily. On the contrary, cream taken from the milk at a proper time, kept and churned at 57 or 8°, will require more time in churning, but the butter will present a high and rich color, will be firm and hard—will not stick, and will readily break when being separated. The buttermilk can be at once expelled, which should always be done before the salt is applied, so that when it is subsequently worked, which should be very little, nothing will be expelled but a little brine slightly discolored. Another cause of bad butter is the use of impure salt, and that frequently in such large quantities, that lumps not dissolved are frequently found in it. A small quantity only should be used of pure rock salt, perfectly pulverised and incorporated with the butter. No other salt should be used, but such as is perfectly pure. The Salina salt, after repeated trials, I have entirely thrown aside.

I have also tried experiments to ascertain what effect different kinds of feed had on the quality and quantity of butter produced from any given quantity of milk.—From 1500 lbs. of milk, weighed when feeding green corn stalks in addition to feed obtained in the pastures, I obtained a

little over ½ of one lb., from each 100 lbs of milk, more than the average produced through the season, and the butter made was of superior quality. For a description of my farm, locality, &c., I respectfully refer the committee to Transactions for 1846, page 144; which contains my statement made last year. I have used in addition to the farm there described about 20 acres of hill pasture and 8 acres of meadow, soil gravel loam, bearing red and white clover and herds grass. An average crop of hay on my meadows, that are not plowed is about 1¾ tons per acre. My dairy has been composed the past season of 20 cows, from 4 to 13 years old; 5 three years old heifers and 4 two years old, all of native breed—except 3 short horn heifers; one of my cows became dry about 15th of September, and I sold one cow and one heifer a little later, I think a fair average through the season would be 27 cows. I had 26 calves dropped by the 16th of April. They were all kept on the cows until the 12th of May, when they were all sent to the Boston market, when I immediately commenced making butter, and continued 224 days.

The produce of my dairy was as follows, viz:

3,736 lbs. of butter, sold in the Boston market by C. P. Adams, at an average price of 24½ cents, . . .	$1,067 13
29 calves, averaging 37 days old,	151 83
Cream and milk used in a family of 12 persons, 16 cts. per day, ...	58 30
Skimmed milk and buttermilk fed to hogs, 224 days, $1 40 per day, ...	316 40
	$1,593 66

My cows each gave on an average, as weighed and measured, 4,230 lbs. of milk, which would make for the whole herd, 164,200 pounds. The quantity of butter to 100 lbs. of milk, would be a fraction less than 3 lbs. 5 oz. The feed of my cows, in addition to grass and hay, was two quarts of provender (barley and oats) per day during the time they suckled their calves, and one feeding per day of green corn or pumpkins from about the 1st of August to 1st of November, after which, they were fed dry corn fodder.

For a particular account of my method of making butter, I will again take the liberty of referring the committee to my statement of last year, which has not been varied, except in the use of more ice, and a little lower degree of temperature, which, together with the use of green corn for feed, has improved the quality of the butter.

My sales of young pigs, which were fed on the skimmed milk and butter-milk about two months and then sent to market, amounted to $236 65
Pork, lard, &c., ... 1,640 39

Nett amount of sales, . . .	$1,877 04
Amount paid for hogs, . .	842 00
Amount to credit for feed, .	$1,035 04

I have not yet hauled out their manure, but think I can safely estimate it at 450 loads.

I hereby certify the above to be correct.

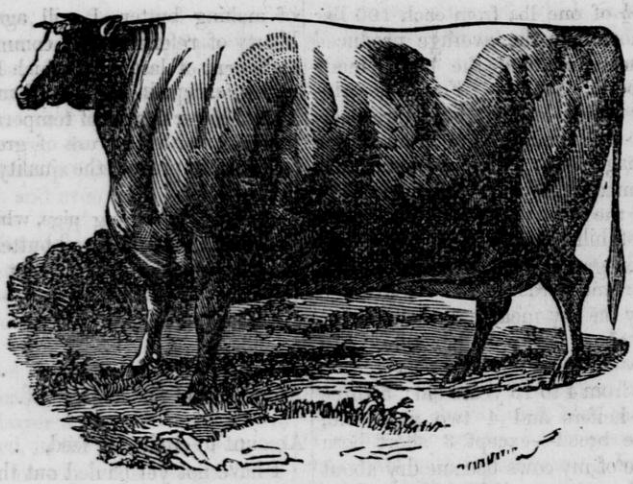
B. A. HALL.

Value of Lands in Virgina.

It is confidently predicted that the recent assessment of lands in this State will exhibit an increase in value over the previous assessment of 50 per cent. Some of the famous Green Spring lands in Louisa, says the "Richmond Times," have been assessed at from $40 to $60 per acre; in Augusta county, some lands have been assessed as high as $70 per acre; in Rockingham, from $50 to $60 per acre. High as these assessments are, they do not exhibit the real value of the lands; the owners of many farms ask one-fourth more than they have been valued at by the assessors. In Albemarle county, the value of land has advanced in the same ratio with those in the counties above named.

Within a few weeks past a number of Pennsylvania farmers have visited the counties lying between Richmond and the Blue Ridge of mountains in search of farms, &c. We trust these thrifty sons of our sister State may succeed in procuring locations to their liking. The farms of this State, it is well remarked, are deficient only in proper subdivision and cultivation.—[Fairview (Va) News.

☞ The specie in the banks in Boston was counted the other day, and amounted to $11,409,537.



Short Horn Durham Heifer.

This engraving represents the prize heifer exhibited at the Christmas Club Show, at Smithfield Market, London, in December, 1843. This annual show is much the largest and best of fat cattle in the United Kingdom. To this heifer were awarded all the first prizes of that show:—£20, as the best cow of her class; the gold medal, as the best fat beast at the show; and a silver medal to her breeder, &c., Sir C. R. Tempest.

This heifer was four years and nine months old. Her dead weight was one thousand seven hundred and seventy pounds. She produced two hundred and twenty-eight pounds of loose fat, which is included in her dead weight. Our engraving has been made by Brown, from a drawing taken from a cast which may be seen in our office—a *fac simile* of the original.—[N. E. Farmer.

Agricultural Meeting.

At a meeting of the farmers and others of Rock county, held at the Court House in the village of Janesville, on the 6th day of January, 1851, for the purpose of organizing an Agricultural Society, J. P. Wheeler of La Prairie, was called to the chair, and O. Densmore, of Bradford, was appointed secretary.

The object of the meeting was stated in a brief address from the chair, which was followed by Messrs. Hudson, Niel and Russel of Janesville, and E. A. Foot, of Centre.

On motion of C. C. Cheney, Esq., of La Prairie, it was resolved that the meeting proceed to organize an Agricultural Society.

On motion of E. A. Foote, Esq., a committee of fourteen was appointed to draft a constitution. The committee consisted of Messrs. Cobb of Lima, R. R. Cowan of Fulton. John Boyce of Porter, E. Miller of Magnolia, J. Hopkins of Turtle, O. Densmore of Bradford, A. M. Carter of Johnstown, Wm. Spaulding of Harmony, J. Russel of Janesville, E. A. Foote of Center, S. F. Chipman of Plymouth, J. F. Willard of Rock, C. C. Cheney and J. P. Wheeler of La Prairie.

On motion adjourned for one hour.

Met pursuant to adjournment.

The committee to prepare a constitution reported the following, which on motion of Hon. Andrew A. Palmer, was unanimously adopted.

ARTICLE 1st. The name of this society shall be the "Rock County Agricultural Society and Mechanics Institute."

ART. 2d. The object of this society shall be to encourage Agriculture and the Mechanic Arts.

ART. 3d. The officers of this society shall be a President, six Vice Presidents, a Recording Secretary, a Corresponding Secretary, a Treasurer, and twenty Directors,

one of whom shall reside in each town in the county, all of whom to be elected at the annual meeting in each year.

ART. 4th. The President shall preside in all the meetings of the society, and may call special meetings thereof at such times as he may deem necessary, and in his absence one of the Vice Presidents shall be designated to preside, and in case a vacancy shall occur in the office of President, such a vacancy may be filled by the Board of Managers by ballot, from among the Vice Presidents, by a majority vote of said Board.

ART. 5th. The President, Vice Presidents, and Directors shall constitute a Board of Managers, to transact all the concerns of said society, shall appoint the necessary committees, shall establish the amount of premiums to be awarded in each department of Agriculture and the Mechanic Arts, shall fix the times and places for holding annual and regular meetings of their Board and of the society—shall establish such rules and By-Laws for the government of the society and the committee as they may deem proper, subject always to an appeal by any member of the society, which appeal shall be decided by a majority vote of the members thereof, at any annual meeting, present and voting thereon.

ART. 6th. Any person who shall subscribe to this constitution and pay one dollar to the Treasurer of this society, shall be a member thereof, for the fiscal year in which he may pay as aforesaid, and any person who shall pay ten dollars as aforesaid, shall thereby be constituted a life member thereof.

ART. 7th. This constitution may be amended at any annual meeting by a majority vote of the members present and voting thereon.

SCHEDULE.—For the purpose of organizing this society, the meeting which shall adopt this constitution, may elect all the officers named therein, who shall possess all the powers delegated, and perform all the duties required thereby.

The meeting then proceeded by nomination to the election of officers provided for by the constitution, which resulted in the election of the following officers:

President—J. P. WHEELER.

Vice Presidents—Wm. F. Tompkins, of Janesville; A. Dickinson, of Harmony; O. Densmore, of Bradford; J. Goodrich, of Milton; J. M. Burgess, & A. W. Pope, Janesville.

Recording Secretary—Josiah F. Willard, of Rock.

Corresponding Sec'y—Andrew Palmer.

Treasurer—John Russell, of Janesville.

On motion of William F. Tompkins, a committee of five was appointed by the chair to nominate Directors.

The committee, consisting of Messrs. Wm. Stewart, Wm. Spalding, Rufus Washburn, N. Howell and H. Griffith, reported as follows:

Directors— Wm. Stewart, of Clinton; Peter D. Wemple, of Bradford; John A. Fletcher, of Johnstown; Paul Crandall, of Lima; George W. Ogden, of Milton; Harvey Holmes, of Harmony; Guy Wheeler, of La Prairie; John Hopkins, of Turtle; Wm. Yost, of Beloit; Z. P. Burdick, of Rock; L. D. Thompson, of Janesville; R. R. Cowan, of Fulton; Daniel Lovejoy, of Porter; E. A. Foot, of Center; Harrison C. Inman, of Plymouth; John Thomas, of Newark; Almon Kinney, of Avon; R. R. Hamilton, of Spring Valley; Col. E. Miller, of Magnolia; and Hiram Griffith, of Union; which report was accepted, and on motion of Hon. A. Palmer, the gentlemen nominated in said report were elected and constituted Directors of the Society.

On motion of Wm. F, Tompkins,

Resolved, That the President, Secretary, and Treasurer, procure 500 printed copies of the constitution for the use of the officers of the society who are instructed to solicit subscriptions, receive the money for membership, and pay the same to the Treasurer on the first Monday of February next, and the President is authorized to call a meeting on that day, of the officers of the society.

On motion of C. C. Cheney,

Resolved, That our senator and members of assembly from this county be requested to use their efforts to obtain the passage of a bill at the present session of the legislature which shall have for its object the encouragement of Agriculture and the Mechanic Arts.

Resolved, That the proceedings of this meeting be published and a copy sent to each member of the present legislature from this county.

On motion of Wm. F. Tompkins, the meeting adjourned *sine die*.

J. P. WHEELER, Ch'n.

O. DENSMORE, Sec'y.

HORTICULTURE.

F. K. PHOENIX, EDITOR.

Tarbell Peach.

We cannot trace the origin of this fruit, but it has been long cultivated in Lincoln, in this State, and it is probably a native of that place. It has had several names, among which Royal Kensington has been the most common; but it is very different from that variety. The tree is vigorous, and very hardy; and the fruit is large, handsome, of excellent quality, and very saleable in the market. It bears carriage well, and retains its good properties some time after gathering. The qualities of the fruit, and the habits of the tree, render it one of the very best varieties for orchard culture in the north, and preferable to foreign varieties, or those that have originated in warmer climes. An important requisite to success in peach culture, in this region, is the cultivation of those kinds that are natives of the north.

The fruit is large; roundish, a little flattened at the base, a broad suture extending nearly round it; a rich yellow ground, nearly covered with red, which is very deep and purplish full in the sun; flesh yellow, red at the stone; very juicy, rich, sweet, and of a delicious flavor. Ripens from the 10th to the 25th of September.—[N. E. Far.

Pomological Meeting at Princeton, Ill., Dec. 18 & 19, 1850.

For some years past, the necessity for some concerted action for the advancement of Pomology among us, has been increasingly apparent to our Western Horticulturists. Having in this section, a soil and climate most peculiarly our own, and having in the process of its settlement obtained our varieties of fruit from many promiscuous sources and under many promiscuous names, great confusion and repeated failures have resulted, and must result so long as these causes operate. To combine our energies for their removal—to take the first step towards a thorough organization for that purpose, was the object of the little gathering of the friends held on the 18th and 19th of December last, at Princeton, Illinois.

Considering its almost spontaneous character, it was all that could have been expected—an interview, as we are constrained to believe, replete with enjoyment, utility and promise. In regard to the organization proposed, we would say, generally, of these Local Societies, that for our own part, we believe they will be far more thorough and efficient in their several spheres than any National Society can be, and would therefore bespeak for them the most cordial support.

REPORT:

At a meeting of Pomologists, held at Princeton, Illinois, Dec. 18th, 1850, Edson Harkness was called to the Chair, and F. K. Phœnix, chosen Secretary. The Chairman stated the object of the meeting—it being, as he understood it, for the purpose of having a Pomological Investigation and Conference—whereupon it was

Resolved, That such varieties of the Apple as are proposed by gentlemen present, be taken up for discussion, commencing with the Summer varieties:

The *Yellow June*, being proposed as the earliest sort, Mr. C. R. Overman, remarked that it was small and unworthy of cultivation, save on account of its very early maturity. Tree, a handsome but slow grower and rather late bearer. Would plant one or two trees in a hundred.

Early Harvest.—Mr. A. Bryant. It had been a very shy bearer with him. With Mr. Shaw it had borne poorly, but the fruit measured well when picked. The tree was easily recognized—the base of the branches being large, with a peculiar habit of forking.

The Chairman had found the fruit very fine for early cooking—not first rate for eating till fully ripe—too tart. Tree rather tender—grafted on the root, with Chairman, Secretary, and C. R. Overman—hardy with Messrs. Shaw and Whitney. Mr. Whitney considered it a tolerably good and regular or annual bearer. Voted, by all acquainted with it, worthy of general cultivation.

Carolina June.—The Chairman had found it very fine—the flavor excellent, and the fruit a beautiful, brilliant red.

C. R. Overman had known it a dozen years or more. Knows none more popular of its season, which is about the same as the Early Harvest. The fruit is of good, uniform size, and keeps well—the tree is a handsome, regular grower, though rather slow at first; does better after it becomes established; bears early and constantly.

The Secretary expressed a very high esteem of the variety from all he had seen or heard of it. Voted, by all who knew the variety, worthy of general cultivation in the West.

Sweet Bough.—With Mr. A. Bryant, the tree had proved a shy bearer, and the quality of fruit hardly equal to its reputation. Mr. Edwards would cultivate it for its fine flavor, whether productive or not. The Chairman finds it too poor a bearer—the fruit dropping nearly all off while very green—that he cannot recommend it. Mr. C. R. Overman would plant the more trees.

Sweet June.—A Western variety—With Mr. Edward's, promises well—the fruit is of fair quality and the tree a good bearer. Mr. C. R. Overman has known it from childhood—finds it of fair quality, nearly equal in flavor to Sweet Bough, save not so juicy. The tree has many good qualities—thrifty, handsome, an early bearer, and productive. With Chairman the tree overbears—fears it would be injured thereby. Mr. C. R. Overman has known old trees in full health and vigor.

(Supposed) *Early Pennock*, of Mr. A. Bryant, who remarked that the fruit was obtained as Summer Queen, which it

resembles somewhat in color, and is about as tart in flavor, but not as aromatic. An excellent bearer and hardy on root—fruit large and showy. Mr. J. H. Bryant, does not esteem fruit of first rate flavor—a little coarse—ripens well in house if picked before matured on the tree, and keeps pretty well. Recommended by several members for general cultivation.

Summer Queen.—Mr. A. Bryant had a tree worked on the root, but lost it with blight. Mr. C. R. Overman has known this variety 15 or 20 years. Fruit handsome and of fair quality, but costs too much, as the tree bears poorly—a good grower.—Chairman. Has 10 trees some ten years old, thrifty, healthy and fine, but bear poorly. Fruit of good flavor. The Secretary has trees in his orchard—was not aware they were considered so tender on root. The Chairman thought the trees might be hardier on poorer soil. Voted, by those acquainted with it, good, but unprofitable.

Hocking—Apparently a new variety disseminated considerably by the Chairman, who stated that he obtained it for one of three choice kinds, of Mr. Selby, who brought it from Fairfield County, Ohio—that it proved entirely different from what was expected—a very valuable August fruit. Has had it in bearing 5 or 6 years, and esteems it decidedly the best August apple he cultivates. Fruit striped, some like Rambo, but often higher colored—large, unless the tree is very full, and ripens before the Summer Pearmain. Tree, vigorous and upright, bearing on side shoots or spurs.

In these remarks, Messrs. Overman, Whitney, and the Secretary fully concurred, so far as they were all acquainted with the variety. Recommended by those acquainted with it, for very general cultivation.

American Summer Pearmain.—The Secretary had tested the fruit pretty thoroughly during the past summer for the first—esteems it very highly—decidedly the first of its season; and the tree, when well established does well, though a very feeble grower at first, and hence greatly disliked by Nurserymen. Mr. C. R. Overman thinks it indispensable, but as a tree better adapted to gardens than orchards—an annual bearer. Should be worked well up on seedling stocks, and such as are not too thrifty, as very thrifty ones so worked, incline to throw up suckers.

Maiden's Blush.—Mr. A. Bryant, finds it productive—flavor not first rate, but excellent for cooking. C. R. Overman esteems it a profitable sort for its bearing qualities and for kitchen use. Tree a very early and regular bearer—tender on the root. Shaw has had it for several years, and esteems it on many accounts. Recommended by most of the members for general cultivation.

Yellow Ingestrie.—The Chairman thinks it worth cultivating for its early and great productiveness. Mr. Whitney has had full crops from his trees for 6 years in succession, and esteems it for its early and great productiveness, its good flavor and excellent cooking qualities.

Mr. C. R. Overman knew nothing against it, save its small size.

Mr. Edwards would recommend it for new countries.

Voted, by those acquainted with it, worthy of moderate cultivation on account of its good flavor and bearing qualities, and was thought, by some, to be best adapted to the North.

Fall Wine.—Highly esteemed by several members, and recommended for very general cultivation. Tree, an early bearer, and hardy on root, but a slow grower until established.

Autumn Swaar—Not of Thomas' Fruit Culturist.—The Chairman has had the fruit several years—medium size—of a clear handsome yellow—flavor rich and fine—nearly sweet. September and part of October. Much esteemed in its season and deemed worth a place in every collection—though the tree does not seem to be a very early bearer. The Secretary, having tested the fruit the past season, agreed with the Chairman respecting it. Passed as not generally known to the members.

Rambo.—Unanimously recommended for very general cultivation *on every account*, both as a tree and a fruit—save that the tree is tender on the root.

The Secretary would suppose the very thriftiest stocks the best, if care were taken the first year or two to keep down the suckers.

Fameuse.—Recommended for general cultivation.

Fall Pippin.—Mr. A. Bryant—has found

it but a moderate bearer with him. Mr. J. H. Bryant—blows off considerably.

The Chairman has trees and grafts 10 years old, but never a good crop till this season—fruit fine, but not abundant. By some members it was thought better adapted to the North.

Recommended for but limited cultivation on account of its shy bearing.

Westfield Seek-no-further.—The Chairman had found the trees very productive and profitable—taken altogether, one of the best varieties. Mr. A. Bryant does not esteem the flavor.

Sweet Nonsuch—Of Mr. A. Bryant—a local name—medium size. Yellow with red stripes—russetted. Season, October to January. Tree, hardy and vigorous, bears moderately every year.

Tested by members present, and recommended to general notice for its very excellent flavor—resembling much the Sweet Bough.

Bullock's Pippin.—Some members preferred to call it Golden Russet. Recommended by several for general cultivation. Though small, yet a great favorite, on account of its choice flavor. Trees productive, but tender on the root.

Vandervere.—Recommended for general cultivation. Pretty hardy on root.

Rhode Island Greening.—Passed as not yet sufficiently well tested in the West for general recommendation. Tree, tender on root.

White Bellflower.—Recommended by several for general cultivation. Tree, rather tender on root.

Yellow Bellflower.—Unanimously recommended for very general cultivation.

Esopus Spitzenburg.—Recommended for general cultivation. Tree, rather tender on root. The genuineness of specimens of this fruit and the Seek-no-further, shown by the Chairman, having been publicly called in question, the subject came up for discussion: Whereupon it was Voted, that the varieties of apples cultivated and exhibited by Mr. E. Harkness, as the Esopus Spitzenburg, and Seek-no-further, (Westfield,) are, in the opinion of this meeting, unqustionably genuine.

Mountain Pippin—Of Mr. Bryant.—Very large and showy—regular, smooth—pale, green and blush; light for its size. Very stout, hardy, vigorous grower, and productive—overgrows stock. Tested by members present, and recommended for moderate cultivation.

Domine.—Recommended for very general cultivation.

Blue Pearmain.—Specimens from Dr. Hascall, who esteems it, but finds the tree late in bearing. Tested by members present, and recommended for further trial.

Michael Henry Pippin.—Recommended for moderate cultivation, as the flavor does not please, universally. Tender on root.

(Supposed) *Willow Twig.*—Fruit not of first rate flavor, but uniformly fair, of good size, an excellent keeper. Tree grows slowly at first, and the shoots mildew; but does well in the orchard—an early and great bearer. Recommended by several members for general cultivation.

Milam.—Too small, with Mr. Whitney, who has fruited it for two seasons.—Should be called the Sucker tree, from its inveterate sprouting habit. Recommended by several for general cultivation.

Swaar.—Tree overgrows stock. Recommended by several for general cultivation.

Prior Red.—Recommended for moderate cultivation, only on account of its late and shy bearing.

White Winter Pearmain.—A very hardy, fine tree. and the fruit of excellent flavor and keeping quality. New to many, but recommended by several for general cultivation.

Newtown Pippin.—Mr. A. Bryant.—Trees slow in bearing, and bear but moderately. Chairman. With him the trees grow slowly at first, but better afterward—also finds them tedious in coming to a bearing state, but the fruit very excellent.

Unanimously recommended for extensive cultivation.

Raule's Janette.—Recommended by most for general cultivation. Tree, a great bearer and hardy. Best in the south.

On motion, Adjourned till 8 o'clock, tomorrow.

SECOND DAY'S PROCEEDINGS.

Dec. 19th—8 o'clock, A. M.

The Meeting being called to order, the minutes were read and approved—and the *Jersey Black*, presented. The Chairman stated that the tree was a slow grower, but hardy and productive. Mr. C. R. Overman said it was so poor and feeble a

grower he would dispense with it, though the flavor was passable and the fruit handsome.

A large and showy pale, yellow apple without a name, was presented and identified by some as the *Cumberland Spice*.—Tasted and well esteemed. Recommended for further trial.

A new variety, or at least unknown to the meeting, was presented from Mr. Dewey, of Lewiston, by the name of *Carolina Spice*—large, showy, and of good flavor; is said to be a long keeper. Deemed worthy of further trial.

Specimens of the *Passe Colmar* Pear, from Mr. Overman's, were distributed among the members, and *nem. con.* pronounced first rate.

There were specimens of many more varieties contributed, but as several members were obliged to leave, it was thought best to defer any further public discussion upon them until another meeting. Among these, were the Baldwin, Winesap, Timbertwig, Gilpin, or Red Romanite, Roman Stem, Fulton, Jonathan, besides many of less note. Some very showy seedlings were also introduced, among which were several from Mr. Lake, from seeds of the Yellow Bell-flower, which were quite interesting from their similarity in appearance to the parent variety, and of unusual good flavor for seedlings.

The subject of forming a permanent organization was then discussed in connection with the question of adjournment, and it was finally Resolved,

1. That when we adjourn, it shall be to the 1st day of October next, at Princeton, for the purpose of organizing a North-Western Fruit Growers' Convention.

2. That the proceedings of this Meeting be published in the Praire Farmer and Wisconsin Farmer.

Adjourned.

F. K. PHŒNIX, Sec'y.

For the Wisconsin and Iowa Farmer.

Hints on the Management of Peach Trees.

MILTON, Dec. 12, 1850.

MR. MILLER:

Sir—The rearing of Peach trees, by some, is considered very doubtful, in Wisconsin, while others think they may be to some extent. Now I wish to throw out a few hints, if perchance I might be of some little use to my fellow men, to say nothing of their *fair and better halfs*, in regard to my small experience and observation for for ten years in this country. I commenced, some nine years ago, with a few seedlings; selected a fine, rich, southeastern slope, verging from the openings to a rich bottom prairie and marsh. My trees flourished like a green bay tree by a river, until the second spring, when we had a warm spell, so that the sap started and the buds swelled; then a hard freeze, which did the work for them—they all died to the ground, and with them died all my hopes of ever eating any Peaches from them; but there sprang up a luxuriant growth from the roots, which I divided, and set them a little higher up the slope. They flourished well and shared the same fate again, which put me to thinking how to remedy the evil. Just above the slope I had a piece of table land of pretty stiff clay soil, with a mixture of pan and gravel basis. I thought that possibly this might keep them from spring killing (for they did not winter kill,) and at the time, I made it a business, when opportunity served, to make inquiries of others; and, falling in with a gentleman who had made the Peach tree and its cultivation, an object of observation, I related to him my experience and thoughts. He said I had come to a right conclusion: "For," said he, "I have invariably noticed that it always did best on pretty stiff clay land." So I set a few right on the edge of the slope, where the basis of the soil was sand—a quick soil—and the balance I set on the clay soil. The result is, the trees on the warm, quick soil, flourished and shared the fate of their predecessors, while those on the clay soil have grown not so fast, and not even a twig has been spring killed. So I am well satisfied that the difficulty is only in preventing them from starting early enough so that the sap will circulate before the last hard freezes are past. Any thing, in my humble opinion, that will keep the tree from starting too early, will serve to make the peach a fruitful tree, even in this country. The placing of coarse manure around the tree for some little distance from it, after the ground has frozen hard, will serve to hold the frost in later in the spring, and thus prevent it from spring killing.—Now if you should think the above hints

worthy a place in your valuable paper, so as to encourage experiments by others, or be of any use to any of your numerous readers, it will repay me for my trouble of scribbling these few lines; if not, I shall be satisfied.

Yours, Respectfully,
A SUBSCRIBER, &c.

Profitableness of the Nursery Business.

In the March No. of the last vol. of the Farmer, we had occasion to make a passing remark respecting the popular estimate of the exceeding profitableness of the Nursery business—intending to recur again to the subject. This we do now, and would commence by recording our entire dissent from aforesaid popular estimate—whether we consult our own experience or acquaintance both East and West. Not but that some have done well at it, but that—taking the average of cases through—and taking into account the outlay, risk and labor involved, the profits of this business will not be found surer or greater than those of other occupations.

At any rate, after several years' trial, we feel far better prepared to speak of the former from experience than the latter! Still we wish to discourage no one from going into it, but our desire is that its real character and chances shall be correctly understood, as we certainly think they are not, at present, by a great majority of our people. We trust then, when Nurseries are started, that neither those who commence them, nor their neighbors, will think the owners on the high road to ease and fortune—such misconceptions are exceedingly embarrassing and injurious on many accounts. Here, if anywhere, will be found the appropriate field for a wide scope of capital and skill, industry and patience, ere the goal of success is attained.

The popular estimate of the business is nowhere more strikingly, and to the honorable nurserymen more unpleasantly evinced, than in regard to the prices asked for trees—be they ever so low, they seem to be received as if extortionate in the highest degree. For the purpose of letting our readers know whether western nurserymen are so much sharper and higher-priced than their brethren at the East, (who, so far as we know, *in every respect save one,—the value of the land used—have the advantage of us,*) we give the following sketch of the prices of trees in four of the best and most extensive nurseries in N. Y. State—two of which are in the eastern part of the State, and two in the western—as given in their late catalogues. Apples 25 cents each,—in one catalogue it is "20 cts. where 25 or more are ordered." Pears in two of the catalogues 50 cts.; in the other two 37½ to 50 cts. Plums 50 cts. in all of the catalogues. Cherries 37½ to 50 cts. Peaches 20 to 25 cts. Grapes 25 to 50 cts.—Strawberries per doz. 25 to 50 cts.

HINTS.

Straw for Mulching—Getting out Manure—Winter Pruning—Seeds—Scions—Bark and Scab Lice—Leaf Rollers.

Do not fail to improve this mild winter weather in preparing for the growing season. Secure a good supply of straw for mulching. Manure should be got out and spread around under the trees for a distance of 4 or 5 feet each way, and do not fear giving a liberal dose. Do not trim off large branches closely before May, without waxing over the wounds; but if you choose you can now select and take off spare limbs, leaving a stub two or three inches long, which can afterwards be cut closer.—Gather Red Cedar seeds, and after bruising and washing out the pulp, put them away in moist earth to freeze, and so with most other fruit seeds to be sowed in the spring.

Cut your scions now for grafting and put in a cool, moist place, away from the mice till wanted. Send East by all means for some of those very choice kinds you had in the "old orchard," if you can't get them without! If wrapped tightly in oiled silk, or glazed paper, they will come by mail in perfect order. In getting or using scions we entreat that especial pains be taken to guard against *the bark and scab lice*, a description of which will be found in the last volume of the Farmer, a terrible pest among pear and apple trees, with which some nurseries we could name must be wretchedly infested, judging from the trees they have sent out, and filled the West with, as far as they have supplied us. If such will not do better in the future, they should be marked and avoided.

Pull off every one of those hateful leaf-rollers that so cover with their leafy nests, in the winter, the limbs of our apple, plum, and quince trees.

Live Screens for Orchards and Fruit Gardens—Trees best adapted to that use—Red and White Cedars, Cotton Wood, Locust, Abele, Balm of Gilead.

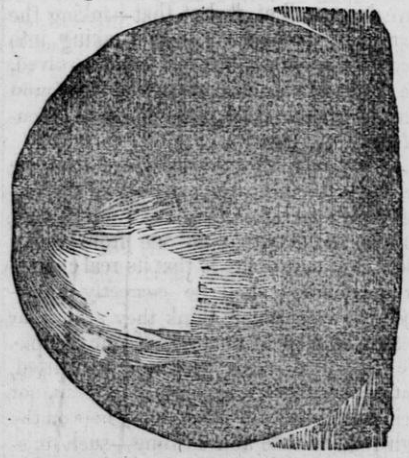
We have repeatedly urged upon our readers the importance of sheltering their fruit trees as much as possible from our bleak winds; and, indeed, to any one at all acquainted with them, nothing can be more obvious than the advantage of such protection; and where it is not to be had otherwise, as from forests, hills, buildings, or high fences, or the like, an artificial growth should by all means be resorted to, and the more bleak and exposed the location, the greater the necessity and the benefit that will be received from it. The trees will be hardier, thriftier and straighter, and the fruit will hang on better for being thus protected. We would therefore strongly recommend the formation of *Live Screens* on the North and West sides of our nurseries and orchards, and where very extensive, or in very bleak locations, we would have them, if we could, as often as every twenty rods.

As to the best material for these screens or the trees best adapted, the Red and White Cedar is unquestionably the most perfect, when of sufficient age, though not of so rapid a growth as could be desired for that use. Still we doubt not they will yet be extensively planted for screens, combining as they do so much of utility and ornament. Of deciduous trees we should prefer the Cotton-wood wherever it will succeed; the Balm of Gilead, or the Abele, which flourishes on poorer soil, all of which are very easily propagated and of remarkably rapid growth, and by no means deficient in appearance. The Cotton-wood and Balm of Gilead "come" readily from slips or cuttings; and the Abele sometimes, but not so certainly, at least the common variety. The Abele Auriplia, a new sort, does better in that respect, and has decidedly a richer foliage. But the Abele may be indefinitely multiplied by breaking the roots, as the Locust, and hence could be easily got into a perfect thicket. The Locust is also well adapted on some accounts for screens, and should be used if nothing better can be had.

From a single row of Abeles or Locusts, planted, say two feet apart, a heavy belt of trees, affording the most ample protection, could be got in a few years around our orchards; or from the other sorts with a little trouble in sticking down the cuttings, while for the timber, the Cotton-wood and Balm of Gilead, would be far preferable.

The Kingsley Apple.

We gave a few weeks since an article from a correspondent describing this new seedling, under the title of "The Apple of Apples in all the World." We have since been furnished with the beautiful cut below; and refer to the fruit again to add some additional information from Dr. Long, who has brought it into notice.



Of this apple a Committee of the "North American Pomological Convention," held at Syracuse in 1849, reported as follows:

The Committee say "that their attention has been called to a new seedling apple to which they have given the name of Kingsley Apple. This variety originated on the farm of Mr. Kingsley, in Pittsford, Monroe county, in this State, and as it comes up to the standard required by the Pomological Rules adopted by the Convention for the guidance of its Committee, we annex an outline and full description of the fruit.

Size—Medium, being about two and an half inches broad and two and a quarter in depth. *Form*—Nearly globular, but slightly

inclining to an oval. *Exterior color*—On a yellowish ground, pinkish red stripes and splashes diverge in every direction from the stem end of the fruit, while the calyx end is surrounded with light russet, and the exposed side nearly covered with irregular patches of pinkish red, profusely sprinkled with whitish dots. *Texture*—Fine grained and melting. *Flavor*—Of peculiarly rich, pleasant sub-acid, and supplied with an unusual quantity of delicious juice. *Core*—Of medium size and open. *Seeds*—Small, of dark brown color, and few in number. *Stem*—Short, not quite half an inch in length, slender and inserted in a regular cavity. *Eye*—Small, closed, and set in a shallow basin. *Growth*—The tree is moderate in its growth, ereet in its habit, hardy, and a profuse and early bearer. Thirty bushels of fruit were gathered from the original tree in the autumn of 1848. *Season*—From November until July.

Remarks.—The fruit above described has a peculiarly rich and agreeable flavor, and an unusual supply of delicious juice, and is in eating order at a season of the year, without extra care, when very few other varieties are in good condition. The specimens from which the above description was written, were eaten on the tenth of June, and were as fresh and free from defect as when taken from the tree. This alone, would entitle it to consideration, but taken in connection with its other qualities, renders it well worthy of recommendation and name"

The greatest and most frequently urged objection to this apple, is its want of size, but this we have reason to believe may be removed or greatly obviated by cultivation. Dr. Long has recently shown us specimens from the only tree yet in bearing from scions of this seedling, and there is a marked and decided improvement both in size and appearance. This is what might be expected, however, from the unfavorable condition of the parent tree, which was stated in the article to which we have alluded to be in a perishing condition.

The great merit of this apple is in the remarkable length of time which it will keep of undiminished good quality—remaining in season, a delicious, well-flavored apple from October to July.—[Moore's Rural New-Yorker.

A Great Root Grower.

The December number of the American Agriculturist, gives a short account of some of the operations of Charles B Calvert, Esq., of Maryland, on his farm called Riversdale, about seven miles from Washington, D. C. It would seem by these statements that Mr. Calvert is king of the root growers in the United States. The Agriculturist says that his farm is a sandy loam, and has been very severely cropped and greatly reduced in fertility, until he undertook the renovation system. His turnip crop last year was 25,000 bushels upon thirty acres. That amounts to 833⅓ bushels to the acre. Our own farmers could raise turnips as largely to the acre as this crop, but too many of them have imbibed the idea that they are of very little value when raised, and so they neglect the culture. We have often urged their culture, and have compared them to grass, and have always considered them as *solidified grass*, or grass made into a solid state on purpose for green food for stock during our long winters. From other statements in this same journal, we see that Mr. Calvert is making our name a true one by the mode in which he feeds out his turnips, using them entirely as grass, and giving his cattle no hay at all, while feeding them out. In this way he uses up this enormous crop.

"He keeps eighty cows," says the Agriculturist, "mostly Durhams, besides other stock. The turnips are cut up with a root cutter, some twelve hours before feeding time, and sprinkled with salt and bran. The salt entirely prevents any unpleasant taste in the milk. At the same time a quantity of cornstalks are cut or rather ground fine, and these are fed to the cows, mixed with the turnips, at the rate of two bushels of stalks to one of turnips, a day. Upon this food, without any hay, the cows are kept all winter, and give milk all the time."

He is thus enabled to sell large quantities of hay, which by hauling it into Washington, seven miles, brings him from $15 to $20 per ton.

We believe the greatest root grower in Maine is Capt. Bryant, of Dexter. We have not heard what the amount of his crop is this year. He raises the ruta baga principally, and feeds them out mostly to sheep. —*Maine Farmer.*

Wisconsin Farming.

Wheat has thus far been the staple crop of Wisconsin, and will probably continue to be for years to come. But farmers wo'd do well to remember, before it is too late, that they have hitherto been depending upon the natural fertility of the soil for the abundance of their harvests, rather than upon thorough tillage, rotation of crops, manuring, or any of the other means which skillful farmers in older states think indispensable to give them even a reasonable chance for good crops. Hale, hardy young men, when they begin life, are apt to think they can, with impunity, subject themselves to all kinds of hardship—riotous living—and a neglect of all the received rules for preserving sound health—but they ere long find that all who violate nature's laws, must pay the penalty she imposes—and they are also sure to learn that years of medical treatment, of privation and suffering, are frequently insufficient to restore a dilapidated constitution, which, by proper prudence and care, might have been easily kept in vigorous health.

Very similar to this will the improvident farmer find the case with his farm, who goes on taking crop after crop from the rich virgin soil, without returning anything to supply its exhaustion occasioned by each successive crop. Gradually he will find his crops diminishing in quantity and probably in quality too, until in the end they will not yield enough to pay the expense of cultivation. Foul weeds and noxious plants creep in, too, as another consequence of this bad system of culture, until finally the farmer comes to the conclusion that "the land is not what it was cracked up to be, and that he'll move further west." So it ever was with bad farming, and so it will continue to be with those who farm badly. Farmers of Wisconsin, resolve to be wise in time, lest it be so with you. Listen to the voice of wisdom as gathered from the experience of others.

Ohio is comparatively a new state—much of it once regarded as peculiarly well adapted for the growth of wheat. Indeed, wheat is even yet regarded as its staple crop.—Not many years since, its fields, like ours, yielded their 15, 20, 25, 30, and sometimes even more bushels to the acre. A leading agricultural paper, published at Cincinnati, states, "that the great market staple, the wheat crop of Ohio, has been annually decreasing in productiveness for a number of years," and "that the present annual product, taking the whole state together, and one season with another, is less than 10 bushels per acre."

In the counties of Rock, Walworth, and Jefferson, the same decrease in their annual crop has been observed for the last two or three years, and yet very many of these same farmers burn their straw in stacks, to save the labor of hauling it out upon the land, when it should have been converted into manure; and erect their temporary stables in a new place, when their yard becomes so filled with manure as to render it very inconvenient wading through it. The Lord of the Harvest has not promised his blessing upon the doings of sluggards.

The rust, the fly, and worm, have made sad havoc; but who that has paid any attention to the subject, will deny that the prominent causes of poor crops are:

1st. The land has been run to wheat from year to year without manuring or seeding it down.

2d. The sowing of the same seed, year after year, on the same farm.

3d. Sowing too early or too late.

4th. The imperfect culture of many acres rather than the thorough tillage of a few.

With these facts before us, may we not profit by the lessons furnished, and escape the misfortunes which have fallen heavily on some of our neighbors.—*Rock County Badger.*

MULES.—Why do not our farmers more generally try mules for farm work? In many countries they are extensively used.—They are much more hardy than horses, more cheaply kept, subject to fewer diseases and accidents, and are generally found, we believe, to do more service, both on the farm and in hauling loads to market. We have seen them, after 30 years' service on a plantation, seemingly in as good condition as ever! Is it not an object to try them? Our neighbors in Grant and Iowa counties breed them to some extent, and they might be introduced here without much trouble.—*Rock Co. Badger.*

☞ Dane county paid $180 bounty money for wolf killing during the last year.

White-Blue-Stem Wheat, and Wool-Growing in Ohio.

The following extracts are from an interesting communication in the November number of the Cultivator, entitled "Notes on Farming in Ohio." The variety of what is called the "White-blue-stem," introduced here (about Zanesville,) by James L. Cox, from Pennsylvania, is grown to some extent and is very highly approved. It makes the most beautiful flour of any kind known. It is sought for at five cents or more a bushel advance on the price of other varieties, and all say the yield is equal to that of any other wheat.

I find almost everywhere. a disposition to attend the Sheep and Wool-growing business. The country and climate are well adapted to sheep, and if the management is properly understood and pursued, it will, I think, yield more in proportion to the capital and labor employed, than almost any other branch of farming. A Mr. Buckingham has, in different parcels, upwards of 2000 sheep, and sold his entire clip this year at 41 cents a pound."

Water Oxen.

We notice the arrival from Constantinople, per bark New World, via Liverpool, of two pair of Asiatic buffalo calves, or as they are generally called in the books "water oxen."

These animals have been imported by Dr. Davis, for Mr. Williams Middleton, whom we understand, some time since adapted, (by wire fencing,) a large extent of land for the rearing of cattle, and in which he has about one thousand head, sustained entirely by the natural resources of the land, not only in giving him a revenue, but adding greatly to the supply of veal, butter and beef markets in our city.

A pair of these water oxen brought out by Dr. Davis over a year since, are really objects of curiosity, (and of course of corresponding promise,) from their remarkable fatness, and this from feeding on the marsh grass of the Doctor's farm. Mr. Middleton has, in his enclosure, a great deal of this marsh land, now valueless, which, we bleieve, he is now about to turn to good account with these animals.

The water oxen disregard mud or bogs, and are hence well adapted, as working oxen, in such lands. A great part of the day they spend in Ashley River and an artificial pond on the Doctor's farm with only the nose out of water. They grow to an enormous size, the cows, tolerable milkers, and very fair as beef cattle.

We are thus particular in this notice, hoping that the planters on our extensive marshes and rivers, where the freshets are so destructive to cattle will examine into the capabilities of these animals, and avail themselves of this facility of importation.—[Charleston Mercury.

Improvement in Tanning.

We have, we believe before alluded to an alleged improvement in the process of tanning, which, it is asserted, will revolutionize the business. Whether it will prove, on further trial, to be really a valuable improvement, and adapted to common use, we are unable to say. At the late Fair of the Onio State Agricultural Society, specimens of leather, tanned by the new process, were exhibited. The Ohio Statesman says that "Mr. Ansel Frost, of Rochester, New York, created more sensation in the minds of all true lovers of science and improvement, than any other person on the ground, by exhibiting specimens of tanned leather in whole sides, and made up into boots, shoes, gloves, &c. which were tanned in the almost incredibly short period of ten minutes, by a process discovered by his fellow townsman, Mr. Harmon Hibbard.—By this mode of tanning, a composition is prepared that acts directly and rapidly upon the grease, &c., in the skin, opening its pores, and preparing it at once for the tanner, which being a part of the constituent property of the composition, passes instantly into the skin, and there unites with the gelantine at once, all of which is done as if by magic, making stronger, softer, and more valuable leather than can be produced by the old methods, and at a much less cost. Hides or skins of all kinds may be tanned with the hair, wool, and fur on, with equal facility. Sheep skins, by this process, it is said, will compete successfully with calf skins tanned by the usual method. It certainly does appear, from all the evidence furnished, that this new discovery is destined to work an entire revolutian in the business of the manufacture of leather."

EDITOR'S TABLE.

☞ We send the January and February numbers of the "Farmer" at the same time. The printing of the January number has been delayed until we received returns from a portion of our agents, that we might calculate as near as possible how large an addition to commence the 3d volume with.

☞ The Farmers of Rock County met at Janesville on the first Monday of January, and formed an Agricultural Society. The proceedings of the Convention will be found in this number of the Farmer. A Constitution was adopted, and other steps taken to insure an efficient organization. We hope the Farmers of other Counties will follow the example of the Farmers of Rock.

☞ Our much esteemed Correspondent, Dr. Kennicott, of The Grove, Illinois, says: "A letter received yesterday from Col. Wilder, of Boston, informs me that Professor Hitchcock has returned from Europe, and that the Commissioners for establishing an Agricultural College, &c., will report at once. Mr. Wilder will, I presume, write the report. He says, Professor H. has brought home statistics of 351 Agricultural Schools. I was not aware that so many existed, A report from the pen of Marshall P. Wilder will be very interesting.

Ship-building in and about N. Y. City.—Launched in 1850 and on the stocks, 19 steam-ships, 24 steamboats, 3 propellers, 28 ships, 4 schooners, 9 ferry-boats; tonnage 89,741, an increase of 17,766 over 1849. In all there have been built 38 steam-ships, with an aggregate tonnage of 47,807, value about $10,500,000.

New Road to Fort Winnebago.—We have just been informed by Mr. R. Jackson, who came from Portage, on the Wisconsin river, near Fort Winnebago, that a road has been cut through to the Prairie du Chien road, intersecting that road at Mr. Metzer's tavern, 80 miles from Portage, 60 miles from Prairie du Chien, 44 from Black River Falls, and 20 from Prairie la Crosse. Mr. Jackson speaks of the new road from Portage to Mr. Metzer's in the most favorable terms; says there is no large stream to cross; that the small ones are bridged, and good houses of entertainment all the way through; and is of the opinion that the road will be considerably travelled the present winter, and the mail from the East to this place will soon be sent on this road, which will open a direct communication between Milwaukee and Willow river, as well as connecting us directly by mail with Madison.—We are also glad to hear by him that Portage is rapidly improving, as one may judge from the River Times, a neat and well conducted sheet, published at that place, exhibiting talent and good taste. We are glad to hear of the prosperity of other portions of our State, and that Wisconsin is now considered *the place* for the enterprising farmer, mechanic, and merchant, to look for a new home.—[St. Croix Enquirer.

New York State Agricultural Fair.—The Fair in September next is to be held at *Rochester*. It was held there once before—in 1843.

Free Bridge across Fox River.—The amount required to build a bridge across Fox River, at Berlin has been subscribed, and the work commenced.

House of Representatives, Jan. 10, 1851.—Mr. Doty, Representative from Wisconsin, on leave, introduced the following bill, which was referred to the Committee on Public Lands:

"A Bill to authorize the State of Ohio and Wisconsin to select the balance of the lands to which they are respectively entitled, under the acts granting land to aid in the construction of the Wabash and Erie, and Dayton and Erie Canals, and for the Improvement of Fox and Wisconsin rivers.

"*Be it enacted, &c.* That the Governors of the States of Ohio and Wisconsin shall be, and they hereby are, respectively, authorized to select the balance of the lands to which those States are entitled, under the several acts granting land to aid in the construction of the Wabash and Erie and Dayton and Erie canals, *and for the improvement of Fox (or Neenah) and Wisconsin Rivers*, out of any of the unsold public lands in those States, not claimed by pre-emption; the selections for each State to be within its own limits.

☞ Geo. W. Taggart, P. M., at Lind, Winnebago Co., in a letter on business, says:

"You will confer a favor by giving the following Notice an insertion in your next number.

'Lind Post Office Winnebago County, is situated on the Menominee tract, North of the Fox and West of Wolf River, on the route from Berlin, Marquette County, to Waupaca. All Mail matter directed to Lind, should be sent by way of Berlin P. O.

"This Indian tract is attached to Winnebago County, though lying at some distance from the organized part of it, and it is not generally known that any part of Winnebago County lies this side of Wolf River, and packages directed to this office are usually sent to Oshkosh or Neenah, thereby causing much delay, if they are not entirely lost.

Respectfully, your Ob't Serv't,
Geo. W. Taggart."

Perished on the way.—It is computed that 5000 persons have perished, the past season, on the overland route to California.

CONTENTS.

McCORMICK'S
PATENT VIRGINIA REAPER.

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From the Albany Eve. Journal, Oct. 17, 1850.

Circuit Court of the United States for the Northern District of New York.—October Term, 1850, at Albany—Before the Honorable Samuel Nelson.

CYRUS H. McCORMICK *vs.* WILLIAM H. SEYMOUR AND DAYTON S. MORGAN.—The plaintiff is the inventor and patentee of the Reaping Machine, known as "McCormick's Reaper," which for several years past has been extensively used throughout this country for cutting grain. The defendants reside at Brockport, in this State, where they have been engaged in manufacturing reaping machines, alledged by the plaintiff to be an infringement upon his letters patent. For this he claims twenty thousand dollars damages, That his machine is one of great importance, particularly where large fields of grain are to be cut, is unquestionable. It appeared, by an account which the defendants had been ordered to furnish, that they had during the present year made and sold about three hundred reaping machines, for more than thirty-two thousand dollars.—When the case was called, their counsel moved to postpone it on the ground that they were not ready for trial. The motion was opposed by the plaintiff's counsel, who, after adverting to the importance of the questions and amount involved, urged that under no circumstances ought the cause to be postponed, unless an injunction issued, restraining the defendants from the further manufacture of the machines. It appeared that a motion for an injunction had been fully argued, before Judge Nelson, in June last, and that he declined granting it in July, on condition that the defendants should keep and render, on oath, a true account of all machines made and sold by them, and at the same time ordered the plaintiff to bring a suit at law. The defendants objected to the granting of the injunction, but the Court on postponing the cause until the next term, ordered the defendants to pay the costs of the term, and also, directed an injunction to issue restraining them from making any more reaping machines, such as they had been making and known as "Seymour & Morgan's Reaping Machines." Sam'l Blatchford, of Auburn, E. W. Stoughton, of New York, and Sam'l Stevens, of Albany. Counsel for plaintiff. H. R. Selden, of Rochester, Counsel for defendants.

[The following is copy of the Injunction Writ issued as stated in the foregoing extract from the Albany Eve. Journal.]

COPY ENDORSEMENT.—*Circuit Court of the United States for the Northern District of New York—Cyrus H. McCormick vs. William H. Seymour and Dayton S. Morgan. Allowed by the Court, Oct. 15, 1850.*

Writ of Injunction.

The President of the United States of America to William H. Seymour and Dayton S. Morgan and to your counsellors, attorneys, solicitors and agents, and each and every of them, Greeting: WHEREAS it hath been represented unto us, in the Circuit Court of the United States for the Northern District of New York in equity on the part of Cyrus H. McCormick complainant that he has lately exhibited his bill of complaint in our said Court in Equity, against you the said William H. Seymour and Dayton S. Morgan to be relieved touching the matters therein complained of. In which said bill it was stated, among other things, that you are combining and confederating with others to injure the said plaintiff touching the matter set forth in the said bill, and that your actings and doings in the premises are contrary to equity and good conscience. We, therefore, in consideration thereof, and of the particular matters in the said bill set forth, do strictly command you the said William H. Seymour and Dayton S. Morgan and the persons before mentioned, and each and every of you, under the penalty of twenty thousand dollars, to be levied on your lands, goods and chattels, to our use, that you do absolutely desist and refrain from any further constructing or causing to be constructed, using or causing to be used, or vending to others to be sold or used in any manner the improvements described in the Letters Patent of October 23, 1847, in the bill of complaint mentioned, and from making, constructing, using or vending any reaping machine or machines constructed in any respect upon the principle or plan of those described or referred to in the said letters patent, or according to the same or to the specifications accompanying the same as set forth or stated in the said bill, and also from further constructing or causing to be constructed and from selling, transfering or disposing of, or delivering, or suffering to pass from their hands or control, any of the reaping machines in the said bill mentioned which are now in process of construction, or which have heretofore been constructed by them or under their direction, and especially from so constructing, vending, using, or transferring, or causing to be constructed, sold, used or transferred, any reaping machine or machines or improvements of the kind, description or on the principle of those mentioned in the said bill as being or having been constructed by the said defendants, in violation of the rights or claims of the said complainant under his said patent.

WITNESS, the Honorable Roger B. Taney, Chief Justice of the Supreme Court of the United States, at the city of Albany, the 15th day of October, in the year of our Lord one thousand eight hundred and fifty.

A. A. BOYCE, Clerk.

SAMUEL BLATCHFORD, Solicitor for Complainant.

CHICAGO, Nov. 5, 1850.

I have heretofore given public notice, and especial notice to all persons infringing my right as PATENTEE of the "Reaper," that I should hold those who pirated my inventions to strict legal accountability. I instituted legal proceedings against SEYMOUR & MORGAN of Brockport, N. Y., who in disregard of such notice, were found to be much the largest operators in this respect, and who had manufactured the Reaper three years previously under contracts with me. The foregoing paragraphs show the proceedings already had in the Chancery Suit, also, without further comment, the probable consequences to all concerned therein.

Certain interested persons, abettors in the pirating of my inventions, whose motives will be readily understood, have invented and set afloat various false rumors respecting my Patents, Among them, a man employed as *Counsel for Seymour & Morgan*, is known to have figured conspicuously. Knowing *the man*, it is only necessary to know his connection with the business, to furnish the *motive*, and thus make the whole matter understood. These falsehoods are part and parcel of the iniquitous *system of operations*, devised to prejudice the public against me and my inventions, *for the purpose* of aiding those violating my Patents in palming their spurious and unlawfully manufactured machines upon an uninformed and so far innocent community, and thereby defrauding me (as well as the community,) of my rightful reward of time, money, labor, &c., bestowed upon my "Reaper," to render it valuable to the country.—When it is understood that all persons *using* a machine illegally made or sold, in violation of the rights of a Patentee, are equally as liable as the manufacturer or seller, and can be sued and made liable to pay damages to the Patentee, and can be prevented by injunction from *using* such machine, it will be perceived that the *system of operations* above alluded to has not only been a *fraud upon me*, but is a gross imposition and fraud upon those to whom machines are thus sold. Purchasers of such machines are not allowed to plead ignorance of the Patent as a justification for the infringement of the Patentee's rights. When these things are understood by the farmers of the country, and when it has been ascertained that with all the effort that has been made to compete with my "Reaper," none has been found equal to it, and that the closer the imitation of it, the better the machine: when, as in years past so it has still been found in the last harvest, that notwithstanding the great pretensions of other *proposed* improvements *prior* to the harvest—backed too, of course, by glowing certificates—the more prominent of these have, by *signal failures*, only resulted in additional admonitions to those to which the public have from time to time had of the unreliableness of certificates, puffs or partial trials, or of premiums and medals based upon them: when it is seen that "McCormick's Patent Virginia Reaper" has not only sustained its superiority over all others, but has from year to year, sold by thousands throughout the wheat growing portions of the United States, given "*increased satisfaction*," as is admitted by *competitors*, and which is the best certificates that can be given of its success and value:—when all these things are recollected, I say, the Farmers of the

country, having already been so grossly humbugged in *divers ways*, should look well to it, that in future they purchase Reapers that will in the first place *operate right*, and secondly, that they have a right to *use* them when purchased—two things, verily, that are of some consequence to be understood in purchasing a Reaper!

I need only repeat here, that, having now gone as far in the prosecution of my suit against Seymour & Morgan as I at present can go, and sufficiently far for all practical purposes, as will be perceived, suit is about to be brought against several other concerns for infringments of my patents, (unless they not only desist from further, but make just reparation for pa t infringments,) which the farmers of the country would do well to observe.

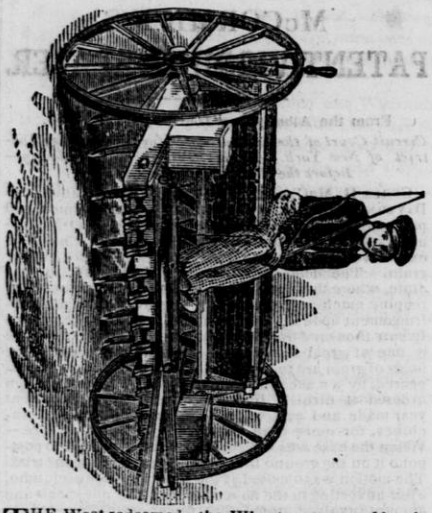
While it has, for some years past, been deemed unnecessary to publish Certificates of the operation of my Reaper, (although thousands could be given,) I may say that I received the Gold Medal of the American Institute, in 1849, and the Certified Diploma of the same Institute in 1850, for my Reaper, one of which has exhibited there preparatory to its exhibition at the great World's Fair in London, in May next, and its immediate introduction into Great Britain, where it has recently been patented. It has been introduced into Austria, and arrangements are being made for its introduction into South America and other countries.

I will only add that of the 1600 Reapers manufactured the present year, many have been sent into the states of Maryland, Pennsylvania, Delaware, New Jersey, New York and Ohio, and that thus they have been so favorably introduced into this territory, not heretofore supplied from this manufactory, that, from the estimates of Agents in those states, a large demand for the next harvest may be calculated upon there; and that, in view of the continued encouragement received from the farming community, for which they have my acknowledgments, I design to have manufactured for the harvest of 1851, about the same number that I had for the last harvest—and that, having on hand a large quantity of lumber and other materials of the best quality, with the advantage of my large experience in the business—which is indispensible in perfecting the details of a Reaper—*I* hope still to improve somewhat in the construction of my machines, which will be guarantied superior in all respects to any other machine of the kind. And no pains shall be spared to prevent a possibility of disappointment on my own part, as well as that of our chasers, on account of the negligence or bad faith of shipping agents and others.

I have also had very favorable accounts from the operations of my Mowing Machines and intend to manufacture a considerable number of them, further particulars in relation to which will be furnished in due time.—And I also intend to manufacture for the next season a considerable number of Threshing Machines, Horse Powers and Seed Drills, of the most approved designs, of which more particular notice will be given when arrangements for the same shall be completed.

The co-partnership between O. M. Dorman, Esq., and myself having expired by our articles of agreement, the business will in future be conducted mainly under the superintendence of my two brothers, (Wm. S. & L. J.) who have had much experience in it, and who will at all times be found in place—and in the name of the proprietor. C. H. McCORMICK.

A. P. Dickey, Esq., of this city, principal traveling Agent. dec3 47



THE West redeemed—the Wheat crops saved by the use of Piersons Patent Seed Drill, manufactured by Allen Vance, at Chicago. Farmers, wishing this invaluable Machine, for Spring, will send in their orders soon, as uone need expect a Drill unless giving their order in time for it to be made. The terms will be very easy, and any farmer has the privilege of returning the Drill should it fail to work well and give entire satisfaction and increase the crop five bushels to the acre in Sprius Wheat, and saving the entire winter crop. The drill can be used to great advantage in seeding other grain. In a word, all kinds of seeds, from corn to turnep, can be all planted. One man and team will plant or seed from ten to fifteen acres per day. I deem it unnecessary to say any more in favor of the drill, and will give the names of a few of those who have the drills. See them, as you will believe what they say, in preference to me. See ther Fall Wheat, if possible:

Reference—*Wisconsin.*	J. Churchil, Batavia
Augustus Smith, Troy.	Lathrop & King, St Charles
Wm. D. Wolf, Heart Prai	James Schoonhoven, Elgin
Mr. Edwards, Sug. Cr'k	S. Seward, Marengo
F. M. Ruble " "	H. W. Barrass, Rockford
Mr. Pierce " "	Harris Miller, "
Ebenezer Thomas, Esq., Pr.	Mr. Works, "
Wm. Sherman " "	Mr. Johnson "
A. R. Hinkley, " "	G. S. Rubbell & Co. Beloit
Henry Warner, Fondulac	Wm. Reddock, Ottawa
Mr. Hulbert, Platville	Ralph Ware, Gainesville
Iowa.	Nathaniel Smith, Chilicothe
Kev'd Mr. Norris, Du Buq.	Jacob Wells, Travilla
A. Pierce, "	N. B. & I. Mason, Farmi'n
Illinois.	Peter Kneff, Paris
Dr. F. J. Miner, Elk Grove	Samuel Porter, Pekin
S. S. Crocker, Babcok's "	A. B. & H. Hawley, "
Joseph Stephens, Geneva	L. Shelton, "
J. Brown, "	I. Dickson, "
S. Scott, "	

A. P. Dickey, Agent at Racine, Wisconsin.

I would further state that I have taken a Store in the old Bank building, No. 157 Water Street, where I will keep all kinds of the most approved Farming Implements Farmers, visiting Chicago, will call on the subscriber, or any wishihing any information about any implement by writing to me, will have all that n can give. All kinds of seeds will be kept as soon as they can be had.

The Public Obedient Servant,
ALLEN VANCE.

Chicago, January 1, 1851.

WISCONSIN & IOWA FARMER,
AND
NORTHWESTERN CULTIVATOR.

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F. K. PHŒNIX, } EDITORS.
MARK MILLER, }

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Postmasters and all others who feel an interest in the circulation of the FARMER, are invited to lend their aid in procuring subscribers and extending its circulation.

Agricultural Meeting.

A meeting of the friends of the Agricultural interests of the county of Racine, was held, pursuant to notice, at the house of JESSE D. SEARLES, in the town of Yorkville, in said county, on the 22d day of February, 1851.

The meeting was organized by choosing THADDEUS G. KELLOGG, Chairman, and ALBERT G. KNIGHT, Secretary.

Dr. B. B. CARY then stated the object of the meeting to be the formation of a County Agricultural Association.

On motion, it was voted that the meeting proceed to form a permanent association.

Dr. B. B. Cary, of Racine, Ezra Birchard, of Yorkville, and Thos. W. Hackney, of Rochester, were appointed to draft a Constitution. The Committee withdrew, and in course of the afternoon reported the following

CONSTITUTION:

ART. I. This Society shall be known as the RACINE COUNTY AGRICULTURAL AND HORTICULTURAL SOCIETY. Its object shall be the instruction and improvement in practical Agriculture and Horticulture, and the Mechanic Arts.

ART. II. Any person may become a member of this Society, by paying *one dollar* annually. Honorary and corresponding members by a vote of the Executive Committee. The payment of *ten dollars* at one time may constitute a member for life.

ART. III. The officers shall be a President, one Vice President from each town and city, a Recording Secretary, a Treasurer and Executive Committee, consisting of the officers above named, and six additional members, five of whom shall constitute a quorum for the transaction of Executive business.

ART. IV. The duties of the officers of this Society shall be such as may be designated in the By-laws. The Executive Committee shall hold such meetings, and perform such duties as are required in the By-laws.

ART. V. There shall be an Annual Meeting of the Society on the first Wednesday of February, in such place as the Executive shall direct; at which the officers shall be elected by ballot, and a majority of all the votes cast shall be necessary to a choice.—The Society shall hold such other meetings as shall be prescribed by the By-laws.

ART. VI. The Society shall adopt a code of By-laws for its regulation, and may alter or amend, by a two-third vote, at any annual meeting.

ART. VII. This Constitution may be amended by a vote of two-thirds of the members of the Society present at any annual meeting, or meeting called for the purpose.

Which was read and adopted, article by article.

On motion, it was voted that a Committee of five persons be appointed by the chair, to draw up a code of By-laws, to be presented at the next meeting of the Society.

The chair appointed Mark Miller, B. B. Cary, Ezra F. Weed, Jesse D. Searles, and Nelson R. Norton.

Resolved, That the proceedings of this meeting be published in the Wisconsin

Farmer, and that the other papers in the county be requested to notice.

Resolved, That when this meeting adjourn, it adjourn to meet at this place on Saturday, the 8th day of March, at 10 o'clock A. M.

Meeting adjourned.

T. G. KELLOGG, Ch'n.

ALBERT G. KNIGHT, Sec'y.

The Teachings of Experience---Shall we heed them?

"What thou sowest, that shalt thou also reap."

"Who doubts this?" says Mr. somebody, "I did'nt"—why, believers in transmutation, to be sure. But we fear there are many who do not believe in transmutation, that, in their practice, at least, lose sight of this great truth. Let us see,

Who were bit last year for the third time, perhaps, by trusting all to the chances of a wheat crop? Not a few to be sure; but they sowed an uncertain grain—*and reaped one!*

What do they reap who "half farm it," generally—with half buildings, half fences, half stock, half tools, and half help enough—what but half crops of produce and whole crops of weeds—according to this seed?

Who are reaping the bitter fruits of pecuniary embarrassment and debt? Those who sowed the seeds of indolence or improvidence—spending, by aid of drafts upon an uncertain future, that which they had not yet earned.

What are they reaping who, in their "haste to be rich," went to California? Not gold, certainly.

Who are poverty stricken when the calls of honest debtors or benevolence are pressed? those who are fully occupied with the demands of sensual appetite and fashionable indulgence.

Who are sick? Too often those who prefer the indulgence of appetite to plain, temperate living—who practically prefer "a pound of cure to an ounce of prevention!"

Who are reaping the bitter fruits of corrupt legislation? Most evidently they who sowed the seeds, *who chose the framers thereof.*

And, finally, who will sow such seeds over again the coming season, and reap accordingly? Those, certainly, who are not satisfied with their past yield!

But who, on the other hand, who are our modern men and model farmers, reaping bountiful harvests—not merely from their farms, but of honor and esteem among their fellows as the rewards for their efforts. Most evidently those who sow the right seed, who combine uprightness with enlightened industry and economy—who "take the papers" and profit by other's experience as well as by teachings of their own.

Is not this *so*—are not these the means to be employed, and these the ends to be kept in view? Are not people generally the arbiters of their own good or bad fortune? Are we not free agents, creatures of our own making, acting for ourselves, responsible to ourselves? Most undoubtedly. Then this shuffling off of responsibility to the charge of bad luck, or bad laws is all wrong—as false in theory as pernicious in practice.

"Thou art the man"—to thyself, thine own master, by thine own management, dost thou stand or fall! True, the best calculations will sometimes fail and calamitous accidents will sometimes overturn the wisest plans, but such are the exceptions—not the general rule. As to our own case, it can by no means, in our opinion, be allowed among the exceptions. For, the great main causes are to be found in our own mismanagement and might have been avoided.

But let "beggars be beggars," the great practical question for us now to solve is this—shall we profit by the teachings of past experience and avoid similar errors in future? Shall we relieve our own agency and responsibility in the fixation or establishment of our own condition?

Social Reform.

It is a fact, if we are any judge, that our people live too high—too fast, altogether, to comport not only with our means and welfare, but with the means—the true welfare of any community, however prosperous. We do not approach this subject or advance such opinions because we like to, but in obedience to what we conceive the plainest dictates of duty. Thus impelled, we must speak out—and plainly, though kindly as we trust. At every turn, in every effort for improvement of whatever character, whether agricultural, social, moral or

political, we are met, opposed, check-mated by this state of things, until it seems the first great duty of every friend of truth to labor for its removal.

Are people asked to subscribe for agricultural newspapers, to build school houses, to support any good cause—they refuse, excusing themselves by the universal complaint, the unanswerable plea of hard times—which as for real hard times—such as a tyrannical government, war, famine or pestilence brings, we know almost nothing of them, and with our chances, should be this day what we are not—socially and pecuniarily upright, independent and happy.—True, our means have been circumscribed by unfavorable seasons and poor crops—yet not so, we think, as to justify such an accumulation of evils upon us.

Were we called upon to name their chief cause, we should be compelled, though very reluctantly, to say—social dissipation and improvidence, unintentional on the part of many, but nevertheless a positive, prodigal waste of ways and means in gratifying false pride and indulging appetite. A serious, sweeping charge, we know, but not made without careful investigation, and the most earnest desire—the sole purpose of doing good.

True refinement, we believe in, we will go all proper lengths to sustain and make general, but when it comes to the refinement of modern fashions—to eating and drinking, wearing and using up, for the gratification of pride and appetite, all we can earn or run in debt for—leaving honest debts, public interests and the future wholly unprovided for—when asked in obedience to its claims to hazard not only our property and character, but even our health and life, we beg to decline—for we choose to be called unrefined. Yea, we will rather forswear civilization entirely if it cannot be rescued from such tendencies! Better both in this world and the next, in our opinion, would be the condition of savages, whether as individuals or communities, than of that people, who, possessing civilization, were destroying themselves by its evils, rather than improving and perpetuating themselves by its blessings.

Tell me, if luxurious living, sensual gratification and pecuniary dependence comport with strength of character and independence, individual or national—with health of body or soul—and then tell me if we are on the right track? What is the secret of our unsettledness, our instability, our unrest and anxiety to shift and change about? Our desires for wealth and luxury have quite outrun our success in attaining the means for their gratification. The new strange drafts made, require equally new strange schemes for supplying them.

To apply these remarks—Are we not neglecting the good old paths of industry and economy? Is there not a shocking waste of time—a host of drones—of non-producers among us? And yet all these must be sustained, and that by the workers! We wish to encourage no warfare among classes or professions in society; but, candidly, there is a host that should be supported at public expense, or *earn* a living, if we had to provide for them. But such would soon find their true place were society organized aright, were a course of "severe letting alone" only practiced towards them.

But so far as ourselves, our own individual interests are concerned—do *we* make the best use of that most valuable of all possessions—*time*—or do we spend it in doing nothing? Are all the members of our families doing their share towards bearing the burdens of their support—or are we, in mistaken kindness, rearing up a set of idle, non-producing *genteel* sons and daughters to burden our old age and society with—the truest drones and bores in existence—as well in fact to themselves as others—for whose existence and conduct in society their parents are too often and in fact generally responsible. What hope can there be for erring childhood—for the rising generation, when parents in their wisdom pursue such courses?

To look at the subject in another light—do not our outgoes exceed our incomes, and does not such a state of things presuppose pecuniary indebtedness, and eventually poverty or a resort to dishonest resources to sustain ourselves—and here you have half the world of evil among us unmasked. True, it has been said that the love of money was the root of all evil, but here we have sometimes thought it was not the love of getting, but of spending, and if it could be only spent without the trouble of getting, so much the better.

Thus, at least, with too many in society;

but, how is it with the honest, hard-working farmer, the bone and sinew of the land, who finds himself continually falling short in spite of all that he can do. Let us see, are you in debt—if so, you certainly have an equal chance—"the short end of the whippletree"—for you of course are paying interest—of course buying on credit, and hence paying higher for things, and thus getting in deeper and deeper all the while. Your income, or your risk, must be very great with such outgoes. But, do you know what your income and your outgoes are—or do you allow other parties to keep all your accounts? If so, are you safe? By no means! Then like good sailors, keep a Log and know your soundings. *Above all, avoid debt!*

But let us come still nearer the particulars—not on our account, but for your profit—by way of searching out the real causes of these difficulties. Our outgoes for domestic purposes, the table and wardrobe—now, really, do they comport with the dictates of health, propriety and economy, or with the demands of appetite and fashion? In all candor, we ask, are those outgoes for luxuries in the way of rich victuals, costly clothing, furniture, parties, &c., necessary? Can you afford them and preserve your physical and pecuniary health—responding to every honest demand—every call of duty and humanity, upon you? We fear that thousands would come short if tried by such a standard.

And is it not the true one—can we reasonably expect to make real progress in any other course? We think not, and for one we are fully prepared to seem and to be esteemed singular for striving to carry it out. We mean to deny ourselves of no real good within our reach, nor would we deny others.

On the contrary, we believe that all real good, all proper gratification, all honest gain harmonize perfectly, and can be found or secured in the path of industry and economy, Christian integrity and simplicity.

Now, friends, call this, if you please, a sermon—say, if you will, that in the "Farmer" it is not in its appropriate place—the question after all is, *are these things so?* Our appeal is to the masses—shall we ever be independent—shall our earnings be our own to use and improve on as we wish, or shall we, by thus living in a state of fashionable indulgence and indebtedness forever be at the mercy of speculators, usurers and sharpers generally?

For the Wisconsin and Iowa Farmer.

Management of Bees.

Messrs. Editors:

Every fact concerning the economy, care and management of the Honey Bee is of such general interest that I am induced to send you a brief account of an incident in my experience therein, and if you deem it worth a place in your paper it is at your command.

Last spring I purchased a hive which sent out a fine large swarm in July. They were safely hived and went to work in good earnest; nearly filling their hive before winter. Late in the fall I noticed they were quite cross and did not appear to work as well as my others. In December they died very fast, so much so that in a little more than a week it was necessary to raise the hive twice and clear the dead bees from underneath for the pupose of ventilation. At this time I observed what I had not before noticed, that among the dead bees were many drones. A further examination showed that the entire swarm was dead. There was in the hive about 20 lbs. of honey, considerable bee bread, but no brood comb. It was suggested by a neighbor who has had much experience in bee management, that the queen must have died, and probably in the fall. This opinion was predicated upon the circumstance that the bees had spared so large a number of drones, contrary to their custom. If any of your correspondents can inform me with regard to this matter, as to whether any thing could have been done to save the swarm or not, I shall consider myself much obliged, as such knowledge may prevent a like occurrence in future. A. G. H.

Waukesha, Feb. 17th, 1851.

A similar circumstance occurred with us the past season. We had a very large swarm come out in June. They were placed in a new hive which was removed to a distant part of the garden from the old swarms. The hive filled rapidly with comb—to all appearance great progress was being made in laying in a good store of honey; and, like the milk-maid in the fa-

ble, who counted their chickens before they were hatched, we reckoned on the hive as as good for twenty pounds of honey, beside a sufficiency to carry the swarm through the winter. Early in October we noticed an unusual number of dead bees under the hive, and the entrance nearly clogged up with pulverized comb, which was cleared out. But, in about a week it was found in the same condition again. Thinking something was wrong, one side of the hive was carefully elevated from the bench when we found there was not a living bee in it, nor a drop of honey. It was nearly full of comb, a part of which was broad comb, filled with young bees in all stages of growth. Other portions had evidently been filled with honey, but the greater part of it appeared but partially completed. We think the swarm was killed and the honey carried away by some neighboring swarm, that our correspondent's shared the same fate.

We know of no better remedy, when one swarm attacks another, than to close up the hive of the assiled and shut out the assailant. It should be closed at night, when the bees are mostly in.

For the Wisconsin and Iowa Farmer.

The Peach---Winter-killed.

FRIEND MILLER:

Again our hope of recording 1851 as a "Peach year" is blasted—the promising display of blossom buds are killed. On the night of the 18th of January, the thermometer sunk 12° below 0, but did not affect the peach or apricot buds; they were perfectly green and fresh up to the 31st, when the mercury fell to 15° below 0, completely killing the peaches and apricots, showing, conclusively, that between 12 and 15° below zero (only 2° difference) was the fatal point. Could not we have protected the tree, or at least a part of its branches to this amount by enveloping them with straw or hay? I think so, with but little cost or trouble; at least, I intend making the experiment next winter. The buds have never, to my knowledge, been killed before Christmas, at which time I propose *swindling* up the tops of some choice varieties. This covering I shall remove the last of February, after which (on the lake shore) they are never killed. Many persons suppose our cold backward springs are the cause of the failure of our peach crop; precisely the reverse is true, for if they escape the severe winter the backward and cold spring is of great advantage in keeping the tree from putting forth blossoms until all fears of frost have passed.

P. R. Hoy.

Racine, February 1, 1851.

For the Wisconsin and Iowa Farmer.

The Wild Plum for Stocks.

As many persons are disposed to abandon the cultivation of the peach, and try the plum as a substitute, it may not, perhaps, be amiss to offer a few words upon the value of the plum as a fruit for this section of country, and upon the method of propagation, which seems to be the cheapest and easiest for us to pursue.

So far as it has been tried about here, it has done well; it is perfectly hardy, and very productive, and, I think, is destined to become one of our most valuable fruits. The only difficulty with us in regard to it, at present, seems to be the high price and scarcity of trees; there being nothing like a supply to be found in the Nurseries. To obviate this, it has been recommended to graft on the Wild Plum. To do this properly, or in such manner as to produce good standard trees, I think that it will be found necessary to use seedlings of the wild plum, which have been raised with care and good cultivation, and graft them in the neck or a little below the surface of the ground.—We have a few trees of the plum and apricot worked in this manner on the wild plum, which are as fine as any I have ever seen of the same age, and under similar cultivation, that had been grafted on the cultivated plum.

So far as I have had an opportunity of becoming acquainted with them, I think that I should prefer stocks of the wild plnm, if worked in the above manner, to those of the improved plum; they form good roots, and can be transplanted with little or no risk. It is probable that the trees would be smaller or somewhat dwarfish, but I thlnk they would come into bearing sooner and perhaps be more productive.

The large trees taken from the groves and forests for stocks, and grafted at standard height, will make unsightly trees on ac-

count of the graft so much outgrowing the stock, yet they may be of some value to those who are anxious for early bearing trees, and care but little for the appearance of them. But I would recommend that, while they are enjoying the fruits of these, they should be getting forward some good thrifty ones, to replace them when they shall break down or become otherwise useless.

Yours,

D. MATTHEWS.

Burlington, Jan'y, 1851.

Smut in Wheat.

I have lived on a farm in this county, over half a century. When farming was first commenced here, it was in small patches in a heavy forest, and we were all troubled with smut in our wheat, till we brined and limed our seed. I once failed to prepare seed enough for a lot, and I sowed dry wheat to finish. The result was, the dry seed did not produce over three-quarters as much as the prepared seed did, and was very smutty. It was all sown in one day, and on the same quality of ground.

I once saw a piece of wheat growing in a sugar orchard, and at least one-half was smut. I then thought, and still think, that the impurity of the atmosphere, caused by maple trees, produced the smut. Since our wheat growing-lands have become older, we are not troubled with smut as formerly. I consider it of great importance to change seed wheat from oak to maple lands as often as every three or four years. I believe wheat sown ten years on one farm, without brining and liming, will not produce much over one-half as much as it would if the seed had been changed two or three times, from ten to twenty-miles, and also from a different soil.

D. K. K.

Port Byron, N. Y., 1850.

—*Genesee Farmer.*

In 1845, my spring wheat was very smutty, and was getting worse every year. In 1846, I thought I would, for experiment, get a new kind of seed; and accordingly I obtained a bushel of the Italian, as that was said to produce well. I sowed three acres —two and a quarter acres with the old kind, after washing it with strong brine, (as that was the last prevention I had then heard of,) and three quarters of an acre with unwashed Italian. When ripe I found, as usual, the old kind about one-tenth smut; while the Italian, though standing side by side, and the adjoining edges intermingled by dragging, was entirely free from it. I could find smut heads of the olk kind several feet from the line, among the Italian. I could also find heads of the latter among the old kind; but after a long and close examination, was compelled to give up, without finding a single head of the Italian smutted. Since then, I have, in two different fields, sowed the Black Sea wheat beside another kind, on the same day, and harvested them the same day, finding the Black Sea free from smut, while the other was scarcely more than three-fourths good wheat.

As I know not the cause of smut, (as I stated before,) I know of no preventive that is sure in all cases. All I can say, therefore, is that the most successful course with me, is to sow seed that is as free from smut as possible, if not entirely, and change the seed as often as every third year: that is, change with some of your neighbors or friends, for some that grew on different soil from that you intend to crop. D. A. C.

Dryden Hill, N. Y., Sept., 1850.

—*Genesee Farmer.*

Fattening Sheep in Cold Weather

The following article on the fattening of sheep in cold weather, we find in a late work by Henry J. Canfield, of Salem, Ohio. We have often urged upon the farmers of Wisconsin the importance of sheltering stock in cold weather. The experiments made by Mr. Spooner will illustrate the economy of good barns to protect stock from the weather.

"In fattening sheep to the best advantage in winter, it is necessary that they should have good shelters, and that these shelters should often be supplied with fresh litter, so as to make them quiet and comfortable; and, also, that proper allowances of food, water, and condiments should be regularly supplied to them.

The observations of Mr. Spooner will illustrate this subject as follows: 'Quietude and warmth contribute greatly to the fattening process. This is a fact which has not only been developed by science, but proved by actual practice. The manner in

which these agents operate, is simple, and easily explained. Motion increases respiration, and the excess of oxygen thus taken, requires an increased quantity of carbon, which would otherwise be expended in producing fat. So, likewise, *cold robs the system of animal heat;* to supply which, more oxygen and more carbon must be employed in extra combustion, to restore the diminution of temperature. Nature enforces the restoration of warmth, by causing cold to produce both hunger and a disposition for motion, supplying carbon by the gratification of the former, and oxygen by the indulgence of the latter. The above facts are illustrated by Lord Ducie:

"One hundred sheep were placed in a shed and ate twenty pounds of Swedish turnips each, per day; whilst another hundred in the open air, ate twenty-five pounds each, and at the rate of a certain period, the former animals weighed each thirty pounds more than the latter; plainly showing that, to a certain extent, *warmth is a substitute for food.* This was also proved by the same nobleman, in other experiments, which also illustrated the effect of exercise.

No. 1. Five sheep were fed in the open air, between the 21st of November, and the 1st of December. They consumed ninety pounds of food per day, the temperature being 44 degrees; at the end of this time they weighed two pounds less than when first exposed.

No. 2. Five sheep were placed under shelter, and allowed to run at a temperature of 40 degrees; they consumed at first eighty-two pounds, then seventy pounds per day, and increased in weight over twenty-three pounds.

No. 3. Five sheep were placed in the same shed, but not allowed any exercise; they ate at first sixty-four pounds, then fifty-eight pounds, and increased in weight thirty pounds.

No. 4. Five sheep were kept in the dark, quiet and covered; they ate thirty-five lbs. per day, and increased in weight eight pounds."

A similar experiment was tried by Mr. Childers, M. P. He states that eighty Leicester sheep, in the open field, consumed fifty baskets of cut turnips per day, besides oil cake. On putting them in a shed, they were immediately able to consume only thirty baskets, and soon after but 25, being only one-half the quantity required before, and yet they fattened as rapidly, as when eating the largest quantity.

From these experiments, it appears, that the least quantity of food, which is required for fattening, is, when animals are kept closely confined in warm shelters; and the greatest quantity, when running at large exposed to all weather. But, although animals will fatten faster for a certain time, without exercise than with it, if they are closely confined for any considerable time, and are at the same time full fed, they become, in some measure, feverish; the proportion of fat becomes too large, and the meat is not so palatable and healthy, as when they are allowed moderate exercise, in yards or small fields.

As to the kinds of food which may be used most advantageously in fattening, this will generally depend upon what is raised upon the farm, it being preferable, in most cases, to use the produce of the farm.—Sheep prefer beans to almost any other grain; but neither beans or peas are so fattening as some other grains; and are used most advantageously along with them.—Beans, peas, oats, barley, rye, buckwheat, &c., may be used along with Indian corn, or oil cake, or succulent food, making various changes and mixtures, in order to furnish the variety of food, which is so much relished by the sheep, and which should ever be attended to by the sheep fattener. This will prevent their being cloyed, and will hasten the fattening process. A variety of food, (says Mr. Spooner) operates like cookery in the human subject, enabling more sustenance to be taken.

The quantity of grain or succulent food, which it will be proper to feed, will depend upon the size, age and condition of the sheep, and judgment must be used, in ascertaining how much they can bear. Mr. Childers states that sheep [New Leicester] fed with the addition of half a pint of barley per sheep, per day; half a pound of linseed oil cake, with hay, and a constant supply of salt, became ready for the butcher in ten weeks; and gain of flesh and tallow, thirty-three pounds to forty pounds per head.—[One sheep gained fifty-five pounds in twelve weeks.]

This experiment shows what is about the largest amount of grain which it is necessary or proper to feed to New Leicester

sheep, at anytime while fattening. The average weight of forty New Leicester wethers before fattening, was found by Mr. Childers to be one hundred and twenty-eight pounds each. By weighing an average lot of any other kind of sheep, which are to be fattened, and by reference to the table of comparative nutriment of the different kinds of food, a calculation may be readily made, as to the largest amount which will be necessary for them, of any article of food whatever.

When sheep are first put up for fattening, they should be sorted, when convenient, so as to put those of the same age, size, and condition, each by themselves, so that each may have a fair chance to obtain its proportion of food, and may be fed the proper length of time.

They should be fed moderately at first, gradually increasing the quantity to the largest amount, and making the proper changes of food, so as not to cloy them, nor produce acute diseases of the head or intestines, and never feeding so much as to scour them.

Sheep, when fattening, should not be fed oftener than three times a day, viz: morning, noon, and evening. In the intervals between feeding, they may fill themselves well, and will have time sufficient for rumination and digestion; these processes are interrupted by too frequent feeding. But they should be fed with regularity, both as to the quantity of food, and the time when it is given. When convenient, they should have access to water at all times; otherwise a full supply of it should be furnished to them immediately after they have consumed each foddering.

When sheep become extremely fat, whether purposely or not, it is generally expedient to slaughter them. Permitting animals to become alternately very fat and lean is injurious to all stock. Therefore, if animals are too strongly inclined to fatten at an age when wanted for breeding, their condition as to flesh should be regulated by the quantity and quality of their food or pasture."

The Exchange Fair.

Notwithstanding the clouds have lowered about us for ten days, and we have had snow, rain, fog, and thaw, those great extractors of frost from the ground—by which the roads have been rendered nearly impassable, there was a goodly attendance at this fair—this first effort (in this section of the country at least) to get up a meeting of farmers and mechanics for the exchange of all kinds of agricultural and mechanical productions and considering all the circumstances there was a good show of Horses, Cattle, Sheep, Swine, and quite a number changed owners.

We noticed some excellent samples of Winter and Spring Wheat, Barley, Oats, &c., some hundreds of bushels were contracted for, the barley at 75 cts. per bushel; summer Wheat 75 cts. to $1 per bushel; Oats 25 to 26 cents. One farmer sold a number of bushels of Peas; we understood the price to be 87½ cents, and they were handsome. We noticed one load of superior corn.

There was a corn-sheller in full blast doing good work and fast, brought out by Davis, that indefatigable Davis, who is always at work at something new for the farmer.

Friend Mitchell was on hand as usual with his Plows, the best Plow in use here; we understand he sold some half dozen on the spot.

The scene was highly gratifying, it was one large mart or Exchange for transacting business—and quite an amount was done besides a large amount in proposals which are yet to be completed—for instance we noticed a number of engagements to trade Horses in exchange for Cattle, and *vice versa* which the parties are to meet and complete; they learned each other's wants at this Fair, and thus we see one of the advantages of this meeting.

Some 200 of the company partook of friend Dutton's *farmers' dinner*, and it was truly what it professed to be—*a Farmers' Dinner*—and dog cheap at 25 cents.

At 2 P. M., all were invited to attend and take part in the meeting of the Kenosha County Agricultural Society—the Hall was crowded.

First business reading Report of Com. on Agriculture at Madison, H. Johnson, Chairman.

Second, The following resolutions were presented, discussed and unanimously adopted.

Resolved, That the thanks of this meeting be tendered to Henry Johnson Esq.

for the able report presented by him to the Legislature now in session at Madison, on the subject of agricultnre.

Resolved, That this meeting highly approve of his course in the Legislature on the subject of agriculture, and that we will heartily co-operate with him in carrying out the principles of said report, believing that it is the only effectual method of raising the standard of agricultural science and placing it side by side with the learned professions.

Resolved, That these resolutions be signed by the President and Secretary and forwarded to Mr. H. Johnson.

Then followed some very spirited speeches from R. C. Otis, A. B. Jackson, H. S. Thorpe and several others.

The whole audience evinced an enthusiasm that bids fair to make this the banner County in the State, so far as agricultural improvement is concerned.

Now Farmers, take notice that the next meeting of the Kenosha County Agricultural Society will be held at Dutton's Tavern on Saturday the fifth day of April at 10 A. M.

The business will be to hear the report of your Committee on the *Time*, *Place*, and *Premiums* to be offered at the Annual Fair to be held next fall. Reports are also expected from the several *Farmers' Clubs* in the County.

Come one and all, every farmer should say and feel that this is his *individual* business, and it cannot be done by proxy.

THOS. SLADE, *Vice Pres't.*
J. T. RAND, *Secretary.*
—[Kenosha Telegraph.

Agricultural Society.

The farmers of Rock county are to meet at Janesville on Monday next, for the organizing of an agricultural society. We have before called the attention of the importance of these societies, and had hoped that the formation of one in each of these counties, would have been made long ere this.

The fact cannot be disguised, that the products of a large portion of the farms in this section of the country, if not throughout the state, which have been tilled for any considerable length of time, have been diminishing both in quantity and quality for several years past. The soil is deterioraing. It has been severely worked, but not fed. There has been a continued draft made upon its native strength, while no nourishment whatever has been imparted to it.

There are thousands of agriculturists in this state who have very limited acquaintance with the different varieties of American soil, having but recently come to our shores, and who are, in consequence, but poorly prepared to judge of the crop best adapted to any particular variety of soil.—Besides many of our farmers are young men who require a more thorough knowledge of the science of agriculture, to enable them to prosecute their calling with success.

Our farming impliments require improveing. So does our stock. Our horses, cattle, sheep, swine, &c., are not what they might become. It costs no more to raise good annimals than poor, while on the score of profits there is a vast difference in favor of the former.

What is the best way to reclaim our lands, to obtain a better knowledge of our different soils, and to improve our tools and our stock? These are legitimate subjects for discussion, before agricultural societies. By meeting together once or twice a year, and comparing experiences, an amount of practical knowledge might be obtained upon these points which can be derived from no other source.

But the advantages of the societies do not end here. By the offer of suitable premiums for the greatest yield of crops to a given quantity of land, for the best specimens of stock, fruits, dairy products, &c., a commendable spirit of rivalry would be created, the fruits of which wou'd at once manifest themselves. Then, again, by thus meeting together, our farmers would become better acquainted with one another, and a spirit of fraternity, so to speak, enkindled, prompting to unity of feeling and action among them, on all matters connected with their general welfare.

But we have not time to pursue this subject farther at this time. We throw out these crude hints hoping that they may have some influence in prompting the farmers of Jefferson and Dodge to consult their own interest by the immediate formation of agricultural societies.—*Watertown Chronicle.*

☞All very true Brother Chronicle, but how are our Farmers to learn the best way to effect all these changes, and improvements? strange enough that you have not thought of the AGRICULTURAL PRESS, as well as Agricultural Societies! which would be comparatively inefficient without the aid of the Press. (Ed. Farmer.)

Wheat in St. Lawrence, Co., N. Y.

It is very common to suppose that the apparently forbidding soil of Northern New York will not grow wheat; but we have before us an illustration which will make even the farmers on the very best land of the West, stare. The St. Lawrence Republican says that John E. Tallman, of the Black Lake settlement, in the town of Oswegatchie, reaped and threshed out for seed a piece of the field, (of 15 acres of wheat,) which, upon measurement, proves to contain 1 acre and 15 rods of land, and the cleaned wheat measures 77 bushels and 4 quarts of full weight, or a trifle over *seventy bushels* to the acre! Other parts of the field appeared equally heavy, and from the result of this parcel, it is believed that the residue will yield 60 bushels to the acre. Will some of the farmers in this State give us their figures, and see whether they cannot surpass Northern New York? *Rock* is a rich county, and has had a good crop. Let us hear from her thrifty farmers.—*Selected.*

Wheat in Salt Lake Valley.

Bishop Holliday, residing ten miles south of the Great Salt Lake city, raised from one bushel of sowing, one hundred and eighty bushels of clean wheat, weighing sixty pounds to the bushel. The Kanesville (Missouri) Guardian says:

"Farmers begin to sow wheat there in August, and continue to sow every month, and perhaps every week, when frost does not prevent, until the next June; and about the 20th of June they begin to harvest, and continue harvesting their wheat until the following November. We left there on the 1st of October, and the vines were all green as summer, and many pieces of wheat were not harvested, but just turning white; and we said, surely this is a great country, where "the plowmen overtake the reapers."

"In this country, when wheat is ripe, it has to be harvested or the crop is lost. Not so there. It may stand in the field a month after it is ripe, and take no harm. It is a different sort of wheat from ours. When early wheat is harvested in that country, by irrigating the stubble ground, a second growth springs out from the roots of the stubble and not from the seed, and often comes to maturity the same year."

Domesticating Fowls.

MR. FREAS:—To render poultry raising profitable, it is essential that great care and circumspection be exercised, not only in the selection of valuable "BREEDS," but in feeding and rearing the young. If the raiser is remiss in these points, no profit will result from the enterprise, and as a general thing he will, to adopt an old adage—"Have his labor for his pains."

There is a vast difference in fowls, and while some are hardy and profitable, others are weakly and scarcely pay their way under the most favorable circumstances, and the best management possible to bestow. It is always a judicious plan for the farmer to keep a number of fowls, of some kind, upon his premises, as there is always enough waste or refuse matter to feed them, and beside, they are serviceable in protecting the crops by destroying the numerous insectiverous depredators, which in the spring and summer months prey so voraciously on the youthful and more tender plants.

A hen with a dozen chickens—the hen being confined in a coop, and the coop placed in the vicinity of the kitchen garden, will do more to secure the preservation of the vegetables than a man; they not only keep the insects from destroying the tissues of the plants, but they annihilate the insects themselves, and convert them as a source of profit instead of a loss by devouring them as food. When one is suitably located, the keeping of all kinds of fowls—hens, turkeys, ducks, geese, &c., will be found profitable. It will bring many dollars in the course of the season, and ensure a constant and liberal supply of eggs and poultry for domestic use. These products always command a ready sale and a high price in most

of the markets of this country, and bring cash, where little can be obtained for the products of the field. In the New England States, and especially in Maine the egg and poultry business has attained a degree of consideration and importance to which, probably, it has not reached in any other State of the Union. Standing in the doorway of a shop in one of the interior villages of the latter State, a large load passed, and on inquiring the character of the lading, I was informed that it consisted of 26,000 dozen of hen's eggs. They were going to the Portland market, and thence probably, to the cities of the west.

A New Englander.

Near Claremont, N. H., Nov. 10, 1850.

—*Germantown Telegraph.*

Horse Distemper.

A correspondent of the Boston Cultivator says: When a horse has contracted this distemper, he appears stupid, has a cough, discharges at the nose, and in the advanced stages of the disease, swellings under the throat and on various other parts of the body. For the relief of animals thus afflicted, I feel desirous to give my mode of treatment, it is this: On the first appearance of the disease, commence feeding the horse with ginger, a table spoonful three times a day, mixed with grain, keeping the bowels loose at the same time by gentle purgatives. One pound of ginger will, in ordinary cases, be sufficient to cure a horse. He should be worked moderately every day and covered with warm blankets at night to keep him from taking cold. It is highly necessary that he should be exercised, and when thus treated, I have not known it to fail of a cure in my practice, which has been limited.

Profitable Yield.—We are credibly informed that Mr. W. B. Newcomb, on Mr. McCane's farm at the foot of Lake Pepin, Wis., sowed 1½ bushels of wheat in the fall of 1849, and harvested last fall 65 shocks, or 780 bundles, thrashed 40 shocks and got 45 bushels, and he thought he lost 5 bushels in thrashing. He sowed 45 acres last fall. We are glad to hear the farmers are turning their attention so largely to the cultivation of wheat in this part of the State. Let us have a few more facts to spread before our readers from our practical farmers.

Flint Enamel Ware.

Some ten or fifteen years ago, Mr. Fenton, a manufacturer of Fire-Brick, &c., at Bennington, Vt., commenced a course of experiments on the liquefaction by heat and intermingling in various proportions, of the flint quartz, &c., used in his business or existing in the mountains around him with an eye on the production of wares adapted to household uses. In these experiments he preserved, until at last he was enabled to produce a ware combining strength, purity and beauty,—composed entirely of flint, feldspar and quartz, ground together, bolted like flour, then formed into a clay or paste and moulded into any shape which taste or use may suggest, then covered with a delicate enamel and baked to a consistency exceeding that of marble. The enamel is formed entirely of flint, without a particle of the metallci bases which render much of the ware now in ordinary use always dangerous and often virulently poisonous.

The Flint Enamel Ware, though especially prized by us for its capacity to supersede the enameled wares now used for milk-pans, stew-pans, coffee-urns, &c., is intended to subserve a far wider circle of uses.—Among the articles into which it has already been fashioned are water jars, stove-urns, mantel and other parlor ornaments, lamps and candlesticks, table-slabs, door-plates, door-knobs, block letters, daguerreotype frames, inkstands, pitchers, wash-bowls, bathing-tubs, spittoons, &., &c.

The usual color of this ware is a rich, dark brown, shaded and flecked or mottled with white and blue, though it is made of a pure white when desired. It is harder than marble, and a delicate pitcher may be thrown on the floor with violence without starting the handle. The point of a nail driven smartly against its side with a hammer makes no scratch or dent of any kind. The enamel stands heat perfectly, and all this ware may be, as most of it is, made absolutely fire-proof, so as to be burned in a pit of burning anthracite and come out of the ashes as good as new. Withal it is nearly as cheap as the "stone ware" now in use.—We cannot doubt that it will rapidly find its way into very general use throughout the country. The ware is patented, and agencies for its exclusive sale, by counties and towns, are being formed throughout the Union.—*N. Y. Tribune.*

HORTICULTURE.

F. K. PHOENIX, EDITOR.

Nurseries in the North-West—should they not be sustained?

Hitherto we have been obliged, in a great measure, to rely on other sections for our fruit trees as well as our fruit—thousands of dollars being annually sent out of this region for trees—a circumstance by no means in our favor, especially in these hard times. And not only have we been thus under tribute in getting foreign trees; but, great imposition has been practised by foreign dealers in bringing or sending lousy, half-dead, falsely-named trees among us—which, thank fortune, we are no longer compelled to purchase for the want of better—there being in our midst several excellent Nurseries, containing stocks of trees that would do no discredit to older States, while many others are starting, so that there must soon be a great supply.

The propriety and manifest advantage to all parties, of purchasing at these home Nurseries, must verily suggest themselves to our readers; in fact there is every reason, but one, that we can think of, in its favor and against sending off—and that one reason is, that the assortments here may not be quite so complete—which, however, they doubtless soon would be if liberally sustained.

By-the-by, why do not more of our Nurserymen contribute for, and advertise in the "Farmer"—are they not losing a first-rate medium of communication with the public?

However, we shall take the liberty to advertise some of them forthwith, just by way of "provoking them to good works," and to let our readers know where they can be found. We would like to name them all, if we knew them, and say lots of fine things in their favor, but space forbids—we can only say, "go and see them, they are doing a good work for you."

We head the list with our friend, John Bell, of the Wisconsin Nursery, on Gardner's Prairie, one of the oldest and most extensive in the North West; at Milwaukee, are those of Mr. Parker, and Messrs. Beecher & Bryant; Messrs. Flynn, of Watertown; Messrs. Drake, of Janesville; J. C. Brayton, Aztalan; D. Wood, Walworth, Walworth County; Mr. Woodward, Beloit; Mr. Allen, Allen's Grove; ourself, at Delavan.

In Illinois, there is Dr. Kennicott, as every body knows; Mr. Truesdell, of Elgin; Dr. Hascall, Rockford; Mr. Montague, Wadham's Grove, Stevenson County; Messrs. Wheeler & Brewster, Freeport; A. R. Whitney, Franklin Grove, Lee County; A. Bryant, Princeton; E. Harkness, Trivoli, Peoria, County; Messrs. Overman, Canton, Fulton County.

One word more—in getting trees from Nurseries—*always, by all means, go or send early, so as to get the first choice.*

We give, below, several extracts from our professional correspondence, feeling confident that neither the writers nor our readers will object.

A much esteemed Eastern Nurseryman, to whom we have been before indebted, writes: "*Mulching*, no doubt will be of service to you. I have tried it a little the past season to advantage, and intend this year to give it a more thorough trial.

Nursery Business.—Our business requires so much close attention that we ought to be better paid for it—besides, do the best we can, there will occasionally be a mistake, and purchasers who know nothing of the care and trouble of keeping so many varieties distinct, think we intend to cheat them. New varities are often called for before we have printed them, and of course we cannot be *certain* they are correct—yet the purchaser makes no allowance!

New Varieties of Fruit.—The *Hurlbut Apple* is a very strong grower, and persons acquainted with it say it is very fine.

Belle et Bonne, is a good grower, bears well, fruit large and showy, and brings a large price in market, though not of the best quality.

The *Trescott Russet*, or *Trecott Pippin* has not fruited with me, but where known (in Connecticut) is said to be better than the Roxbury Russet and keeps better.

The *Cooper and Rome Beauty*, (Ohio Fruits,) made quite a show at Cincinnati, and no doubt, from what I saw of them, are valuable.

Fulton and Western Spy promise well.

Mother is very fine—so is

Northern Sweet, McLellan, Golden Russet, (of Massachusetts, but small,) *Victuals*

and Drink, Jewett's Red, Eustis and Orange Apple (of New Jersey.) Among sweet apples I have not yet seen any equal to them.

Ladies' Sweet, for late keeping and fine quality.

Bailey or Edgerly Sweet lacks juice and becomes mealy, which is not the case with Ladies' Sweet. We often have them in June and July retaining their brisk and juicy flavor.

The *Late Bough* not Fall Bough, of Flushing, is the best sweet of its season (Sept., Oct., and Nov.,) I have yet seen—medium size—keeps well without decaying, and retains its flavor to the last.

The *Haskell Sweet* is an excellent Sept. Apple.

Wagener is fine, resembling Vandervere, in flavor—the tree not a strong grower, with me. I do not think so highly of

William's Favorite as the Boston folks, though it is very handsome, and brings a good price in market; but is rather dry and has not flavor enough; besides, the tree is a slow grower, and requires high culture.

The *Northern Spy*, I fear has been too largely planted.

Of *Plums*, I think *Reine Claude De Bavay* and *St. Martin's Quetsch* will prove valuable—the last is a late variety and of strong habit.

Blue Imperatrice, as late fruit, will be desirable and profitable.

Monroe and Penobscott Plums are strong growers and good fruit, but not of first quality.

McLaughlin is of the very first quality—a fair grower, but not rapid—wood strong and stout.

Rhubarb from seed—The *Victoria* Rhubarb being a strong kind comes generally the same from seed—when I have tried it nine out of ten will be true.

Downing's Colossal does not often come as good as the original—a few sometimes are inferior. For marketing, the Victoria is a profitable kind; but, for family use, far inferior to the Colossal being coarse-grained and strong flavored, while the latter is much milder—stalks reddish and hardly as large as Victoria.

Rhubarb should not be sown till the ground is warm—say first or second week in May. They came up in two or three weeks and should be shaded from the mid-day sun for a few days till the plants get a little strong, as they are apt to "burn up" the first week or two. A shingle or board stuck in the ground on the south side of the plants, and leaning to the North, is sufficient.

Salt as a manure.—I have used salt as a manure, but as we are not troubled with cut-worms, I cannot say that it will kill them. For Plum trees, 15 or 16 bushels to the acre would probably not hurt the trees, but for the others 7 or 8 are enough. (Our inquiry was not in relation to the cut-worm, but *large white gnat*, which abounds in mucky soils and old manure—and in Nurseries are often very troublesome, gnawing off or girding the roots of young trees, especially seedlings. Salt has been recommended to destroy them, and would, doubtless, we think to a greater or less extent.—[Ed. Farmer.

The Curculio.—An Ohio friend writes: Those Curculios we must look after, for they are *sad torments* with us. I sometimes fear we shall never learn how to prevent or master them. Do you get the "Western Horticultural Review?" Tha is taking up the cudgel against curculios right manfully, and is a good work for Western Fruit-growers.

Public Schools in Wisconsin.

Report of the Superintendent—Number of School Districts—Increased Attendance—Wages paid to Teachers—Number and Valuation of School-Houses—Expenditures for the past year—Amount of the School Fund—Libraries—New Map of the State—Reforms in the System of Instruction.

The State Superintendent has made his second annual report to the Legislature.—By this report it appears that the average number of months in which schools have been taught, has increased twenty-seven per cent. The number of children attending school has nearly doubled, and the amount of public money received nearly quadrupled. Some errors are found in the financial reports, through the imperfect organization of the whole school system.

Two organised counties, La Pointe and Marathon, have made no reports. The remaining twenty-seven counties comprise 389

towns, of which 24 do not report. The 315 towns which report, contain 1700 districts and 650 parts of districts. 405 of the former and 114 of the latter not reporting. This gives an average per town of 5,397 districts and 2063 parts of districts, making the probable total number in the State 1829 of the former, and 699 of the latter, of which 534 districts and 173 parts do not report. It is difficult to ascertain accurately, the whole number of districts in the State. The estimate is 2160.

The whole number of children between four and twenty years of age, stated as attending school, is 61,597; last year this was reported at 32,184. By correcting for the 24 towns not reporting, is 68,241 obtained for the number of children attending school. The whole number of children residing in the State is 99,375. Last year it was 86,442. The percentage of children attending school this year is 67. Last year it was 46 per cent. The number of children under four, attending school, is 1020; over twenty, 688. The whole number reported attending school is, therefore, 62,305.

The average length of time for the State, that schools have been taught, is 4·96 months, being 1·03 months longer than for the last year. The longest time is 7 months in Manitowoc County, the shortest 1·78 in Richland County. The average length of time schools have been taught by male teachers, is reported to be 2·80 months, and by females 3·69 months.

The average amount of wages paid to male teachers is $17 14; to female teachers $9 02. This is a decided advance on the report of last year, the averages then qeing $15 22 and $6 92, respectively.—The highest wages paid to male teachers is $60—the lowest $7 50. The highest to female teachers is $20—lowest $2 00.

The whole valuation of school-houses is $174,246 67 in 227 towns—112 not reporting this item. This gives an average per town of $772 01, and for the whole 339 towns, $261,711 73. The valuation of school houses this year is greater than that of last year by $97,435 92. The sum raised by tax, and expended in building, hiring, &c., school houses, is represented to be $47,171 51.

The whole number of school houses reported, is 1,233, viz:—38 built of brick, 51 of stone, 540 framed, 568 built of logs, and 26 reported from Marquette county, but not classified. These are reported by 263 towns, which gives an average of between 4 and 5 school houses to each town, making 1,576 in the State, which is 584 less than the estimated number of school districts. The difference was last year 673, showing a small improvement.

The highest valuation of school houses are found to be $5,000, to the cities of Milwaukee and Kenosha. The lowest is in the town of Spring Valley, and is (jocularly?) estimated at *five cents.* The number of school-house sites, reported as containing less than one acre is 1,025; the number uninclosed, 1,047.

There are 87 unincorporated and private schools and academies, with an average attendance of 39 pupils, or 3,408 in all, and two incorporated academies, with an average attendance of 75 pupils, or 150 in all, making 3,558 children who have been taught, independently of public schools, during the past year.

The amount of money expended during the past year, appears to be $142,917 96. The amount expended for teachers' wages is reported at - - - $87,710 14 being $1 39 per scholar, and 95c. per child.

The capital of the School Fund, on the first day of January, derived from the sales of school lands and from fines, amounted to $538,094 41, the interest of which, at 7 per cent., is $87,666 61. The lands sold in 1850 have yielded 6 per cent. advance on the appraised value. Taking this for granted for the future, we have a prospective fund of $5,301,943 44. This does not include the swamp lands or flues.

With regard to the district libraries provided for by law, the Superintendent recommends that great care be exercised in the selection of suitable works, and that, to that end, catalogues of such books as are desirable should be published, and the districts be restricted to the works enumerated.

A new map of the State exhibiting the various towns and their school districts, is being prepared under the supervision of the Superintendent.

With regard to the present system of instruction in schools, after recapitulating what is required by law, the Superintendent urges greater care in the branches of reading, spelling, writing, and other elementary

branches. He thinks the present system defective in many respects, for the reasons that an adequate compensation is not provided for teachers, and a proper course is not laid down for pupils. The remarks of the Superintendent under this head are very sensible, and such as every one who has had any experience in the instruction of youth, will fully endorse.

Schools of different grades are recommended. The report closes with a dissertation on the "professional education of teachers." Under this head, Mr. Root alludes to the Fourth department of the University of Wisconsin—that of "The Theory and Practice of Instruction," and urges that this be made, in accordance with the spirit of the design, the Normal School of the State.—The remarks are sound in theory and the practice upon such a basis would be highly beneficial to the State. Mr. Root shows himself to be thoroughly acquainted with the profession in which he is engaged. His plans, if carriad out, would make the public educational system of Wisconsin, more complete than that of any State in the Union.—*Mil. Wisconsin.*

Road from Point Douglass to Lake Superior.—We understand, from the most reliable source, that the United States Surveying Party, under the command of J. S. Potter, Esq., will soon commence surveying a road from Point Douglass, M. T., to the head of Lake Superior, on the Minnesota side of Lake St. Croix. The General Government has been very liberal to the Minnesotians in appropriations for roads and public buildings; and it is to be hoped that, in the multiplicity of presses among them, they will not forget their public benefactors at Washington, who have cherished towards "the pet of the flock" sentiments of peculiar regard.

The Surveying Party has just returned to St. Paul, "all the members of the corps being in fine health and spirits," from surveying a road from Mendota to Wabashaw, M. T., a distance of seventy-five miles below Mendota, on the west side of the Mississippi river.—*St. Croix Enquirer.*

☞ A circle of chalk or lime laid round any plant will prevent ants from touching it.

From the Madison Express

North-Western Wisconsin.

From the mouth of the St. Croix I travelled over the most beautiful and inviting soil, prairie and open timber, and through some fine settlements, just began, crossing several mill streams, for 20 miles, when I reached the village of

WILLOW RIVER.

This village is beautifully situated on the gently rising bank of Lake St. Croix, at the the mouth of Willow river, and is the seat of justice for St. Croix County. I counted 20 buildings, mostly new, and some unfinished; but progressing towards a finish as fast as industrious mechanics could drive them, and no doubt there are many more houses at this time, as "go-a-head" seemed to be the order of the day.

The land offices for that district, are in this place, and the obliging officers appeared to be busy in attending to the calls for locations, indicating the rapid settlement of the country. A school-house, for the treble purpose of schools, courts and meetings, was erected, and is, no doubt, ere this, in a state of occupancy for those purposes.

At a point a few rods up the Willow river, where but a narrow ridge, separated between the river and the lake, Mr. Purinton, Dexter, and perhaps others, were erecting a very large saw-mill, to stand on the lake at an excellent steamboat landing, and receive water from the river, raised by a ten feet dam, to drive the machinery. The mill was calculated for several single, and one gang of 24 saws. The logs were to be obtained from the St. Croix, and from towards the head of Willow river.

Having occasion to spend a Sabbath here, I found a moral, religious and go-to-meeting people—a favorable omen in the settlement of a new country, and since I was there, a newspaper has been started, which it is hoped, will be well sustained.

From Willow river, my course was north, towards the falls of St. Croix, about 28 miles. The face of the country is rolling, and seems gradually to rise higher and higher above the river, till, at the falls, the hills are like young mountains.

The first 14 miles of this road, to Apple river, was over a soil of rich looking gravel, quite rolling, though in but small hillocks, with frequent extensive plains. It was bush

prairie, with here and there pleasant groves, and some small marshes. But better looking timber was in sight on either hand.

Apple river, at its crossings, is a fine mill stream, and from the number and size of the sawlogs I saw on the river, I inferred, as well as from report, that at, or near the head of the stream, must be a good pine forest. A bridge had been built across this stream, but the running fires had disabled it for crossing, except for footmen, and I was obliged to find a road some rods below.

After passing this river, the road lay through some prairie, some timber and some openings. In the vicinity of the Osceola mills, on a general level of some 300 feet above the St. Croix river, is about a township of beautiful prairie of rich soil, surrounded by oak groves. A few feet from the surface, fine wells of water were obtained; and from springs and some small marshes in this prairie, rose a small strea g, which bounded over a succession of falls to the St, Croix, where the water of it drove the machinery of the

OSCEOLA MILLS.

These mills, like a number of others on this river, show the effects of genius, on applying Nature to the convenience and benefit of man. These mills are situated on the bank of the St. Croix. 8 miles below the falls, in the mouth of the ravine formed by the little stream, but without level ground enough to place the necessary dwellings, shops, etc., for the establishment, except by digging away the side of the hill.

The stream could be run through the space of 5 square feet, but being so managed as to fall upon a 30 feet wheel two mulee saws, and a set of circular caws, were driven by it with ample force. A boom affixed to strong built piers, catch and hold the logs driven from the upper country, while the rafted lumber finds a gentle, but sufficient current in the river to waft its way to a market below.

From Oseola, the road climbs from bench to bench to about 300 feet, where it obtains a general, undulating level of good soil, plenty of timber and excellent water; and for miles brought me, after descending at least as many, and probably more, feet, bench by bench, to the

FALLS OF ST. CROIX.

Here is quite a village, with some stores, and some finely finished buildings. The town is built on a sloping side of the hill, fronting to the river, and contains, probably 100 buildings. But the growth of the place has been retarded by the litigation, long in court, and yet undecided as to the ownership of the soil. The mills have 5 perpendicular, and several circular saws, and are capable of throwing off a large amount of lumber in a year, which can be rafted down the stream at any time, when not obstructed by ice. Steamboats frequently reach to a point one mile below the falls, and in sight of them, by which the lumbermen receive their supply of goods and provisions.

The river at this point varies in width, from 30 to 200 yards, according to the form and situation of its bed: below, it will probably average 150 yards wide.

On the opposite, or Minnesota bank of the river, Mr. Folsom, and some others, were about laying out, and commencing a town, one mile from the falls, and at the head of steamboat navigation. At this point the river is compressed into about 30 yards, between two rocks, when in a low stage, but overspreads the rocks on one side when it is high, For a short distance below this, the river is walled into a narrow channel, by perpendicular cliffs, being stained by mineral deposites, or covered with different colored moss, have the appearance of streaks of fire rising through clouds of smoke; and the water being of a dark color, when high, and being covered below the falls, with small bodies of white froth, occasioned by the fall, the contrast is most striking; and when I visited this place in 1838, in a canoe, dancing upon the tossing current, it required some little nerve to preserve a proper balance in the mind—the appearance of the place, with the roar of the falls, reminded one so strongly, by association of ideas, of the suberbs of the "bad place."

These mills, and the settlement here, was commenced in 1838, the year after the treaty, by which the land was ceded to the U. S. In that season, a company of men had ascended the river some 60 miles, from the falls to the mouth of Snake river, and were engaged in getting out timber; when the Indians, not receiving their first payment as soon as they expected, becoming impatient, drove the whites off, who took to their boat, and in their fright, attempted to, and did, run the falls, with part of their men—but

came out of the surf with their boat full of water—the men making a narrow escape with their lives.

At these falls, and in their vicinity, the indications of copper and iron are very strong and inviting. Indeed, some of the rocks seem to have more iron in them than anything else, being when broken off the color of pot metal, and having a similar ring, when struck. A copper location was made here, and I think a licence obtained, which is another ingredient in the difficulty about the title.

Leaving the falls on the west side of the river, I travelled over a similar country to that on the east side of the river—a general level on high ground, covered with timber most of the way.

Fifteen miles brought me to the Marine Mill, which is on Lake Oseola, and supplied with its power from small springs, concentrated on an over-shot wheel. But the bench on which the fine building stands, offers an excellent site for a town. Ten miles further, mostly over prairie hills, brought me to Stillwater, at the head of lake St. Croix. This is a fine thriving village of several hundred inhabitants. The mill which first started here, is another of those over-shots, and does a large business.

Here I met the Nominee, and took passage for self and horse, and in twenty-four hours had sailed 300 miles, and reached home contented, for the present, with my excursion.

A. BRUNSON.

Prairie du Chien, Jan. 1, 1851.

Chloroform for Horses.

We fine the following in the Washington Globe:

GRUBS, OR BOTS, IN HORSES.

I am satisfied that there is nothing in the whole *materia medica* equal to chloroform, for the cure of the above mentioned disease.

After having tried almost everything on the Grub that would most likely destroy them, or cause them to quit their hold, I was induced to try Chloroform, knowing its power to produce a state of insensibility, and its sedative power on the circulation and nervous system, as well as its well-known miscible properties with the blood. It had the effect of immediately rendering inactive the above named *entozoa*, and they never survived. Since then, I have had an opportunity of giving chloroform to one horse that I supposed was affected with Grubs, and in the course of thirty minutes, he became perfectly easy, and remained so. I believe if it be administered before they have perforated the stomach or intestines, that they will never trouble the horse further.

It is decidedly the most rational remedy that we have. The dose is one fluid ounce: or two tablespoonfulls, given in one pint of water.

H. A. BIZZEL, M. D.

Clinton, December 30, 1850.

Economy and Preservation of Farm-Yard Manure.

At a late meeting of the Highland and Agricultural Society of Scotland, Dr. Anderson delivered an important lecture on the "Economy of Manures," from which we make the following extract:—

I beg it to be understood as my decided opinion, that farmyard manure must always be the farmer's main stay. Good farmyard manure will continue more or less of all the constituents of our crops, but, in estimating its value, we must be contented to take into consideration only its more important constituents, and, in this way, I conceive we may obtain a sufficiently near estimate, by knowing the amount of nitrogen and phosphoric acid which it contains.

In the management of farmyard manure, two different questions require to be considered. First, the production of a manure containing the greatest possible amount of nitrogen; and, secondly, the successful conversion of that nitrogen into ammonia. It is not unimportant, of course, that the other constituents of the manure should be present in abundance, but it may be assumed, as generally true, that the treatment likely to produce the graatest amount of nitrogen, will be that which produces the most valuable manure in other respects. In regard to the first of these questions, there is a want of definite information. It is a common statement, however, that the value of the manure is dependent upon the nature of food with which the cattle which

produce it are supplied. That, for instance, cattle fed upon oilcake produce superior manure to those fed on turnips. I am aware that this opinion is not universel, as I have heard it disputed by farmers of skill and experience. I am inclined, however, to believe that it is to a certain extent correct. Supposing, then, that two samples of such manure differ, it must be obvious that it is the dung and urine of cattle which differ: the *litter* mixed with such dung will be the same in both cases.

As regards the general question of the preservation of manure, I apprehend that the most important matter is its protection from air and moisture. In the way a common dung heap is made, we have, in fact, exactly the conditions to occasion loss of its valuable constitnents. It is exposed to a more or less free current of air, which facilitates the volatilisation of the ammonia, as it is formed; and it is exposed to the falling rain, which washes out the soluble salts, and what ammonia the winds have spared, into the subjacent soil. It is true that the former of these sources of loss can be got the better of by the use of acids or of gypsum, and mixing with dry earth; but when the ammonia is thus fixed, as it is said, it is fixed only as regards *volatility*, for it is still *soluble*, and liable to be washed away by rain.

In order to have farmyard dung in the best sta.e, it must be preserved under cover; and, my impression is, that the introduction of covered dung pits is likely to prove of great importance. We have another matter to attend to, also, in the management of farmyard manure—its fermentation, namely, by which is meant the production of such a decomposition as converts the nitrogen present into ammonia. The importance of this decomposition depends upon the fact, that, by this means, we obtain a manure which acts with greater rapidity than one in which this decomposition has not been effected. The fact is, that the formation of ammonia, takes place much more slowly, when it has been incorporated with the soil, than when it is heaped up in the dung heap; and as the nitrogen must pass into the state of ammonia before it is absorbed by the plant, we require to effect as much of that change as possible, if we are to have a manure of rapid action."—[Am. Agriculturist.

Cultivation of Cranberries.

Mr. Editor:—

Dear Sir.—Much has been said and written on the subject of raising that delicious fruit that is now considered an indispensable article in every family, the *cranberry*. Having taken particular notice of the plant, and its fruit, for the last three years, I will make some remarks, as they have occurred to me. It has been often said that it was advisable to flow the meadow or bogs to get a good crop. Now my experience has not proved it to be useful to flow the meadows. I have found that the fruit has been better, and less liable to be injured by frost, when it was not covered with water during the fall, winter and spring.

I have come to the conclusion that it only makes the vines tender, as the water is usually drawn off in April, or the first of May; and in such meadows the vines are put back, and if not injured in blossom, are likely to be injured when the fruit is green in September. I have never known the fruit injured on the upland or meadows where the water did not stand. But my fruit never escapes injury from the frost on my low meacows, especially when in wet and unfavorable seasons the water remains on the meadow late, and it is overflowed in time of freshets. So I prefer not to have my cranberry plats covered with water any part of the season.

Since I have drained my meadows, I have more than doubled the quantity of fruit, and if I could prevent the water from coming on at all, I think I should have no cranberries injured by the frost. I have furthermore observed that when I spread sand or mud on the meadows, the vines grow much stouter and the berries larger; also on the edges and banks of ditches I find the best fruit, and more of it, without injury from heat or cold. I think the more cranberries are cared for by spreading mud, sand or gravel on the vines (I mean a slight coat, so as to cover the old dead grass and stubble,) the greater and safer will be the yield. It appears to me that they want cultivating as much as corn or potatoes.

Yours most truly,

S. A. SHURTLEFF.

Spring Grove, Dec. 2d, 1850.

Remarks.—The subject presented by Dr. Shurtleff is very important. Some cranberry growers continue the water upon their vines until the first of May, in order to retard the season of blossoming until the weather has become permanently warm.—The evil effects of their course is shown by the above interesting communication.

We now present to cranberry growers a very important subject for investigation.—Will cranberries flourish as well without being covered with water in the winter?—A few years ago, Dr. Brown, of Wilmington, showed to us his cranberry grounds. which were flowed by a mill pond in winter-He showed the line to which the water flowed in the winter, and there were cranberries vines above and below that line.—Below the line there was an excellent crop of fruit, even on extremely poor, dry and gravelly soil; but above the line of water there was no fruit. We solivit facts on this subject.—[New Eng. Farmer.

Cure for Hydrophobia.

It is stated in the Paris newspapers that a cure has been discovered for the bites of venomous reptiles, which has been thoroughly tested, on a young man who voluntarily offered himself as a subject, and on various animals. The remedy is the root of a plant from Abbyssinia, found by *M. Rochel d' Hericourt.* The experiments were made by Mons. *Arago.* For the bites of serpents and other venomous reptiles, the leaves of the plant have sufficient strength, but for hydrophobia, the root must be used.

In the first trial the patient, a student of medicine, who had offered himself for the experiment, was first put to sleep with chloroform, and his bare arm then passed into the viper's cage. The reptile seized upon it instantly, and, the account says, bit it very badly. In a very few moments the arm swelled to double its size, and when the patient awoke from his sleep, he suffered most excrutiating pain, not only in the bitten arm, but through all his frame, but by the application of the bruised leaves of the plant the pain ceased, the swelling subsided, and by the next morning the only remains of the bite were the little wounds made by the reptiles teeth.

The experiments upon hydrophobia were made upon dogs with entire success, and also upon a soldier who was afflicted with the malady, who was cured in two days. The facts are very precise, and the word of M.d'Hericourt cannot be doubted, as his loyal character has long been known to the scientific and literary world.—*Ex.*

Progress of Invention.

In 1809, there was only one steamboat in the whole world; now, who could count the number? They navigate the Nile, the Red Sea, the Ganges, the Clyde, the Hudson, the Ohio, the St. Lawrence, the Mississippi, the Danube, the Rhine, the Thames, and the golden sanded Sacramento.—America, Europe, Asia, and Africa, exhibit in every steamboat a monument of the progress of invention.

In 1830, there were only thirty miles of locomotive railway in the world. Now there are no less than 10,000 miles. America has no less than 7,000 miles, and will soon have 10,000 in operation, Massachusetts alone has more than 1,000, and Pennsylvania 1,200. In 1836, there were only 15 miles of railroad in the State of New York, now there are nearly 1,600. Then the slow canal boat and stage coach wound lazily up the Mohawk Valley, and we remember well how it required more time to whip an old bolter into a canter, than it now requires the old iron horse to whistle itself from the crags of Cohoes to the rocky pass of the Little Falls. What with the steamboat, the railroad, and the telegraph, as inventions for distancing distance, the ends of the earth are brought together, civilization is fast finding its way into the most darkened corners of the earth.—*Scientific American.*

The Effect of Snow upon the Wheat Crop in Western New York.—It is apprehensive by some of the Western New York farmers, that the great depth of the snow there will have an unfavorable effect on the wheat crop, by excluding the air, keeping the plant *too warm* and smothering it.—[Mil. Wisconsin.

Flour and Corn.—The receipts of flour and corn, at Portland, Me., during the year 1850, were 169,879 barrels of flour, and 222,641 bushels of corn.

What they think of us.

The Liverpool Journal says: "America exists to reproach and reform the world.—There is a Providence in these things. The rough and ready republicans expand themselves over a universe—the Union has just been enlarged by territories as large as Europe, and already the new State of California exports half a million of gold a month, and prepares to open a steam communication with China and Japan. ThePacific becomes the highway of nations, and enterprises unheard of approach maturity, while the mine of the ancient world is absorbed on the miserable subjects of divine right and controversy. The majesty of civilization and commerce brightens regions rich and vast, while Europe pauses to parley with the idiot legitimatists and ancient nonentities. The Republic of America bids fair for the mastery of the universe, and will achieve it.

THE DISCOVERIES OF THE LAST HALF CENTURY.—There has been no period since the commencement of the world, in which so many important discoveries, tending to the benefit of mankind, were made as in the last half century. Some of the most wonderful results of human intellect have been witnessed in the last fifty years. Some of the grandest conceptions of genius have been perfected. It is remarkable how the mind of the world has run into scientific investigations, and what achievements it has effected in that short period. Before the year 1800, there was not a single steamboat in existence, and the application of steam to machinery was unknown. Fulton launched the first steamboat in 1807. Now there are three thousand steamboats traversing the waters of America, and the time saved in travel is equal to seventy per cent. The rivers of every country in the world, nearly, are traversed by steamboats. In 1800 there was not a single rail road in the world. In the United States alone there are now 8,797 miles of railroad, costing $186,000,000 to build, and about 22,000 miles of railroad in England and America. The locomotive will now travel in as many hours, a distance, which, in 1800, required as many days to accomplish. In 1800 it took weeks to convey intelligence between Philadelphia and New Orleans, now it can be accomplished in minutes through the electric telegraph, which only had its beginning in 1843. Voltaism was discovered in March, 1800. The electro-magnet in 1921. Electrotyping was discovered only a few years ago. Hoe's printing press, capable of printing 10,000 copies an hour, is a very recent discovery, but of a most important character. Gas light was unknown in 1800, now every city and town of any pretence is lighted with it, and we have the announcement of a still greater discovery by which light, heat, and motive power may be all produced from water with scarcely any cost. Daguerre communicated to the world his beautifut invention in 1839. Gun cotton and chloroform are discoveries but of a few years old.—Astronomy has added a number of new planets to the solar system. Agricultural chemistry has enlarged the domain of knowledge in that important branch of scientific research, and mechanics have increased the facilities for production, and the means of accomplishing an amount of labor which far transcends the ability of united manual effort to accomplish. The triumphs achieved in this last branch of discovery and invention, are enough to mark the last half century as that which has most contributed to augment personal comforts, enlarge the enjoyments, and add to the blessings of man. What will the next half century accomplish? We may look for still greater discoveries, for the intellect of man is awake, exploring every mine of knowledge, and searching for useful information in every department.

ROAD FROM ST. ANTHONY TO WILLOW-RIVER.—Through the courtesy of Colonel Hughes, we learn that the bill for laying out a road from St. Anthony Falls to Willow-River has passed the Minnesota Legislature. to go by John Morgan's Hotel, and that W. R. Marshall, of St. Anthony, is the surveyor. Gov. Ramsey has signed the bill, and this important enterprise will soon be commenced, as the surveyor intends to run it out the present winter. We have been a part of the way through on this new route, and are persuaded an excellent road can be made, connecting the business of two of the best water powers in the North-West by a good and direct road, and shortening the distance materially between the two flourishing towns to the one travelled at present, and will cause business to start up at the crossing of the Stillwater road to Morgan's Half-way House.—[St. Croix Enquirer.

EDITOR'S TABLE.

POSTMASTERS WHO CAN FRANK LETTERS *to Publishers.*—The Postmaster General, in answer to a letter of inquiry whether Postmasters have the privilege of franking letters to publishers containing a remittance for subscription, writes:

"All postmasters whose *compensation* does not exceed $200 a year, are privileged to send and receive, *free*, all letters or written *communications on their own private business*, not weighing over half an ounce.

"Postmasters who have the privilege of franking these private written communications, *can frank letters to publishers of newspapers*, covering money for subscriptions, or the names of subscribers, as agent for the publisher, and his agency will be presumed from the fact that he franks them. NATHAN K. HALL,

"Postmaster General."

OUR NEW VOLUME.—Will not our editorial brethren (to whom we are already much indebted) notice our new volume and new dress, terms, &c. To all our old friends, Postmasters, Agents, &c., we would tender our hearty thanks and beg a renewal of their kind offices for the present volume. Though sometimes vexatiously hindered in "getting out," we are a "fixed fact," and determined to go ahead! Nurserymen, in their spring sales can procure us many new subscribers.

To our old Correspondents, and the Farmers generally we say, let us hear from you often—write, *write*, WRITE! It will do both us and you good!

OUR PLANK ROAD works to a charm. We often see heavy wagons with 25 bbls. of flour drawn by four horses, while before, from 10 to 12 was the usual number taken. Several times too, have noticed four loaded wagons drawn by one yoke of oxen each, and driven by one person—the three hind yokes being hitched with ropes around their horns to the wagon preceding.

THE PAST WINTER was very mild with the exception of two or three cold snaps in January, which, alas! were just enough, we fear, to destroy all the fruit-buds on our peach trees—which, before looked very promising.

We hope our Illinois and Michigan neighbors will be on hand to supply us next fall. The lowest depression of the mercury was on the morning of January 30th, 17½ below 0.

NEW POST OFFICES.—The Post-Master General has established the following new Post Offices in this States:—Barton Washington county, J. R. Taylor, P. M.; Georgetown, Lafayette county, Asa McCollum, P. M.; Genoa, Waukesha county, V. Willard, P. M.; Stoner's Prairie, Dane county, Wm. Vroman, P. M.; and Seven Mile Creek, Sauk county, C. B. Strong, P. M.

FRUITS.—We are again indebted to our Southern Friends for a choice lot of fruit presented us at Princeton, embracing many fine varieties, among which was a beautiful specimen of the Fulton Apple and some fine Pear-shaped Quinces, a present to our better half, from the garden of Mr. J. Phelps, Elmwood, Peoria County This variety seems to flourish admirably with Mr. P. and may prove hardier for this section than the common—in regard to which we hope soon to be able to report definitely.

NOTICES OF PERIODICALS.—We are in receipt of several numbers of the "*New England Farmer and Boston Rambler*," an elegant and spicy weekly formed by uniting the Farmer and Rambler, though the Farmer is still published semi-monthly, as before, at $1 per annum—the weekly $2—by Raynolds and Nourse.

AMERICAN AGRICULTURIST.—The Dec. number of the last volume has been received—an able monthly edited by Messrs. A. B. & R. L. Allen, and published by Messrs. Saxton & Blanchard, N. Y. City, at $1 per annum, eight copies for $5.

PRAIRIE FARMER.—This standard Western Journal holds forth as usual—but with evidences of increasing prosperity and usefulness. We should want to make large extracts from it were it not that we thought most of our subscribers took it. We hope, in the March number, to learn the name of that correspondent who thinks the grasses grow from nothing!

By-the-by, Friend Wright, we believe you, or some of you, said awhile ago the Keswick Kodlin had been rejected by the Pomological Congress—will you please inform us which of them rejected it?

SUCH FACTS MAKE FARMERS THINK.—It requires thirty-five hundred sheep to be kept a whole year, to support the Lawrence (Mass.) mills with wool for a single day. They produce fifteen hundred shawls per day and consume cochineal to the value of $60,000 per annum. Three years since there were not five hundred inhabitants in Lawrence—now there are ten thousand.

THE FARMER'S GUIDE.—We have neglected to notice two or three of the last Nos. of this valuable work.—We cannot say too much in its praise. Each number is finely illustrated with engravings accompanied with choice reading. We would urge every one of our subscribers to it. We will furnish it at our office in Nos. free of postage at publisher's prices. Published by Leonard Scott & Co., New York, at 25 cents per number.

OHIO CULTIVATOR.—An excellent semi-monthly, by M. B. Bateham, at Columbus at $1 per annum, 9 copies for $6. The Ladies' Department by Mrs. Bateham, and several able Lady contributors is alone worth double the subscription price.

WATER-CURE JOURNAL.—By Fowler & Wells $1 per annum, 20 copies for $10. Most earnestly do we commend this noble monthly to all who would preserve life and health, if we could take but one periodical we believe it would be this.

A DISTINGUISHED NEGRO BARON.—Gen. Hartwell H. Traver, of Twiggs Co., Georgia, is the largest slaveholder, if not the wealthiest man in Georgia. He owns a thousand negroes, and fifty thousand acres of land, divided into ten plantations, in Twiggs, Pulaski, Houston and Baker counties, yielding two thousand bales of cotton annually. At 12 cts. per pound, his crop will bring $100,000. He recently added to his estate a tract of 2,359 acres in Burke county, purchased at $15 75 per acre, or for $37,000.

NURSERIES.—We would call attention to the advertisement of Mr. Bell's Nursery, on Gardner's Prairie, three miles from Burlington. Mr Bell is master of his business, and we would recommend those interested to give him a call. We doubt not his trees will prove equal to his recommendations.

UNCERTAIN CROPS—WHEAT AND POTATOES—SUBSTITUTES FOR POTATOES—STOCK-RAISING.—The wheat and potatoe crops must be regarded as very uncertain, and therefore not to be relied upon so largely as they have heretofore been—though to be sure they may possibly yield better this season. But for our own part we shall not trust them much. Is not the corn crop far surer, and when combined with pork and stock raising far more profitable for a staple crop?

As for potatoes, they have proved such a scaly set, so vastly unprofitable that we have been trying substitutes so as to dispense with their company altogether, if need be—though with little expectation of succeeding fully. But we find that buckwheat cakes, or corn bread, made with pumpkin or molasses does very well in lieu of them, especially with a good supply of turneps, cabbages, beets, &c. Some sorts of squashes cut up and baked like potatoes make excellent substitutes—in fact nearly equal in richness to the sweet potatoe. Beans are also excellent in lieu of potatoes. So then, let them rot if they will! Most fearnestly do we recommend to our farmers to get into stock—rear up in the best manner every colt, and calf, and lamb, and take all possible pains to improve the stock.

MANURES, BURNING UP STRAW AND STUBBLE.—We are rejoiced to observe the increased attention that is being paid to the getting out of manure among our farmers, and yet there is, in this land of the West, the most wanton, wicked waste of that precious substance of any part we were ever in. But, frinds, we must come to it—we must save and apply our manure, or run out! It is as sure as that we should finally empty a purse or store-house, if we always took from it without returning any thing back to it. Our crops always diminish the supply of elementary substances in the soil—and therefore every crop makes the land just so much poorer. *Do you see this, and will you heed it?* Or will you pursue the same old skinning system, abusing and working to death your bountiful mother earth?

Do you not despise the man that works his team and scarcely feeds them? Surely, then, you will not serve the land in the same way—surely, you won't burn up or waste all the land-feed any more than your horse-feed. Yet many, very many are guilty of this in letting their manure heaps waste away, and in burning up their straw and stubble! What perfect abuse of land this is—it may not have even the single poor mouthful of stubble that's left—but all is sacrificed to that worst enemy of ours—that Western Farmers' Bad Genius—FIRE!

Only see what sacrifices are made to him—straw heaps and stubble, chip manure and brush heaps, besides *thousands of acres of young timber* every year that our posterity will so wretchedly need, and any thing but bless us if we don't preserve it for them. Again, we beg, we implore you to restrain that devouring Fiend! He can feed on nothing scarcely but what will feed and fatten the soil and its owner.

CARROL COLLEGE.—Rev. John A. Savage has issued a circular to the citizens of Wisconsin, particularly of Milwaukee and Waukesha counties, w o are interested in the enterprise of building and endowing Carroll College, inviting them to meet at Waukesha, at 2 P. M., on Thursday, the 13th inst., to "take into consideration the present condition and prospects of the Institutton," and the expediency and practicability of the speedy erection of a building for the use of a College on the site which has been donated by citizens of Waukesha.

As the results of the contemplated meeting will be important in their influence upon the action of the Trustees, it is hoped that the friends of Collegiate Education in the eastern part of the State will see that they are properly represented. It is hardly necessary to say that there is understood to be a strong feeling in some quarters in favor of removing the institdtion to this city, and it is on this account particularly that we hope that those interested will be present to express an opinion of their sentiments.—[Milwaukee Sentinel.

WISCONSIN SCHOOL AND UNIVERSITY LANDS.—*Amount Sold and Moneys Received by the Commissioners since May 1st, 1850.*—Mr. Donald M. Seaver, the Secretary of the Board furnishes the following valuable table fo the "Madison Democrat We compile the aggregates:

Whole No. of acres,.....	140,041 92-100
Appraised value of whole,.....	$671,046 07
No. of acres sold,.....	86.131 70-100
No. of acres unsold,.....	47,510 62-100
Appraised value of land sold,.....	$399,330 27
Amount sold for,.....	$423,785 84
Amount pad down as per centage,....	$63,900 55
Amount received as interest to Jan. 1st.	$12,184 27
Amount due & drawing int. on land sold,	$365,226 80

WORLD'S FAIR.—In the list of articles shipped on the St. Lawrence, we notice a Patent Reaper from the factory of Messrs. McCormic & Co., of Chicago.

CONTENTS.

WISCONSIN & IOWA FARMER,
AND
NORTHWESTERN CULTIVATOR.

VOL 3. RACINE, WIS., APRIL, 1851. NO. 4

PUBLISHED ON THE FIRST OF EACH MONTH, BY
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F. K. PHŒNIX, } EDITORS.
MARK MILLER, }

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Postmasters and all others who feel an interest in the circulation of the FARMER, are invited to lend their aid in procuring subscribers and extending its circulation.

State Agricultural Society.

Pursuant to adjournment, the *State Agricultural Society* of the State of Wisconsin met at the Assembly Hall, at the Capitol in Madison, on the evening of Wednesday, March 12th, 1851.

The chair was taken by Hon. W. F. Tompkins, chairman of the last meeting.

The minutes of the last meeting were then read and approved.

Hon. H. Johnson, from the committee previously appointed on that subject, reported the following Constitution, which was read and adopted section by section.

CONSTITUTION OF THE WISCONSIN STATE AGRICULTURAL SOCIETY.

The style of this society shall be "The Wisconsin State Agricultural Society."—Its object shall be to improve the condition of agriculture, and the mechanical and household arts.

ARTICLE 1. The Society shall consist of such citizens of the State as shall signify in writing their wish to become members, and shall pay, on subscribing, not less than one dollar, and annually thereafter one dollar, and also of honorary and corresponding members.

The Presidents of County Agricultural Societies, or a delegate from each, shall be *ex-officio* members of this Society.

The payment of ten dollars or more, shall constitute a member for life, and shall exempt the donor from annual contribution.

ART. 2 The Officers of the Society shall consist of a President, three Vice-Presidents, (one to be located in each congressional district.) a Recording Secretary, a Treasurer, an Executive Committee, to consist of the officers above named, and five additional members, a majority of whom shall form a quorum—and a General Committee, to consist of one member from each County, organized for Judicial purposes.

ART. 3. The Recording Secretary shall keep the minutes of the Society. The Corresponding Secretary shall carry on the correspondence with other Societies, with individuals, and with the General Committee in the furtherance of the objects of the Society.

The Treasurer shall keep the funds of the Society, and disburse them on the order of the President, or Vice-President, countersigned by the Recording Secretary, and shall make a report of the receipt and expenditures at the annual meeting in January.

The Executive Committee shall take charge of, and distribute or preserve all seeds, plants, books, models, &c., which may be transmitted to the Society; and shall have also the charge of all communications assigned or calculated for publication, and so far as they may deem expedient, shall collect, arrange and publish the same in such manner and form as they shall deem best calculated to promote the objects of the Society.

The General Committee are charged with the interests of the Society in the counties in which they shall respectively reside, and will constitute a medium of communication between the Executive Committee and the remote members of the Society.

Sec. 4. There shall be an annual meeting of the Society on the third Wed-

nesday of January, in the village of Madison, at which time all the Officers shall be elected by a plurality of votes and by ballot, with the exception of the General Committee for the counties, which may be appointed by the Executive Committee, fifteen members shall be a quorum for the transaction of business.

ART. 5. The Society shall hold an annual Cattle Show and Fair, at such time and place as shall be designated by the Executive Committee, at which it shall be the duty of all the Officers of the Society to be present.

ART. 6. This Constitution may be amended by a vote of two-thirds of the members attending any annual meeting.

The Society then proceeded to the election of Officers with the following result:

President:

Erastus W. Drury, Esq., of Fond du Lac.

Vice Presidents:

1st Congressional District, Roswell C. Otis, of Kenosha.
2d ditto, Henry M. Billings, of Iowa.
3d ditto, William F. Tompkins, of Rock.
Recording Secretary, A. C. Ingham, of Dane.
Corresponding Sec'y Royal Buck, of Dane.
Treasurer, Chauncey Abbott, of Dane.

Executive Committee.

H. Johnson, of Kenosha.
Timothy Burns, of La Crosse.
Adam E. Ray, of Walworth.
Andrew Palmer, of Rock.
John H. Rountree, of Grant.

General Committee.

Brown County,	Lorenzo Brown.
Manitowoc	"	G. C. O. Malmros.
Calumet	"	William H. Dick.
Sheboygan	"	B. T. Roberts.
Winnebago	"	Jacob Weed.
Fond du Lac	"	James M. Hawkins.
Marquette	"	Benjamin F. Hollinbeck.
Washington	"	H. Moore.
Dodge	"	Hiram Barber.
Columbia	"	J. T. Lewis.
Milwaukee	"	Allen O. T. Breed.
Waukesha	"	A. F. Pratt.
Jefferson	"	William Sanborn.
Dane	"	Jonathan Larkin.
Iowa	"	Francis J. Drury.
Sauk	"	Frank Crossman.
Portage	"	Thomas J. Moorman.
St. Croix	"	Benjamin Allen.
La Pointe	"	John O. Watrous.
Crawford	"	William Curts.
Bad Ax	"	Charles Waters.
La Crosse	"	Hugh Douglass.
Kenosha	"	Samuel M'Clelland.
Racine	"	Mark Miller.
Rock	"	John Bannister.
Green	"	William Rittenhouse.
Lafayette	"	Daniel M. Parkinson.
Grant	"	Jacob D. Merritt.

The Society then listened to an Address from Robert W. Lansing, Esq., of Dane, after which, on motion of Hon. M. S. Barnett,

Resolved, That the thanks of this Society be tendered to Mr. Lansing, for the Address delivered this evening, and that he be requested to place a copy of the same on the files of the Society.

Mr. H. Johnson offered the following Resolutions which were unanimously adopted.

Resolved, That the Secretary be authorized to procure the necessary Books and Stationery for the use of Secretary and also to procure the necessary Blank Certificates of membership for the use of the Society, and to draw his warrant upon the Treasurer, for the necessary funds to defray the expenses of the same.

Resolved, That the proceedings of this meeting be signed by the Chairman and Secretary, and published in the several papers printed at Madison, and that the Editors of the various newspapers of this State be requested to copy the same.

The Society then adjourned.

W. F. TOMPKINS, Pres't.

ALBERT C. INGHAM, Sec'y.

Proceedings of the Racine County Agricultural Society.

At an adjourned meeting of the citizens of Racine County, held at the House of Jesse D. Searles, in Yorkville, February 8th, S. G. Kellogg in the Chair, D. D. Mc Eachron, Secretary, the following Constitution was presented and adopted in place of the one agreed upon by a previous meeting. In explanation of the action of the last meeting, setting aside the Constitution adopted by the first, we would remark;

that Constitution, although acted upon and adopted article by article, yet no vote was taken upon it as a whole, which left it for the adjourned meeting to accept or reject.

The meeting was large, and a good degree of interest in the success and prosperity of the Society manifested. After the Constitution was adopted, a goodly number came forward and subscribed to it.

The Society being fully organized, the following persons were elected officers:

N. R. Norton, Burlington, President.
R. M. Norton, Racine, Vice President.
E. Burchard, Yorkville, Treasurer.
Mark Miller, Racine, Corresponding Sec'y.
E. W. Washburn, Mt. Pleasant, Rec. Sec.

EXECUTIVE COMMITTEE.

Stephen Sheldon, Town of Racine.
A. G. Knight, City of Racine.
T. G. Kellogg, Mt. Pleasant.
P. Van Vleit, Caledonia.
D. D. McEacheron, Yorkville.
S. O. Bennett, Raymond.
Wm. H. Addington, Dover.
P. G. Cheves, Norway.
T. Hackney, Rochester.
L. Rrown, Burlington.

After the election of officers, N. R. Norton, the President, addressed the Meeting, as follows:

Fellow Citizens—Fully aware of the many difficulties in the commencement and organization of an Agricultural Society, which it will be of the utmost importance to overcome, in order to give to it that character and efficiency to which such an enterprise is entitled, and my own inability to perform the duties which must necessarily devolve upon me, as one of its officers, in order to carry its grand objects into successful operation, I must rely upon your judgment and knowledge, together with the fullest assurance of your united efforts and co-operation in carrying out the objects of this association. With this assurance, I shall enter upon the duties of my office with the hope that the association here formed, may prove but a nucleus, around which more members and strength may gather, to encourage and stimulate progress in agriculture, as well as the forming of social and agreeable acquaintances throughout the farming interests of this county.

Permit me to tender you my thanks for the expression of honor which you have conferred on me at this time.

CONSTITUTION

OF THE

Racine County Agricultural Society.

PREAMBLE.

Agriculture, being the only sure foundation for our national and individual prosperity and happiness, and the mother of Commerce, in our country, at least, the true basis of all our independence, we will endeavor, by such, to elevate her to that high and dignified state she so richly deserves. We will cultivate, ourselves, and encourage others in the cultivation of all branches connected with agricultural, mechanical, and chemical, and scientific experiments, as shall tend to improve the agricultural interests of this county. And further, we will aid the Agricultural Societies now forming in our several counties, in their laudable efforts to advance the interests of Agriculture in our State, until it shall rank among the first in our happy Union.

CONSTITUTION.

ARTICLE I. We the subscribers, citizens of Racine County, and State of Wisconsin, agree to form ouselves into an Association, to be styled the Racine County Agricultural Society, granting the right of membership to all citizens, by paying, annually, the sum of *One Dollar*, each, which shall entitle them to a Certificate of Membership.

ART. II. The object of this Society shall be to encourage Home Industry, Agricultural Interests, and the Improvement of Agricultural Implements and Stock, in the County of Racine.

ART. III. As soon as sixteen persons shall have enrolled their names as members, and singned this Constitution, the Society shall be organized by the election of officers—which shall consist of a President, Vice President, Treasurer, Corresponding Secretary, Recording Secretary, and a Committee, consisting of one Member from each Town and City, which shall constitute an Executive Board—the Members to be Elected Annually, and to perform their respective duties without charge to the Society.

ART. IV. It shall be the duty of the Vice President, in the absence of the President, to preside at all meetings of the Society and of the Executive Board; and, through the Corresponding Secretary, to call all Special Meetings; to give at least two week's notice, previous to such meeting; and shall draw all drafts on the Treasurer for Premiums and other expenditures of the Society, which drafts shall be countersigned by the Recording Secretary, and shall deliver, or have delivered an Address at each Annual Meeting of the Society.

ART. V. It shall be the duty of the Vice President to assist the President in the performance of his duties, and to form a Board for inspecting and conducting the annual election of officers.

ART. VI. It shall be the duty of the Treasurer to collect all the moneys and dues of the Society, receive donations for the same, and pay out such moneys for Premiums and other expenditures of the Society on the order of the President. He shall also render a written account of the state of funds in his hands, and report to the annual meeting of the Society.

ART. VII. It shall be the duty of the Recording Secretary to keep a full record of the proceedings of the Society in a plain and intelligible manner, its election of officers, list of premiums offered and awarded, together with the names and residences of persons receiving the same. He shall also furnish each of the officers of the Society with a copy of the Constitution and By-Laws, and a list of the articles for which premiums are offered. The records to be at all times free for the inspection of any member of the Society.

ART. VIII. It shall be the duty of the Corresponding Secretary to hold correspondence with the officers and members of the Society, and with other Societies; to keep a record of all expenditures ordered by the Board, and prepare such proceedings for publication.

ART. IX. It shall be the duty of the Executive Board to make appointments of the time of holding the Annual Fair or Exhibition, to make out, as early as practicable in each year, a list of all crops, stock, and articles for which premiums will be offered; to procure the premiums for presentation, appoint the different Committees and Judges, which shall consist of three members; to inspect the articles and stock offered by the Society, The Board shall give timely notice of the place of holding the Fair, and make all necessary arrangements for conducting the same. They shall avail themselves of all the means in their power to become acquainted with the Agricultural Improvements of the several Counties throughout the State, for the benefit of this Society, and may, if consistent with the means, and approved by a majority of the Board, present at any meeting, introduce from other States and Counties, whatever they may deem best calculated to enhance the Agricultural interests of this County, whether consisting of Improved Stock, Seeds, Farming Utensils, or Improved modes of Culture. They shall visit the members of the Society, in their respective towns, at least twice a year, for the purpose of consultation, imparting information to, or deriving knowledge from them for the benefit of the Society at large.

ART. X. The Executive Board, when assembled in their official capacity, shall represent the Society, and may pass such By-Laws as may by them be deemed necessary for the better regulation of the Society, not incompatible with this Constitution, and their will, expressed by a majority present, shall govern the Society in all matters, except altering or amending this Constitution.

ART. XI. The President, Vice President, Recording and Corresponding Secretaries, or in their absence, officers appointed pro. tem., together with eight members of the Executive Committee shall form a Quorum for the transaction of business, provided such notice be given of the same as is required by the Fourth Article of this Constituton.

ART. XII. The Annual Election of Officers, after the first, shall take place on the last day of the Fair. The votes shall be given by ballot, and a regular record of the same be kept by the Recording Secretary. The persons receiving the highest number of votes, shall be declared duly elected, and immediately enter upon the duties of their respective offices. The Vice President and Secretaries shall constitute the Board of Judges of Election.

ART. XIII. No alteration or amendment of this Constitution shall be made, except at an Annual Meeting of the Soci-

ety, by a vote of two-thirds of the members present.

ART. XIV. All the Officers shall be residents of this County; and none but Members of the Society will be allowed to compete for Premiums except Ladies belonging to the families of Members.

Ladies may, however, become members by the payment of one-half the sum required from the Gentlemen, and possess equal privileges, with the additional one of voting by proxy.

ART. XV. The Annual Exhibition may be held at any place the Board shall designate in the County of Racine, at five month's notice, together with a full list of crops, animals, and all articles for which Premiums are offered.

For the Wisconsin and Iowa Farmer.

Growing Grasses.

WIOTA, March 6th, 1851.

FRIEND MILLER:

Sir—The subject of growing grasses, in this State, to the upland, or to the prairie Farmer, is one of great and increasing importance. Therefore, in order to obtain such information as will interest and benefit such a large portion of community, permit me, through the medium of the Wisconsin Farmer, to solicit from the readers or correspondents of the same, an answer to the following interrogations, viz:

Has the experiment been made, in Wisconsin, of substituting millet for hay? If so, with what success? What is the proper time for sowing, and what is the requisite quantity of seed per acre? Where can seed be obtained, and at what price? What has been the experience, in this State, of raising Lucerne? What is the best time for sowing, and what quantity of seed to the acre? Where, and at what price can seed be obtained. Any person, giving the desired information, will oblige an

UPLAND FARMER.

☞ Millet has been raised, to some extent, in Walworth County. We saw several fields of it the past season, and were informed that it had proved a profitable crop. We should recommend its cultivation for fodder, especially in sections where dependence is made upon tame hay for wintering stock. Mr. Allen, of Allen's Grove, Walworth County, cultivated a field of Panic Grass, last season, which he informed us made excellent feed for horses. Mr. Allen has had considerable experience in growing it—says it will produce from 40 to 60 bushels of seed to the acre, which meets a ready sale at the East, at good prices. Will some of our agricultural friends answer "UPLAND FARMER" in the May No.?

We have just received a small package of Imported *Lucerne seed*, from the Patent Office, which we shall sow this spring, for the benefit of our patrons who may wish small parcels of seed for another season.—[Ed. Farmer.

For the Wisconsin and Iowa Farmer.

Ringbone.

BURLINGTON, February 20th, 1851.

MR. MILLER:

Sir—In your January No. I observe an article on Ringbone, by S. G. Cone, which I conceive a very cheap, easy, and valuable remedy. Before I came from the east, I had a valuable colt, which was taken lame in the winter before it was two years old, and was so lame, with its hind feet, that it stood up but a small part of the time, and I considered it worthless. I heard of many remedies for the cure of the Ringbone, all of which were attended with expense, care, and delay, and the remedy uncertain, and the cutting out a Ringbone horrible butchery, and so it would be. I at length found a man who said that he could cut out a Ringbone and it would be attended with no risk. I took the colt to his house, cast it on the ground; and, instead of cutting out the Ringbone, he cut into the back part of the fetlock joint, and out burst a kind of bladder, and with a strong thread, he held or drew it, until he cut off the conductors, and the work was done. The creature performed good service until she was twelve years old, and was never lame since I have been in this country. I have operated on two or three horses, and they have done well. I have been using one for the last three years that is entirely free from lameness, which, when I first had him, stood and travelled on three legs.

While writing, I will inform you of a

cheap and simple remedy to prevent rabits from destroying fruit trees, which I do not recollect of ever having seen in print.

First catch a rabit and then cut him up and rub the trees with its parts. I have tried it, publish it as a sure prevention.

I am yours, &c.,

JOHN MARTIN.

For the Wisconsin and Iowa Farmer.

Peas and Turneps.

COLD SPRING, March 1, 1851.

MR. MILLER:

Sir—As I am a reader of your valuable paper, the Wisconsin Farmer, and not seeing much said about Peas, I thought I would give a little of my experience in raising them. In 1849, I sowed one bushel on a half acre of low prairie, which had been under cultivation four years, and plowed them in. I sold five bushels in the pod, for five dollars. Two bushels were used in the family. I cut them on the 20th of July, and as soon as dry, I took them off and stacked them, then plowed the ground and sowed it to turneps; and, in the fall, I gathered sixty-four bushels of Turneps, and I had ten bushels of Peas, which, when threshed, sold for one dollar per bushel, and my turneps for twenty-five cents. The whole crop amounted to $31, allowing for what we used in the family and for seed. I will further say, that the ground had never been manured.

A SUBSCRIBER.

☞ We like to receive and make public such reports as the above. From it we learn the advantage to be derived from a well arranged system of cultivating the soil. We doubt not there are a great many other subscribers to our sheet, who might give us their "experience" to lay before our readers, and by so doing, be mutually benefitted. *Let us have it.*—[Ed. Farmer.

Madder.

The root of Madder, (*Rubia tinctoria,*) is used for several dyes, but principally for the rich Turkey red; and it has been recently an object of attention in the United States. The introduction of this, with numerous other articles consequent upon the extended growth of our manuafactures, shows the intimate and mutually beneficial effects of associating the two leading industrial occupations of agriculture and manufactures. The principal cause which has

MADDER.—FIG. 15.

prevented its cultivation among us, thus far, has been the long time required for maturing a crop. Another drawback in its culture, in this country, is the want of suitable mills for breaking and grinding the roots. This may be done immediately after the madder is dried; or it will gather dampness, so as to prevent its grinding freely. Any common gristmill can grind madder properly; and when ground it is fit for use, and may be packed in barrels, like flour, for market.

Mr. Swift, of Ohio, has raised 2,000 barrels per acre in one crop of four years' growth, at a net profit, including all charges of rent, labor, &c., of $200 per acre. The roots of madder are also a good food for cattle, but the expense and delay of producing it will preclude its use for that purpose in this country.

For the culture of this important plant, see Allen's American Farm Book, pp. 226, 230—*Agriculturist.*

☞ Madder is already being successfully cultivated in this State. Mr. Smith, of Delavan, Walworth County, commenced cultivating it some four years ago, and has succeeded well. He had roots last fall, of of three years' growth, which he proposed to sell to any one who might wish to engage in the business. Mr. S. is no novice in the business, having had several years'

experience in it previous to locating in this State. He believes madder a very profitable crop, and one which may be very successfully cultivated throughout the West.

We know, three years (the time required for maturing a crop of madder) is some time to look ahead from planting time to harvest, but if it be a safe crop, and as profitable as represented by those who understand the business, that should not discourage a commencement.—[Ed. Farmer.

For the Wisconsin and Iowa Farmer.

Sap in Vegetables and Trees.

Mr. Miller:

Sir—I should be pleased to ascertain, through the medium of your valuable paper, from any of your correspondents who can furnish the information respecting the circulation of sap in vegetables and trees.—I consider the old notion, that the sap of trees descend to the root, in winter, erroneous? I suppose the idea arose from observing that, as the leaves of the Onion, the Ruta Baga, and other bulbous plants, decline and wither, there is an evident concentration of the juices to the bulb, which swells and becomes more compact. And to attribute the same process to a tree, is quite in character. But, with these, I should differ, as I am led to think that the sap of the Maple, for instance, is drawn in the spongieles or extremities of the roots and through the pores of the wood to the extremities of the tops.

But, as physiologists disagree on the subject, I am at a loss to determine, and would solicit information.

I have been led to these remarks, by observing some comments made on the subject, in the Genesee Farmer, which led to a debate, in which the parties were not able to reconcile each other, and selected me to refer to you and your correspondents; and as general diffusion of knowledge is the object, I would submit the following ques-

1st. Does the sap of the sugar-maple ascend or descend, in the spring?

2d. Does the sap circulate the same in plants as it does in trees?

3d. Are the properties or sustaining qualities of the sap extracted from the earth, or atmosphere, or both?

James Cleveland.

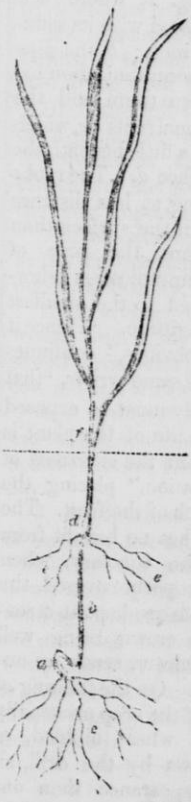
Plymouth, Wis. March 5, 1851.

Wheat Drilling.

The following article upon the preparation of seed wheat, sowing, &c., we compile from the "Farmers' Guide," a work which we would recommend to every farmer to provide himself with:

Wheat possesses a property in its roots common to both barley and oats. The seed will bear to be deep sown—not so deep as barley, but deeper than oats, and not deeper than 6 or 7 inches; and after the germ has become a stem, it puts another set of roots about an inch below the surface.

Fig. 1.



The deeper may be called the *seminal*, and the upper the *coronal* root of the wheat plant. Figure 1 shows the arrangements of the roots under the surface, where *a* is the seed with its seminal roots *c*, and the germ *b* rising from it to the surface of the ground at *f*, above which the stem, with its leaves, are seen. About an inch below the surface at *d* are formed the coronal roots *e e*, the office of which is not only to maintain the plant, but to form the site from which the multiplication of the plants proceeds when it sends forth its tillers. At whatever depth the seed may have been sown, from 2 to 5 inches, the coronal roots are formed at one inch at *d* the difference being the length of the connecting tube *a b*, according to the depth the seed had been deposited.

"As the increase and fructification of the plant depends upon the vigorous absorption of the coronal roots, it is no wonder that they should find themselves so near the surface where the soil is always the richest.

I believe I do not err when I call this *vegetable instinct.* In the nothern counties wheat is generally sown late. When the frost comes, the *coronal* roots, being young, are frequently chilled. This inconvenience may, however, be easily prevented, by sowing earlier and burying the seed deeper. The seminal roots being out of the reach of the frost, will then be enabled to send up nourishment to the crown, by means of the pipe of communication."

Now the form which the plant assumes, when sown near the surface, is different from this, and is seen in fig. 2, where *a* is the seed with its seminal roots; *b* the pipe of communication between them and the coronal roots *c c*, which are a little beneath the surface *d*. The root *c* being at less distance from the surface than before, the pipe of communication is shortened to the smallest longitude. "Hence it is obvious," continues the same writer, "that wheat sown superficially must be exposed to the frost," while the life of the plant is placed in jeopardy "from the shortness of the pipe of communication," placing the seminal root within reach of the frost. The plant, in that situation, has no benefit from its double root. On the contrary, when the grain has been properly covered, the seminal and coronal roots are kept at a reasonable distance. The crown, being well nourished during the winter, sends up numerous stalks in spring. On the tillering of the corn the goodnes of the crop principally depends. A field of wheat dibbled, or sown in equidistant rows by the drill, always makes better appearance than one sown with the harrow. In the one, the pipe of communication is regularly of the same length, but in the other it is irregular, being either too long or too short."*

Fig. 2.

The conclusions which the foregoing statements warrant are evidently these: that the wheat sown before winter should be as deeply covered with earth as to be beyond the reach of injurious frost, say 4 or 5 inches; that in spring the coronal roots set out from the established plants abundance of tillers or stools; that wheat sown in spring should be lightly covered, little exceeding one inch; that the tillers or stools will be few; that therefore the autumn wheat ought always to be dibbled or drilled to make the pipes of communication long, and of uniform length; that spring wheat may be sown broadcast; and that autumnal sown wheat should have less seed than that sown in spring.

"Seed wheat should be *pickled*—that is, subjected to preparation in a certain kind of liquor—before it is sown, in order to insure it against an attack of a fungal disease in the ensuing summer, called *smut*, which renders the crop comparatively worthless. Some farmers affect to despise this precaution, as originating in an unfounded reliance on an imaginary specific; but the existence of smut, and its baneful effect upon the wheat crop, are no imaginary evils; and when experience has proved, in numberless instances, that steeped grain prevents the appearance of this serious disease, the small trouble which pickling imposes may surely be undertaken, rather than place the entire crop in jeopardy. *Why* pickling the seed should have the effect of preventing the smut in the crop, is a question more easily asked than answered; and it is, perhaps, because it has never received a satisfactory answer, that pickling is disregarded by some farmers. No valid objection can be stated against the practice, for the palpable fact stands obvious to conviction, that one field sown with pickled wheat, and otherwise managed in the usual way, will escape the smut; while the adjoining one, managed exactly in the same manner, but sown with wheat in its ordinary state, will be almost destroyed with the disease. I have seen such a case tested by two neighboring farmers, the Messrs. Fenton, late tenants of Nevay and Eassie, in Forfarshire. It is true that, on some farms, wheat sown in its usual state escapes the disease, which I have heard the late Mr. Oliver, Lochend, near Edinburgh, state was the case on his farm; and it is also true that pickling does not *entirely* prevent the occurrence of the disease on other farms; but such cases do

*Geographical Essays, vol. i. p. 67—9.

not prove that every farm must also be free of smut; indeed no one, beforehand, can aver that any farm *shall* be so; and while so much uncertainty exists, the *safer* practice is to pickle the seed, the expense being a mere trifle. It is now an ascertained fact, that vaccination will not insure immunity from small pox, yet it certainly much modifies its attack when it does occur, and precisely so is the case with pickling wheat.

Wheat is pickled in this way: For some time, 2 or three weeks, let a tub be placed to receive a quantity of chamber ley, and whenever the ammonia is felt disengaging itself from the ley, it is ready for use. It is better that the ammonia be as strong as to smart the eyes and water be added to dilute it, than that the ley be used fresh. This tub should be removed to the straw-barn, as also the wheat in sacks to be pickled, and part of the floor swept clean, to be ready for the reception of the wheat. Let two baskets be provided, capable of holding easily about half a bushel of wheat each, having handles standing upright above the rims. Pour the wheat into the basket from the sack, and dip the basketful of wheat into the tub of ley as far down as completely to cover the wheat, the upright handles of the baskets preventing the hands of the operator being immersed in the ley. After remaining in the liquid for a few seconds, lift up the basket, let the surplus liquid run out of it, and then place it upon the drainer, on the empty tub, to drip still more liquid, till the empty basket is filled with wheat and dipped in the tub. Now empty the dripped basket of its wheat on the floor; and as every basketful is emptied, let a person spread, by riddling through a wire wheat-riddle, a little slaked caustic lime upon the wheat. Thus all the wheat wanted at the time is pickled and emptied on the floor, when the pickled and limed heap is turned over and over again, till the whole mass appears uniform.

Other substances beside chamber ley are used for pickling wheat, such as brine of salt, sufficiently strong to float an egg; solution of blue vitriol—all good enough, I dare say; but when so simple, efficient, and easily obtained an article as ley can be had, it appears to me unnecessary to employ anything else. It is powerful, and can destroy vegetable life in the course of a few hours, and, on this account, the wheat should be sown immediately after being pickled; and as this danger exists, no more should be pickled at one time than can immediately be sown. The use of the quick-lime seems merely to dry the ley quickly, so that the grains may be easily separated from one another in the act of sowing; though it may effect some chemical change serviceable to the purpose for which it is employed."

Advantages of Drilling in Wheat

For the information of our Agricultural friends, we give the following statements, from various papers:

Mr. Ellsworth's Report states, "that grain Drilled in is much less liable to suffer from rust drought, or lodging."

Dr. Fothergill, Commissioner of the Board of Agriculture, says: "Of all our modern improvements, the introduction of Drill Husbandry has generally been allowed to be the most important."

The advantages claimed for drill culture, in the Transactions of the N. Y. State Agricultural Society, are as follows:

1. A saving of seed.—Five pecks of wheat drilled in is equal to two bushels sowed broad-cast; every kernel is neatly covered at a uniform depth.

2. A saving of Labor.—Any person that can manage a team can complete, in the neatest manner, from ten to fifteen acres per day.

3. An Increase of crop.—Small ridges of earth are left between the rows of wheat, which by the action of the frost, slides down and covers the roots, thereby preventing "winter killing." Light and heat are admitted between the rows and prevents injury by rust. A vigorours growth is given to the young plant, and its position, in a constantly moist place, prevents injury from drouth.

Flax Seed.

We would call the attention of our Wisconsin Farmers, who have come far short of receiving anything like a fair return from wheat growing, for the past two or three years, to the following remarks upon raising Flax Seed, which we copy from the

St. Louis Intelligencer. The writer, who signs himself "Eastern Man," evidently understands his subject. We have never seen a stock of flax growing in this State yet. It is a pretty sure crop—commands a ready sale, at fair prices. We have soil well adapted to its growth. Why not give it a fair trial? We suppose seed is scarce here, but owing to the early opening of navigation, it can be obtained from Eastern markets in ample time for sowing this spring:

"While nature has done much for the cultivation of Flax-seed throughout most of the Western States, and while the demand for it is unlimited in all markets, at remunerating prices, is it not singular that farmers have given so little attention to its production? Having been raised in Western New York, where this article is one of the great staples with the farmer—and having seen how much the Ohio farmer depends upon it for a large portion of his yearly receipts, I have been surprised to find that in all this region of country, accessible from St. Louis, so little attention is paid to it—where, from the nature of the soils, and the enterprise of the farmers, one would expect, instead of a few hundred, *hundreds of thousands of bushels.* The reason its production is so small, is unquestionably because the thing has not been introduced, nor any pains taken by any body to bring it before the farmers—and this is sufficient reason for this article from the writer, who has been conversant with the subject from his youth.

In raising flax-seed, very little or no attention should be paid to the *fibre.* The farmer should start out with this distinct principle, that to make the crop profitable he must expect to count the straw nothing, and look to the seed for profit. To seed well, it must be sown thin that the fibre is too short and too coarse to be of much account. Six or eight quarts of seed (or less, if it can be evenly scattered,) per acre, and seeds better than when sown as thick as is required in raising for flax. It should be harvested when the balls are in the yellow, and left in swath a few hours. It can be cradled and threshed with a machine as well as wheat or barley. Wherever wheat or corn can be grown, flax-seed can be profitably raised. Eighteen bushels per acre is an ordinary yield, and sometimes twenty-four bushels are obtained.

No crop is subject to fewer contingencies; no winter kill, smut, or rust; spring frost will not kill, crows will not pull it.—Sow as early as the grond will work in the spring, and it will be ready to harvest before wheat, giving you returns for your labor in about four months. A dollar a bushel is sure from year to year, often will bring considerable more. Worth now in this market $1 65, in Cincinnati $1 75. Responsible men here have offered to contract for next year at one dollar and twenty cents. Why then, will not the farmers look to this subject and make it a source of income? There is at present, machinery in operation here, to consume 300,000 bushels of seed per year, and one or two, and perhaps three other works will go into operation this year—which, together, will make a market for any quantity that can be produced.

It is a common notion with farmers that flax is very exhasting upon land, and that more than one crop cannot be raised upon the same field in five years. The correctness of this is unquestionable where the crop is raised for the fibre; but in raising for the seed exclusively, it is not correct. In this country it is customary to sow from one and a half to three bushels of seed to the acre, which is sufficiently thick to cover the ground; in consequence the stalks grow slim and long, and the fibre is fine. In Ireland, where the flax is cultivated for the fine fabrics, from seven to twelve bushels to the acre are sown, so that the crop is literally a dense mass of fine slender stalks, but with no matured seed. The consequence in that country and in this to the land is, that after sustaining such a crop, the soil seems so entirely exhausted that it does not recover from it for years. But in cultivating the crop for the seed only, the management of the crop and the results are different.—Where no calculations are made upon fibre, and the crop raised entirely for the seed, six or eight quarts to the acre is quite sufficient. In this case the stalks grow strong and branch down to the ground—each branch loaded with fully matured seed. The fibre is coarse and short, but the seed plump and abundant. The sun has access to the soil, and experience has shown that this crop thus managed, is no more exhausting than wheat, barley or oats.

In Western New York, where the land

has been in cultivation for a century, [?] the farmers raise on the same ground a crop of wheat every other year, and the intermediate year a crop of flax; the one year flax, the next year wheat, and by clovering every alternate year, and fall plowing, they keep up the strength of the land. And in four cases in five, the flax-seed per acre brings in more money than the wheat, while the expense and delay of the one is not as great as the other—getting returns from the flax in four months from the time it is sown, while with wheat it is ten or twelve." EASTERN MAN.

St. Louis, January 30, 1851.

☞ A writer in the Ohio Cultivator says, two bushels to the acre should be sown —that nine pecks sown to the acre has produced thirty bushels. The Valley Farmer recommends from twenty to thirty quarts to the acre—soil, a rich strong loam, abounding in vegetable mould, and resting on a tolerably retentive clay sub-soil.—[Ed. Farmer.

From the Maine Farmer.

Culture of Onions.

In this section of Maine it has been almost impossible to raise onions because of the ravages of an insect that lays its eggs in the stalk, which hatches a maggot which soon destroys them.

We have thought a few hints on the subject might be of use at the present time in order to induce others to try some experiments.

It has been suggested that the egg of the fly is laid in the seed and not in the stalk and that if the seed be soaked a short time in warm water these eggs would be hatched, and thus the maggot be got rid of. Let this be tried faithfully and carefully. Then we would suggest that the seed be sown at this time of the year. Perhaps the fly will not operate so late in the season. If they do not, the onions will not grow as large as acorns or walnuts. Take them in the fall and lay them away where they will be preserved until spring. Then set them out early—they will grow and thus become early onions.

Another mode of raising early onions in spite of the fly is to set out large onions, as if for seed. When the stalk grows up break the top down. This prevents it from going to seed and it will push out bulbs from the old one, which may be detached and set out, and thus early onions obtained.

Perhaps the Tartar method might be serviceable among us. We are told by travellers that the Tartars never sow the seed of onions, because they think that too long a process. They dry and smoke in a chimney those that they wish to propagate, and in spring, when the time to plant them has arrived, they cut them diagonally into quarters, but so as not to separate the pieces entirely from each other. They set these onions in rows, when thus prepared, in good soil well dug, but not freshly manured, at about ten inches from each other and two inches deep. These onions are said to increase extraordinarily, and grow large and strong. We cannot vouch for this mode, having never tried it.

The potato onion, we believe, has never been tried much if any among us. This is a variety that is planted in hills, or buried like potatoes in hills, and they come up and grow well, and produce abundantly.

We suggest these ideas with a hope that on trial some of them will prove to be successful. We could formerly raise onions with great ease, but not now. We are under the necessity of importing large quantities into the State. Instead of that, we ought to be exporters of them.

RYE FLOUR, when made into good light bread and allowed a day or two to ripen, is very nutritious and wholesome. Rye flour more nearly resembles wheaten flour in its composition than any other; it has, however, more of certain gummy and sugary substances which make it tenacious, and also impart a sweetish taste. All grains and roots which have much starch in them undergo a great change in their chemical composition by baking—flour becomes more nutritious, and more easily digestible, because more soluble. This is also the case with flour; that is, the starch, gluten, and sugar of potatoes, when baked or what is still better, when roasted in the hot embers of an old-fashioned farm-house.—[American Agriculturist.

Bell metal is an alloy of 22 parts of tin and 78 of copper.

HORTICULTURE.

F. K. PHOENIX, EDITOR.

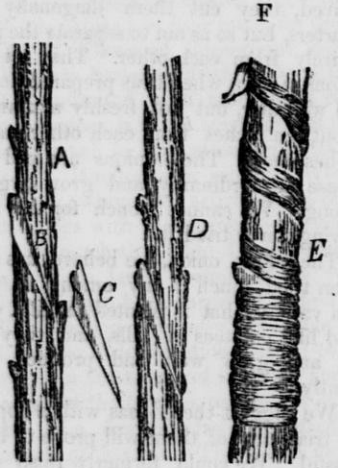
Budding.

For the Wisconsin and Iowa Farmer.

MR. MILLER:

I send you a rough sketch illustrating my new method of budding.

EXPLANATION.



Let *a* represent a stick of buds with the manner of cutting out as at *b*, *c* the bud cut ready for insertion in stock *d*, which is intended to show the bud *c* inserted ready for the bandage. *e* represents the stock with the inserted bud and bandage fastened in a slight cut in the stock as at *f*.

The bud is taken out with two cuts, leaving it in form of a wedge. The place for its insertion, in the stock a single cut.

The cutting requires some skill and can only be done with a keen, thin and wide blade knife.

This way of budding is not quite so expeditious as the common method. It can, however, be performed much earlier before the bark will start. This renders it a valuable method for propagating choice varieties sent from a distance when it is desirable to make the most of a few scions At the usual time of budding, (midsummer) the scions cannot be sent far without spoiling. For this method the scions may be cut before the buds swell in the spring and used as soon as received. If the stock is larger than the scion from which the bud is taken, the back should be made to coincide on one side, as in grafting, and the part of the cut not filled by the bud should be filled with grafting wax before putting on the bandage. When stocks over half an inch in thickness are used, no bandage need be used if the air is entirely excluded by covering all with wax.

J. C. BRAYTON.

Aztalan, March 8, 1851.

MR. MILLER:

I notice on page 18, January No. of Farmer, Vol. 2, Mr. Orra Marvin reiterates an idea which is quite prevalent and which, if true, Nurserymen should know it. I will quote: "He (Mr. Bell) grafts from bearing trees only." Now I have grafted from bearng trees as much as possible, merely that I may say yes! when asked, as I often am, "Do you cut your scions from bearing trees?" Not because I believe they will bear any sooner, nor grow any faster or more upright.

In the spring of '37 I set in trees which were just coming into bearing two scions cut from two different varieties of apple. The trees from which they were taken being but two years old. One bore 2 apples in '48, the other 13 apples last year. The trees from which these scions were taken have not yet blossomed.. All are equally healthy and stand side by side. I think comment on this unnecessary. More anon.

J. C. BRAYTON.

Recovering Dried Grafts.

It often happens that grafts of particular fruits are received in a dried or withered condition from being badly packed; and being supposed to be worthless, are thrown away. The writer once received in a small package a new and rare sort of apple, from a distance of some hundreds of miles, without any protection at all, and they were quite thoroughly *seasoned.*— They were encased in moss, and buried beneath the surface of the earth on a dry spot of ground. By spring they had gradually imbibed moisture, and become plump again, and on being set, every graft grew. Efforts of this kind often fail in consequence of applying the moisture too copiously and suddenly. Shoots in so withered a condi-

tion should receive it so gradually as to require some weeks at least for the completion of the process.—[Cultivator.

The "Rural New Yorker says:

Grape cuttings will bear the third year if they get a good start.

Apples and pears on dwarf stock from three to four years from the start—Cherries the same.

Raspberries always the second year.

If the season is very fine they will do more.

Transplanting Trees.

A correspondent of the *Michigan Farmer*, in his experience in the cultivation and treatment of fruit trees, says:

When I first commenced transplanting trees, I had the holes dug two feet deep, in diameter, (according to the direction of some horticulturists,) threw away the sub soil and filled in with rich surface soil.—They made a fine start, but soon the dry weather set in, which made some of them droop their heads. I thought that, to save them, watering them was necessary, and the result was, I lost some of my finest cherry trees. I am now satisfied, that if let alone they would not have died. I believe that more trees are killed that way than saved. If I had mulched them, instad of watering, I would not have lost any. I have since learned better; all trees that I set out now, are mulched. Out of 300 trees transplanted last fall and spring, I lost but one, and they have made from one foot to two feet growth.

I now dig the holes only from twelve to sixteen inches deep, loosen the sub-soil, and fill the hole nearly full with rich surface soil, and place pieces of sod, grass side down, on the top of which I plant the trees, fill in with good mellow soil, and then mulch them. I find that all the trees planted in this way, grow the best and are sure to live.

Newly transplanted trees require considerable pruning. I find those that are cut off short make the shaped trees.

Compost for Fruit Trees.—Fruit trees must be *fed*, if we would have them thrive and bear. Decaying leaves or the scrapings from the forest form one of the best ingredients for compost designed for any kind of fruit trees. Mr. Downing a distinguished fruit culturist and editor of the Horticulturist, gives it as his opinion that the best compost adapted for general use, with fruit trees, is that composed of swamp muck, or the black, decayed vegatable matter to be obtained in low grounds, mixed with wood ashes, at the rate of five bushels of fresh ashes or twice that quantity of leached ashes to a waggon load. This furnishes not only the requisite vegatable matter, but also those mineral manures which are essential to the production of fine fruit. This compost he would modify as follows, to adapt it to the different varieties of fruit trees.

For Apple Trees. To every cart load of the muck and lime mixture, after it has lain a fortnight, add two bushels of air slacked lime.

Pear Trees. To every cart load of the muck and ashes mixture, add a bushel of ground or dissolved bones, and two bushels of leached ashes.

Plum Trees. To every cart load of the muck and ashes mixture, add half a bushel of ashes, and a peck of salt.

Grape Vines. To every cart load of the muck and ashes mixture, add a bushel of lime, a bushel of ashes and half a bushel of gypsum or plaster.—[Maine Farmer.

Transplanting Trees.

In taking up trees for transplanting, regard should always be had to their size, and a due proportion should be preserved between the size of the tree and the amount of root attached. A deficiency of root may be partially, but not wholly compensated by a diminution or entire removal of the top; but there should always be root enough to supply nourishment to the body, (which, if large, requires the more to sustain it,) and top enough to digest it. A deficiency of top, however, is less fatal, especially in the early part of the season, than a deficiency of root; for if there be enough of the latter, the tree will readily make enough of the former as fast as it shall be needed; but if there be a deficiency of root, although the tree may live and even grow for a time on account of its innate, vital energies, yet it will very probably die before the close of the season.

It is for this reason that many trees that "start well" are often found to die in the latter part of summer, notwithstanding all other circumstances seem to favor their preservation. It is a mistake to suppose that if a tree once begins to grow all risk is at an end. The first season will not always decide; for if that shall be peculiarly favorable, a small root may sustain a tree through it; but the consequence of a small root may be a corresponding small top, and of both, a dead strip running the whole length of the tree occupying, perhaps, one-third, or half of its whole circumference.—Some trees have a much greater tenacity of life than others, and hence may grow with a much smaller root, or even with none at all. But with these exceptions there should always be a direct proportion between the root and the tenacity of life: i. e., the less the tenacity of life the greater should be the root.—[Rural New Yorker.

Down East, Feb. 17, 1851.

From the Michigan Farmer.

Plaster.

In the December No. I saw some remarks to the effect that we received the greatest benefit from plaster in a wet season. From my own experience, I can say nothing on this point, but I know it to be the opinion among farmers with whom I have conversed, that the greatest benefit is derived from it in a dry season. And the philosophy for it I had supposed to be this, that the plaster having quite a strong affinity for water, the dews (which in Michigan are known to be very heavy,) are held by it, and prevented from being evaporated upon the rising of the sun, thereby retaining, in a dry time, whatever moisture may come to the earth, together with the gases, for the benefit of the plant.

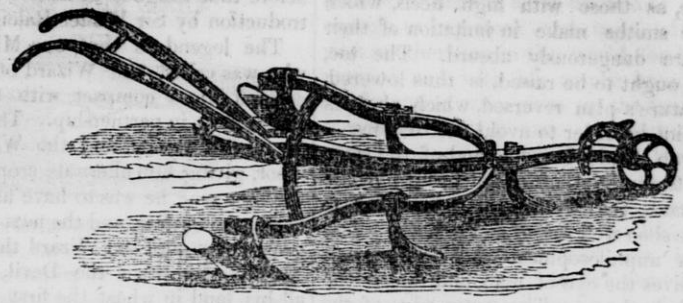
The first part of the growing season with us this year, was very dry, so that the hay crop was very light. One of our townsmen, while the drouth was at its height, seeing that his meadows bid fair to yield him no crop, bethought himself of trying an experiment with plaster. He immediately went to the plaster mill, only a few miles distant from his place, and brought home three tons of plaster, and applied it to his meadows. In a few days the effect was plainly visible, and the result was a heavy crop of grass, while his neighbors had a very light crop. He considers himself more than trebly paid for the outlay, in the increased yield this season, to say nothing of the future.

One of my neighbors sowed his clover seed in the chaff, upon wheat, this spring. The seed took well, and grew finely until the drouth came on, when it began to manifest signs of dying out. He made use of plaster freely, and saved it. The wheat also kept its rank and deep green appearance, while other fields appeared almost used up by the drouth. Others that seeded with clover in the same way, and at the same time, lost both seed and labor. I have no doubt, had plaster been used, the result would have been the same as in the case mentioned above. If any one of us are in error about the use of plaster, we would gladly know the truth, and not apply it injudiciously.

Maryland Farming—*A Great Turnep Crop.*—In our opinion, Charles B. Calvert, of Maryland, is the greatest grower of roots, for stock in the United States. His farm is known as Riversdale, seven miles towards Baltimore, from Washington city. The soil is sandy loam, and has been very severely cropped, and greatly reduced in fertility, until he undertook the renovation system, that has made such a contrast between his land and that surrounding him, which only bears a scanty crop of broom sedge and scrub pines. His turnep crop last year was 25,000 bushels upon about 30 acres. These have nearly all been fed to stock upon the farm, or at the National Hotel, in Washington, which he provided for. He keeps eighty cows, mostly Durhams, besides other stock.

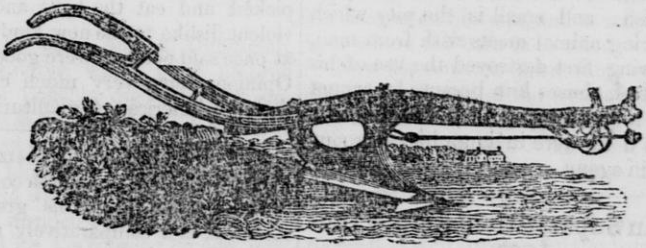
Manner of Feeding.—The turneps are cut up with a root cutter, some twelve hours before feeding time, and sprinkled with salt and bran. The salt entirely prevents any unpleasant taste in the milk. At the time, a quantity of cornstalks are cut, or rather ground fine, and these are fed to the cows, mixed with turneps at the rate of two bushels of stalks to one of turneps a day. Upon this feed, without any hay, the cows are kept all winter, and give milk all the time.—[American Agriculturist.

Grape Vines.—To every cart load of muck and ashes add a bushel of gypsum or plaster.—[Maine Farmer.



Universal Cultivator.

The Cultivator is a greater labor-saving instrument, for stirring the earth in the rows of corn and other crops. It is also well adapted for mixing manures in the soil, and pulverizing it after plowing. It leaves the soil much lighter and in better condition to receive the seed than when the harrow is only used. The above engraving represents a cultivator recently constructed. It is made longer than the common cultivators, and is all of iron except the centre-beam and handles, and the side-beams being of wrought-iron so curved, that as they are expanded or contracted, by loosening the iron key that confines the tooth in its place, are each moved forward or back to a point that will again cause them to work parallel with the centre-beam and at equal distances from each other. To these are fitted several sets of different formed teeth and scarifiers, of wrought and cast iron.



Sub-Soil Plow.

These plows are much used in different sections of the United States, and with great satisfaction. These plows are used by following directly after the team which turns up the surface-soil and in the same furrow. This is of great advantage to the crops, both in dry and wet land. In the former, the sub-soil being deeply broken up, and well pulverized, the moisture is retained much longer than it otherwise would be, and the roots of plants can descend much lower and wider for the their food: while in the latter, the excess of moisture filters below, and is readily carried off.

Horse Shoeing.

The following exceedingly sensible remarks are from the pen of Mr. Miles, Veterinary Surgeon to the Queen of England's Life Guards, and author of several valuable veterinary works. We commend them most particularly to the notice of every person who has that valuable, and almost indispensable animal, the horse, in charge. That class of persons very justly characterised by Surgeon Miles, as "asinine smiths," are invited to give their attention. —[American Agriculturist.

The shoes of the horse should be of equal thickness throughout, with a flat ground

surface, as those with high heels, which asinine smiths make in imitation of their own, are dangerously absurd. The toe, which ought to be raised, is thus lowered, and nature's plan reversed, which elevates the point in order to avoid obstructions.—The web should be wide, and of the same width throughout, instead of being pinched in, because the Vulcan operator likes to see the shoe well set off at the heels. This is both unphilosophical and detrimental; it deceives the eye of man, and injures the foot of the horse. The *outer* edge of the foot rests on the inner edge of the shoe, and the remaining width of the web protects beyond the hoof; so that the master who thinks his horse has a good open foot, only has to be proud of a bad open shoe, which both conceals deformities underneath, and invites with open arms a bad road to come and do its worst. The heels are made bare just where the navicular joint is most exposed; and if that be inflamed, what must the agony be when the unprotected foot treads on sharp flint? The horse falls suddenly lame, drops as if he had been shot—phrases in much too common use to require explanation; and small is the pity which the suffering animal meets with from man, who, having first destroyed the use of his victim's feet, abuses him because he cannot go; and imputes "grogginess" to him as a crime, as if he were in liquor like a groom, and not in agony.

Russian Superstition about Potatoes.

When potatoes were introduced into Russia, towards the end of the last century, the people conceived a great dislike to them and called them the "Devil's fruit" on account of some foolish tales that had been told of this now almost indespensable edible. One of the stories, was, that they were created on purpose for the Devil when he complained on being turned out of the garden, that he had no fruit. He was told to dig for it which he did, and found potatoes. Hence the common people of Russia, who are very superstitious, would neither plant nor eat them at first.

There is a curious and somewhat similar tale, in Scotland, about the introduction of potatoes into that country at a period long before that assigned in history for their introduction by Sir Walter Raleigh.

The legend is that one Michael Scott, who was called the Wizard of the North, entered into a compact with the Devil to rent a farm in partnership. The Devil was to furnish money and the Wizard do the labor, giving him alternate crops. That is, the first year, he was to have all that grew below the surface, and the next year all that grew above, and the Wizard the other part. Thinking to outwit the Devil, he planted all his land in wheat the first year and all in poatatoes the next, so the Devil got nothing but stubble and vines. But he beat the Wizard at last, for the severe system of cropping exhausted the land, so the Wizard could neither raise wheat nor potatoes, and he was obliged to grow more honest to his land as well as to his landlord.

It would be well for some farmers at the present day, who follow the same dishonest course, in the cultivation of rented land. as well as their own, to take the hint, or they may find themselves in a fair way of being ruined.

Some of the first cultivators of poatoes picked and eat the balls, and conceived a violent dislike to the new kind of fruit, and at once said potatoes were good for nothing. Opinions have very much changed since then.—[American Agriculturist.

The Properties of Maize, or Indian Corn.—The fact that starch could be profitably extracted from this great product of America, is a comparatively recent discovery. Yet, it is found to contain almost as great a proportion as wheat. The percentage of starch in the best varieties of corn, is abont 60 per cent.; nitrogenous subtances, some 15, with a good proportion of sugar and 10 per cent. of oil and gum. No wonder it has such faltering properties, as all practical men are well aware of its great superiority over every kind of grain for that purpose.

The amount of starch in sweet corn is very small, not over 18 or 20 per cenr.; but the percentage of sugar is very great. The nitrogenous matter about 20, gum 14, and oil, 11 per cent. If it could be made to yield as much per acre as the more hardly kind, it would be the most profitable because the most nourishing of all the varities.—[American Agriculturist.

Glass Milk Pans.

The superiority of glass milk pans over all others, so far as the preservation of milk and the facility of keeping them clean are concerned, is unquestionable; but whether they will prove the most economical in the end, will depend entirely upon the care with which they are used, and the accidents that befall them. Metalic pans are liable to oxidate or rust, and consequently are more difficult to keep clean; wooden ones absorb the milk, which soon turns sour, and require frequent scalding to keep them sweet; and earthen ones are more objectionable than any other from their weight, liability to break, and the destructive or deleterious qualities of their glazing.

Farming Scenes in the West.

About eight years ago a Dutchman, whose only English was a good natured "yes" to every possible question, got employment here as a stable-man. His wages, six dollars and board; that was thirty-six dollars in six months, for not one cent did he spend. He washed his own shirt and and stockings, mended and patched his own breeches, paid for his tobacco by odd jobs, and laid by his wages. The next six months, being now able to talk good English, he obtained eight dollars a month, and at the end of six more had forty-eight dollars. The second year, by varying his employment—sawing wood in the winter, working for the corporation in the summer, and making gardens in the spring—he laid by a hundred dollars; and the next year one hundred and fifty-dollars. With this he bought 80 acres of land. It was as wild as when the deer fled over it and the Indians pursued him. How should he get a living while clearing it? Thus he did it; he hires a man to clear and fence ten acres; he himself remains in town to earn the money to pay for the clearing. Behold him already risen a degree—he is an employer! In two years' time he has twenty acres well cleared, a log house and money enough to buy stock and tools. He now rises another step in the world, for he gets married, and with his amply broad-faced good natured wife, gives up the town, and is now a regular farmer. In Germany he owned nothing, and never could; his wages were nominal, his diet chiefly vegetables, and his prospect was, that he would be obliged to labor as a menial for life, barely earning a subsistence, and not leaving enough to bury him. In five years he has become the owner in fee simple of a good farm, with comfortable fixtures, a prospect of rural wealth, an independent life, and, by the blessing of heaven and his wife, an endless posterity. Two words tell the story—industry and economy! These two words will make any man rich in the West. —[Indiana Farmer.

Barn Cellars.—A good cellar under a barn is important on many accounts.—We now name one advantage which is not often alluded to—the room obtained is the cheapest that the farmer can procure. Cellars are costly in cities, but a farmer who is about building a barn, has all the material for a cellar on his farm, and usually near the spot where the barn is to stand.

Now his common farm laborers can do the principal part of the work on the cellar, and at odd jobs when business is not pressing. Not much skill is required to lay a cellar wall—one master workman for a few days will be the whole outlay for a cellar 30 by 40. This cellar needs no distinct roof—it is well covered by the barn over it. How can a farmer obtain so much valuable room at so little cost.

If he would not have his cows or hay a single foot below the sills of his barn, he may have his hogs there, or his carts and wagons. It would pay cost to have a cellar for these if nothing else.

But how is a farmer to keep a plenty of loam through the winter, to throw under his cows when occasion requires, in order to keep the place where they stand clean and wholesome? he can keep it nowhere but in a cellar. The same may be said of his roots intended for his stock—[Mass. Plowman.

Among the natural causes which affect the vegetation of countries, the influences of temperature is that which is most obvious to the senses.

From the New England Farmer

Profits of Poultry.

Mr. Cole:

Sir—As many of your readers are interested in poultry, I send you my experience for the last ten months, hoping to add something to the common stock of knowledge, upon this subject. About the first of March, I bought forty hens. Some of these were soon killed for family use, and others were added to them as convenience required, during the spring and summer; so that the old flock did not vary much from forty at any time. They laid in March, 425 eggs; April, 511; May, 330; June, 280; July, 246; August, 834; September, 159; October, 70; November, 75; December, 204.

On the 31st of December, the account stands thus:

	Dr.
64 hens, $31,85; 10 doz. eggs, $3,76; 34 chicks $4,35. Total stock,	$39,96
29 bush. corn, 11 bush. meal, 10 do. oats, 10 do. potatoes, meat, $2 12 Total food,	39,81
Making the whole expense,	$79,77
	Cr.
Egggs used and sold at market prices,	$34,92
91 chickns and fowls, " "	33,25
5 loads of manure,	5,00
28 blood fowls on hand,	35,00
32 common and crosses,	15,00
	$123,17
Deduct expense,	97,77
It leaves a profit of,	$43,40

The fowls were principally of the common kind, and a cross between the common and Dixon Shanghaes, perhaps ¼ of the latter. During the summer, they were confined in a large yard, furnished with gravel, oyster shells and fresh water. Their roost, in the colder months, was in a barn cellar, and common loam from the fields was kept under them to receive their droppings. These were also occasionally sprinkled with plaster of Paris, to absorb the gasses, and perhaps once a month removed. Their place was supplied by a new layer of loam and the process of sprinkling with plaster repeated. Charcoal dust, or earth from coal pit hearths, is a much better article to keep under them where it can be had. With proper care and more earth, I think twice the quantity of manure could have been made, of equal value with that commonly carried from the barn-yard. The cellar is sufficiently open for ventilation, and I have in consequence lost but few fowls.

During the present month, which shows a large increase in the laying, notwithstanding the cold I have fed them freely with small fish, which as they were to be had by the use of a scoop net, in a salt water creek close at hand, I have not set down in the account. These not only furnish them with animal food but the bones must afford lime for the shells of the eggs. Where fish can be had conviently, either from the water, or the offal from the fish market, it will prove a good article of food.

The poultry has paid tolerably well, though with better management it would have paid much better. I have learned something in egg and chicken culture, the past year, and expect to learn more the next.—A hen, like every other creature of God, for which man has a use, pays its way, just as it is well cared for. If it don't pay it is a safe inference, either that you have no use for it, or that you do not manage it right. Find out the laws of its well being, and observe them in its management, and you will have a healthy and profitable animal. Farmers, and indeed all who have time and room to care for them, have a use for poultry. Keep them well and they will pay you. Try it and see.

Stonington, Ct., Dec. 31, 1850.

For Farmers.—Dr. R. T. Baldwin has recently made public the result of several years investigations and experiments upon manures, and the various ways to fertilize the soil. He states that the best and speediest way to fertilize any soil is to cover it over with straw, bushes, or any raw material, so as to completely shade it. The surface of the earth thus being made cool, dark, damp, and close, soon undergoes a chemical process like putrefaction, and become highly fertilized. This plan of fertilizing, he says, may be applied with success to any soil whatever, no matter how poor, and the result will be astonishing.—[Oneida Herald.

From the Michigan Farmer.

Facts for the Curious.

FRIEND ISHAM:

Reading, a few days since, in the "Genesee Farmer," a curious case of transmutationin corn, I have concluded to give your readers (in case this is published) a case that came under my observation, of transmutation in the potato:

A few years since, while planting potatoes, I came across an "old potato," as they are styled, one that grew two years before. It had lain in the summer previous, in a dry situation, and from each eye there were one or two, and in some instances three potatoes, about the size of a marrow-fat pea. This potato with its tiny progeny, was planted, and a stake set up to mark the spot. Well, what of all this? Why, the potato planted was a pink-eye, and those that grew were a red variety. The small ones grew only, and their product was about the size of a walnut. I am positive as to the identity of the "old potato," both from its physiognomy, and the fact I had no other that season. Is there any principle in vegetable physiology by which this can be explained?

A neighbor had, this season, some six or eight stalks of corn, scattered over six or eight acres, that were eleven or twelve feet in height, and when the frost came they had just shown the tassel. One of these I carried to the State Fair; it was ten feet to the ear, which had just set. The stalk, throughout, was of gigantic proportions, measuring six inches in circumference at the height of ten feet, and having "brace-roots" projecting more than two feet from the ground. These transmuted stalks grew from the common yellow dent. Is it possible that pollen from southern Ohio could have wandered so far, and thus produced this strange result?

R. RANDALL, JR.

Clinton, Nov. 8th, 1850.

ROOTS IN DRAIN PIPES.—I once found in a drain 4½ feet deep, a mass of roots which had completely choked the inch-and-a-half pipe, though laid but 18 months.—These roots were from a mangel-wurtzel crop just removed off the land.—[Agricultural Gazette.

Facts for Farmers.

Farmers about to build a dwelling, should know, that by carrying up a large flue in the chimney's back from the cellar, and having a window or two opening to the north or cold side of the house, out of the cellar, they can have as good a milk room under their houses as could be had over a spring that may be perhaps two hundred yards or one-fourth of a mile off, which is so pleasant to go to in bad weather, especially by the female portion of the family.

The floor should be flagged with stone, as they can be kept sweeter or colder than even cement or brick, which absorb "spilt milk," and thus taints the atmosphere.—The walls and ceilings should be plastered, to facilitate white-washing and cleansing. Nothing but milk and cream should be kept in the room, as a pure atmosphere for cream to rise in, is absolutely essential for the making of sweet butter.

What is needed to have a cool sweet cellar, is a current of air, which will be secured by the aforesaid flue and the open windows, as a strong current of air is at least ten degrees colder than the same air at rest.

Farmers ought to know that churning can be done with any good churn in from ten to fifteen minutes, as well in winter as in summer, by having the temperature of the cream right, say fifty-eight to sixty degrees.

The temperature of an ordinary sitting or living room in winter, to be comfortable is sixty-five to sixty-eight degrees, and a closet opening into such a room would be the best place to keep the pot in winter.—In the summer the cream can be readily reduced to the right temperature, by breaking up clean pieces of ice and putting it into the churn.

A thermometer, which is necessary to regulate these matters, costs but one dollar, and such an investment every farmer ought to make, who has churning to do, and thus save labor and time, which is money—and make this much dreaded part of the duties of farmers' wives and daughters' much pleasanter and easier—and for this I know they would thank your modest correspondent if they knew him.—[Lewis County Republican.

Potatoes and Tomatoes.

It is not so generally known as it deserves to be, that the tomato, when grown among corn, is far superior in flavor to those grown in the common way, They must of course have a fair chance of room to grow, and not be too much crowded by the corn.—Those who can appreciate the good qualities of this vegetable when in perfection, will find this mode of growing them to secure all they can ask; at least such has been my experience.

It is maintained, by some respectable experimenters, that potatoes planted among corn are not so liable to rot; and this opinion has been confirmed by a sufficient number of trials to render it worthy of attention.

The soundness of potatoes in these cases, and the superior flavor of the tomatoes mentionad above, are probably owing to the same cause, which is, that corn, from its superior powers of attraction and assimilation, approximates to itself the soluble nitrogenous matters contained in the soil, and thus prevents the less energetic plants in its neighborhood from absorbing those compounds of nitrogen which experience has shown to be injurious to the quality of their products. The best potatoes are those which contain the largest proportion of starch, and this is but carbon and the constituents of water in another shape. Azotized manures, which are found so essential in the cultivation of grain, are, on the contrary, detrimental when absorbed into the circulation of a plant which does not require them for the perfection of its products, and which is, in fact, unable to digest such concentrated nutriment. Every one knows how much inferior the sweet potatoe becomes when grown upon clay soil; and Liebig speaks of a peculiar kind of turnip, which, under the same circumstances, loses all the good qualities for which it is noted when cultivated in sandy land.

Those plants in which compounds of carbon predominate, may be said to form a lower grade, in the scale of vegetable life, than that occupied by those containing more nitrogen. The former are the unassisted products of nature—the forests and the wild grasses with which a fertile country is covered, before the busy hand of man has entered upon its labor; and the latter are the golden harvests which his skill and industry secure, to increase his comforts, or add to his wealth.

A portion of nitrogen is undoubtedly necessary to all vegetables, but it is equally certain that we sometimes apply more of the substance than is required to produce the best results. If we admit, with Liebig, that "plants all the soluble matters present in the soil, as a sponge absorbs water with all that it contains in solution indiscriminately," we must be impressed with the importance of adapting the supplies of food to the necessities of the plant, and of withholding, as far as possible, that which is useless or detrimental.

It is said of the Chinese, that they manure the plant more than the soil; and certainly, to do this understandingly and effectually, implies the perfection of the highest accomplishment within the ambition of a scientific farmer.—[Working Farmer.

Farming in North-Western Wisconsin and Minnesota.

From what we can gather from various sources, we should conclude that this portion of the West is as well adapted to agriculture, if not better than what is generally regarded as the more favored portions of Wisconsin. We are informed by those who have learned from personal observation that the potatoe rot and smut, which have proved so destructive in other parts of the west to the wheat and potatoe crops, have not yet made their appearance there.

The following items upon the advantages which *North-Western Wisconsin and Minnesota* hold out to settlers, we select from sundry numbers of the St. Croix *Enquirer* a spicy, well conducted little Journal published at Willow River, on Lake St. Crox:

Cattle Fattened on Rushes.

WILLOW-RIVER, Wis., Feb. 12.

MESSRS. EDITORS:

On the 17th of Septemer I started with a drove of cattle from Rock Island, Illinois, and arrived at Willow-River on the 17th of October. The grass had dried up very much, so that my cattle were falling off very fast. I then drove them to Rush

river, and turned them out on the rushes, where they have gained rapidly ever since; so that I drove out of the rushes on the 31st day of January, fifteen head of beeves, and slaughtered three at Willow-River, and some of them gave me thirty pounds of rough tallow. One three-year-old beef weighed 590 pounds.

Yours, respectfully,
MICHAEL BARTLETT.

DISTANCE FROM MADISON TO WILLOW-RIVER.—We learn from Mr. J. Bowron, who has recently come through on the southern road from Madison to our village, that it is in contemplation to open a direct road from Madison to the Falls of Black River, which will shorten the distance 40 miles; he came through in eight days and says a team can travel the road with a load of twenty-five hundred pounds. The distance is 276 miles to Willow-River, and between the several stopping places, as follows:

From Madison to Lodi, 26 miles; Matt's Ferry 18; Reedsburgh, 16; Upper settlement in the Baraboo country, 10; Van Oston's 10; Kickapoo, 16; Metzer's, at the intesection of the Willow-River road, 14; Pettit's, 20; Robinson's 16; Black River Falls, 8; Beef River, 28; Mouth of the Oclair, 21; Gilbert's Mill, 25; Brock's, 20; Willow-River, 28. Total, 276.

CROPS ON THE OGALLY RIVER.—Mr. T. Curtis informs us that he put in, on the Ogally river, last fall, 15 acres of winter wheat, which looked very fine when the winter set in, and is preparing to cultivate about 100 next spring; 30 acres of which will be of potatoes, 5 of onions, 25 of oats, 15 of corn, 10 of ruta bagas, and 15 to an orchard. His farm is situated one mile from the Ogally Mills, owned by Messrs. Carson & Eaton. Mr. Curtis cultivated the soil there last year, and knows its capabilities. He has split 12.000 rails the present winter.

Mr. S. Hunter also informs us that Mr. M'Cane sold corn, oats, buckwheat, and potatoes from his farm above the falls on the Chippewa river, 80 miles from here, the products of which amounted the past season, to nearly $2,000,

Mr. M'Cane at the foot of Lake Pepin, sold from his farm the past year $2,700 worth of produce; he has taken several loads of his corn, which yielded 40 bushels per acre, and buckwheat to Woodruff's steam mill at Point Douglass, a distance of 60 miles, the present winter and had it ground.

The farmers find the best home market here of any portion of the Union, owing to the large demand for grain in the pineries the year round, and the large number of Indians to be supplied in Minnesota, together with a large annual emigration.

The price of provisions at Willow-River the present time are as follows:

Flour $6,75 per barrel; corn 80 cents per bushel; peas and beans, $1,50 per bushel; buckwheat flour, $3,50 per hundred; onions $1 per bushel; oats, 50 cents per bushel; potatoes, 60 cents; ruta bagas and English turnips, 25 cents; cabbages 10 cents per head; mess pork, $20 per barrel; fresh beef $6,00 per hundred.

COUNCIL BLUFFS, Jan. 18th, 1851.

MR. EDITOR:

How is the winter at Galena? not so fine as with us, I will wager a Buffalo tongue. I have never experienced such beautiful winter weather. What will your farmer readers think, when I tell them we winter our cattle on the Rush Bottoms without feeding even corn or hay, and they look as well in the spring, as any I ever saw in Jo Daivess county. This is beyond doubt the best stock, as well as wheat growing, portion of Iowa. I challenge successful contradiction. We are in high hopes, as we see Council Bluffs is attracting much attention all over the Union, as the best and only good crossing in the State of Iowa, for the Pacific Railroad, and judging from what we can learn from the Iowa City papers, the legislature of this State have so determined the laws of Iowa, in full force and effect in Western Iowa, and I had rather live here than in any portion of the West I have ever been. Can't you visit us next spring and take a Buffalo hunt. Truly yours,

[Selected. IOWA.

The "seventeen year locusts," which are said to appear once in seventeen years, will return in the summer of this year, 1851, their last appearance being in the summer of 1834.

EDITOR'S TABLE.

State Agricultural Society.

In this number of the Farmer, we publish the final proceedings of the meetings held at Madison on the 8th and 12th of March, to form a STATE AGRICULTURAL SOCIETY. From the lively interest taken in Agricultural improvement by several whose names we notice among the members of the society, selected for its officers, we have a sure guarantee that this organization will prove an active and efficient one. E. Drury and R. C. Otis, Esqs. have been for years extensively engaged in sheep husbandry. They have imported into the State some of the best sheep that any State can boast of. H. JOHNSON Esq., with a few other kindred spirits, have diffused a feeling in Kenosha County, which has been felt in Racine, Walworth and Rock.

It is proposed to hold a State Fair at Janesville, on the first Wednesday and Thursday of October next.

☞ We are indebted to HON. H. EWBANK, Commissioner of patents, for a package of seeds containing some twenty varieties. Many of them we notice by the wrappers were imported for the Patent office. We have duplicate packages of almost every kind received, and will share them with such of our patrons as speak first, with a promise to cultivate them carefully.

DICTIONARY OF MECHANICS.—The 24th No, of this valuable publication is at hand, we can say nothing more in commendation of this work than we have often said before. It should be in the hands of every mechanic who wishes to improve in the mechanic arts.

THE FARMER'S GUIDE.—This is another valuable publication, adapted to the wants of the agricultural community. We have often alluded to it and urged our patrons.

These two publications we regard as the best now issuing from the press.

MANITOWOC COUNTY HERALD.—This is another new visitor to our table. It is a neatly printed sheet, published at the flourishing village of Manitowoc, by CHARLES W. FITCH.

THE DEPERE ADVERTISER is another new paper published at Depere by S. E. Baldwin & Co. It is a good sized sheet, and well got up in every respect.

We have no better index to the rapid improvement of northern Wisconsin, than the increasing number of weekly newspapers there. Judging from the fever here for emigrating north, we think that portion of the State must be receiving a larger portion of settlers than any other.

CUTTING HICKORY TIMBER.—A Virginia Farmer says several years experience has convinced him that hickory timber, cut upon the 4th, 5th, and 6th days after the new moon in August, will not be destroyed by the worm or borers, while that cut at any other time may be eaten throughout.

NEW COUNTIES.—During the present session of the Legislature, no less than seven new Counties have been formed, to-wit:—Bad Axe, La Crosse, Outagamie, Waupaca. Waushara, Door, and Oconto.

SIMPLE REMEDY.—The simple application for a horse's feet which are brittle, or hoof bound, I learned from an English shoer, and have tried it with good effect, and have never seen it fail, I send it to be used as you may deem proper:

"Mix equal parts of tar and some soft grease, having the foot clean and dry, apply it hot, not boiling, to all parts, let it run under the shoe as much as possible. In bad cases the application should be made every day, for a week, and then two or three times a week, till the foot becomes strong and smooth.—[Genesee Farmer.

NEW DISCOVERY.—The Haverhill Banner states that Mr. Leonard Marble of that town has lately discovered a new ingredient in the manufacture of enameled leather, that prevents its cracking or peeling. However roughly it is handled, it retains its gloss and will not crack.

☞ The Legislature of Iowa, at its present session, have laid off and named fifty new counties in that State.

CONTENTS.

WISCONSIN & IOWA FARMER,
AND
NORTHWESTERN CULTIVATOR.

VOL 3. RACINE, WIS., MAY, 1851. NO. 5.

PUBLISHED ON THE FIRST OF EACH MONTH, BY
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F. K. PHŒNIX, } EDITORS.
MARK MILLER, }

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Postmasters and all others who feel an interest in the circulation of the FARMER, are invited to lend their aid in procuring subscribers and extending its circulation.

Racine Agricultural Society.

At a meeting of the Executive Committee of the Racine Co. Agricultural Society, held at the house of Jesse D. Searles, in the town of Yorkville, on Saturday, the 12th day of April, 1851: N. R. Norton, Presiding; E. W. Washburn, Sec'y.

The following list of crops, stock, and Articles, for which premiums will be awarded—was made out:

		1st qual.	2d qual.
1	Best cultivated farm,	$10 00	$5 00
2	" field of Indian corn, not less than 1 acre,	6 00	3 00
3	" field winter wheat, not less than 1 acre,	5 00	2 50
4	" field spring wheat, not less than 1 acre,	5 00	2 50
5	" field of oats, not less than 1 acre,	3 00	1 00
6	" field of barley, not less than 1 acre,	3 00	1 00
7	" field of potatoes, not less than ½ acre,	4 00	2 00
8	" field of carrots, not less than ½ acre,	2 00	1 00
9	" reclaimed marsh of not less than 3 acres,	4 00	2 00
10	" working oxen,	5 00	2 50
11	" steers, 4 years old,	4 00	2 00
12	" steers, 3 years old,	$3 00	$1 50
13	" yearlings,	2 00	1 00
14	" calf,	1 00	0 50
15	" bull, over 2 y'rs old,	5 00	2 50
16	" yearling bull,	3 00	1 50
17	" bull calf,	2 00	1 00
18	" native milch cow,	5 00	2 50
19	" " heifer not over 3 years old,	4 00	2 00
20	" native yearling,	3 00	1 50
21	" " calf,	2 00	1 00
22	" blooded cow,	5 00	2 50
23	" " heifer not over 3 years old,	4 00	2 00
24	" blooded yearling,	3 00	1 50
25	" blooded calf,	2 00	1 00
26	" stallion for draft, 4 years old, and over,	5 00	2 50
27	" stallion for carriage, over 4 years old,	5 00	2 50
28	" stallion 3 years old,	4 00	2 00
29	" gelding for draft, 4 years and over,	4 00	2 00
30	" gelding for carriage 4 years and over,	4 00	2 00
31	" breeding mare,	5 00	2 50
32	" sucking colt,	2 00	1 00
33	" gelding or mare, 3 years old,	3 00	2 00
34	" gelding or mare, 2 years old,	3 00	2 00
35	" yearling gelding or mare,	2 00	1 00
36	" buck,	3 00	2 00
37	" ewe,	2 00	1 00
38	" boar,	2 00	1 00
39	" sow,	2 00	1 00
40	" 12 lbs. butter,	2 00	1 00
41	" cheese, not less than 10 lbs.,	2 00	1 00
42	" ploughing ¼ acre in one hour,	5 00	2 50
43	" plough,	2 00	0 00
44	" fanning mill,	1 50	0 00
45	" ox yoke,	0 50	0 00
46	" churn,	0 50	0 00
47	" threshing machine,	5 00	0 00
48	" printing,	1 00	0 00

49	"	cabinet work,	1 00	0 00
50	"	ten yards cassimere,	2 00	0 00
51	"	ten yards satinett,	1 00	0 00
52	"	ten yards flannel,	1 00	0 00
53	"	ten yards tweed,	1 00	0 00
24	"	ten y'ds sheep's grey	1 00	0 00

There will be premiums awarded for the best variety of apples, pears, plums, quinces, grapes, &c.

Also for onions, beets, cabbages, turneps, squashes, radishes, &c., either in books or diplomas—which shall be discretionary with the judges of the Fair.

Ladies will be rewarded with premiums at the discretion of the judges, for the best quilt, shirt, socks, mittens, woolen gloves, and the best specimen of needlework.

Resolved, That the Annual Fair of said Society be held at the house of JESSE D. SEARLES, in the town of Yorkville, on the 2d Tuesday of Oct. next, and continue as circumstances may direct.

Resolved, That the Ex. Board adjourn, to meet at this place, on the 2d Tuesday of June, next, at 10 o'clock A. M.

N. R. NORTON, PRES'T.
E. W. WASHBURN, *Sec'y.*
Yorkville, April 12, 1851.

For the Wisconsin and Iowa Farmer.

Richmond Agricultural Society.

RICHMOND, WALWORTH Co., Wis.,
March 19, 1851.

MR. MILLER:

Sir—Herewith I send you an account of the formation of an Agricultural Society in this town, the insertion of which, in your valuable periodical, will oblige,

Yours,
Very Respectfully,
R. H. COCKERILL.

AGRICULTURAL MEETING.

A meeting of the Farmers was held at the House of George W. Paul, Esq., in the town of Richmond, on the evening of the 24th of February, 1851, for the purpose of organizing an Agricultural Society.

The meeting was organized by choosing RICHARD BRADT Chairman, and ROBERT H. COCKERILL, Secretary.

The object of the meeting was stated by George W. Paul, Esq., to be, to improve ourselves, and promote the diffusion of useful knowledge among farmers, in regard to the science and practice of Agriculture, that this profession may be more honored and better rewarded than it now is, we do hereby organize ourselves into a Society, under the name of the "Richmond Agricultural Society."

George W. Paul, Esq., J. E. Irish and Robert H. Cockerill were appointed to draft a Constitution.

The Committee withdrew, and in the course of an hour reported the following Constitution.

ARTICLE 2. The name of this Society shall be, the "RICHMOND AGRICULTURAL SOCIETY."

ART. 2. The object of this Society shall be to encourage Agricultural in all its various branches.

ART. 3. The officers of this Society shall be a President, two Vice Presidents, a Recording Secretary, a Corresponding Secretary, a Treasurer, and three Directors, all of whom to be elected at the Annual Meeting in each year.

ART. 4. The President shall preside in all the meetings of the Society, and may call Special Meetings thereof at such times as he may deem necessary; and, in his absence one of the Vice-Presidents shall be designated to preside, and in case a vacancy shall occur in the office of President, such vacancy may be filled by the Board of managers, by ballot, from the Vice-Presidents, by a majority vote of the said Board.

ART. 5. The President, Vice-Presidents, and Directors shall constitute a Board of Managers, to transact all the concerns of the Society, one of the Vice Presidents, and any two of the Directors may form a quorum; they shall fix the time and place of holding the Annual and Regular Meetings of their Board and Society, shall establish such Rules and By-Laws, for the government of the Society, as they may think proper, subject always to an appeal by any member of the Society, which appeal shall be decided by a majority vote of the members thereof, at any meeting present, and voting thereon.

ART. 6. This Constitution may be amended at any Annual Meeting by a majority vote of the members present and voting thereon.

SCHEDULE.—For the purpose of organizing this Society, the meeting which shall adopt this Constitution, may elect all the officers named therein, who shall possess all the powers delegated, and perform all the duties required thereby; which was read and adopted article by article.

The following officers were then elected:

President—GEO. H. PAUL, Esq.,

Vice-Presidents—Richard Brady and Joseph E. Irish.

Recording Secretary—Robert H. Cockerill.

Corresponding Secretary—Oliver H. Smith.

Treasurer—Henry Hess.

Directors—Robert James, Andrew Bradt and Geo. J. Paul.

Resolved, That this Meeting adjourn and meet at this place on Monday, March 10th, at 6 o'clock, P. M.

RICHARD BRADT, President.
ROB'T H. COCKERILL, Sec'y.

Night Soil---Its value.

The best of all manures is the one which in our country is almost universally wasted. In Belgium, where agriculture is carried to great productiveness, they order things differently." There, the estimate is, by *nice* calculation, that it is worth $10 for every individual, man, woman and child. We traverse sea and land, send to Africa and South America to bring elements of fertility which at home we throw away on every farm in the country. What an immense amount is wasted in our cities! It must be the most valuable, containing the elements of all kinds of food consumed by man, and in returning these to the soil, we return the identical constituents which former crops and animals have taken from the land. Night soil contains the phosphate of lime, which is indispensable to the growth of animals' bones and to the nutriment of plants, and which is not supplied from the atmosphere, like carbonic acid and ammonia. All fluid and solid excretions should be preserved by mixing them with burnt clay, saw-dust ashes, peat or wood charcoal, &c.

We have a great deal to learn, and also, much more to practice, that we have learned.—[The Plow, the Loom, and the Anvil.

Culture of the Cabbage.

Fortunately the cabbage can be cultivated by the most simple and easy means.—It grows in most soils and produces its beneficial heads nine months in the year. The ground must be rich, or made so by a good coat of manure, as they have strong tapering roots. Digging or plowing deep is very essential. Indeed, this is too much neglected in the culture of all culinary crops.

For the late Summer, Fall and Winter supply, sow the seed from the first of April, to the first of May, as directed for the September sowing. The sorts are Early Dutch, Drumhead, Bergen, Savoys, and Red Dutch; sow also a few large York. They will come in July or August, and be found useful for filling up vacant ground or patching. Transplanting may be done in May, June, and July as circumstances will admit. When planting out in summer, as the weather is frequently very dry and hot, the ground should be fresh dug, the plants carefully lifted (having given them a copious watering the evening previous,) and their roots dipped into a puddle or mush of cow dung, soot, or earth, before planting; then dibble them in firmly, give a good watering, and a certain growth will follow. The rows may be two feet apart, and eighteen inches from plant to plant.

As the crop progresses, hoe frequently and deep; destroy every weed, and as the plants grow, draw earth round the stems, which will strengthen and forward them. When cabbage heads have been cut, the stumps should be dug up every week and deposited in the rubbish heap. It is waste to allow them to sprout and grow, or decay and evaporate in the air. Some seasons, the fly (a small black beetle) destroys the plants as soon as they appear fairly above the ground. Soot, air-slacked lime, and wood ashes, sprinkled over them, is in part a preventive. Others destroy them by having a hen cooped, allowing the young chickens to have free access to the plant from which they exterminate the flies. I invariably grow my scarce seed in boxes elevated eighteen inches above the ground, entirely out of the reach of this insect, which does not appear on elevated objects. This operation requires more attention in watering, but a certainty is always gained by it.—[Buists Family Kitchen Gardener.

For the Wisconsin and Iowa Farmer.

Wisconsin--Face of the Country--Failure of Crops, &c.

FRIEND MILLER:

In my last communication to the Farmer, I endeavored to show that our dry lands in this level country might be compared to the high lands in a hilly country, and that our marsh lands were in the place of bottom lands in a more uneven country, and that the dry lands have had by means of annual conflagrations, and the winds and rains deposited in the marshes, a large share of their vegetable wealth; and that in this country, the Farmer had commenced cultivating the poor lands, while in a more hilly country the first improvements are made on the bottom lands.

The results that must be expected from this beginning is, that the lands here which are first brought under cultivation, will, unless manured, fail to produce large and profitable crops, as soon as the vegetable matter contained in the sod is exhausted. Also, it will be observed that after the fallow is broken up and exposed to the strong winds and wash of the rains, the land is much more impoverished than in a more uneven country, and that all this strength of the dry grounds is deposited in the marsh.

The attention of the prudent farmer will immediately be turned to his marsh lands for more objects than one. They contain a mine of manure to fertilize his up or dry lands. And they, if rightly cultivated, will yield him a bountiful supply and will repay his labor. Let him, therefore, stock his farm with cattle, mow his marshes and apply the manure to his dry lands and bring them up to the highest state of fertility. But to do this, he must cultivate and improve his marsh lands. They must be drained by ditches on every side, so as to prevent the cold springs from coming into them, and when made sufficiently dry, they should be broken up and brought into good improved meadow with the best cultivated grasses; and when it can be done with propriety, the farmer should carry from the marsh, soil to fertilize his dry grounds.—The bogs, roots and refuse matter should all be laid into heaps, and not burned, but decomposed so as to make manure, and as soon as suitable, should be carted on to the up-lands.

In this way the industrious and prudent husbandman will accumulate loads of manure by constantly heaping up every thing that grows on his farm which is suited for no other purposes. Such as bushes, brush, stalks of mustard, thistles, course grass, and other weeds not useful for feed, and let the door yard be kept clean, and the garden and lawns cleared of every unprofitable thing; let the leach tub, the sty, and the barn-yard, all pay tribute to compost, and when you can obtain the sawdust from the mechanic's shop, or the saw mill, add that liberally, and you will find little need to import guano to stimulate the growth of your crops.

Especially I would caution the new beginner not to be too anxions to burn up all the brush and refuse matter. Cut and pile out of the way, and in a short time you will have the best kind of manure to raise your heavy lands with, if you have any. and if not, spread it around your fruit trees and vines.

M. B. B.

For the Wisconsin and Iowa Farmer.

Corn for Fodder.

FRIEND MILLER:

The following is the result of an experiment made the last season in sowing corn as a svbstitute of hay for fodder.

I sowed about two acres the fore part of June; abut the first of September it was cut, and after being thoroughly cured, a square rod was weighed, and found to yield at the rate of eleven tons and four hundred weight to the acre.

On feeding it out, I ascertained that a tun of hay would last about as long as two tons of corn-stalks, but cows would give more milk on the latter and look better.

The cost of raising &c., is as follows:

2 acres of Plowing at $1	$2 00
3 bushels seed per acre, 50 cts. per bushel,	3 00
Harrowing and rolling, $1,	1 00
6 days cutting and drying at 75 cts. per day,	4 50
Drawing and stacking	6 00
	$16 50

Equal to about 75 cents per ton.

Where land is cheap, and marshes convenient, I think nothing would be gained in sowing corn, except a small quantity for milch cows; but where land bears a high

price, and dairying is the principal business, I am satisfied that it would be an object to raise it, and if cut, bound, and set up in stooks, so as to dry without exposure to weather, it will make feed of a very superior quality.

GEO. D. CURTIS.

Rosendale, April 5th, 1851.

For the Wisconsin and Iowa Farmer.

Sap in Vegetables and Trees.

FRIEND MILLER:

I propose answering the interrogatories contained in the April No. of the Farmer, relative to "Sap in Vegetables and Trees," by James Cleveland.

This I shall attempt to do in a brief and direct manner, stating facts, without stopping to offer the evidence, which would lead to a lengthy article:

1st. "Does the sap in the sugar maple ascend or descend in the spring?"

Before answering we must define what we mean by the term *sap*. Sap, in vegetable life, corresponds to chyle in the animal economy; it is food digested, (in part at least) and ready to undergo further changes in the leaves, before it is prepared to add growth and new matter to the stock, roots, &c. It is composed in its simplest form of water, mucilage, and sugar. In the spring, as soon as the warm and genial sun awakens vegetable forces—vegetable life, the sap of the maple commences moving from the roots up the trunk through the wood — principally, through the sap-wood, called in botany *Alburnum*. The supply of sap is furnished by the minute rootlets, or *spungioles*, which perform the office of so many stomachs; they absorb the elements of nutrition together with water, and subject it to a process of digestion. At this time the buds swell and the leaves are unfolded, through whose net-like system of vessels the sap circulates, where it imbibes additional nourishment from the atmosphere and undergoes further changes by the action of light and air. After these important changes, it is no longer sap, but the true juice of the tree, corresponding to the blood of animals, containing all the principles of new growth. This "true juice" now commences its *descent*, not through the wood, but through the inner bark, *liber*; distributing, as it descends, new matter—forming a layer, or anular ring, of new wood over the whole trunk, and extending, enlarging and multiplying roots. This process is continued with greater or less energy during the whole season of growth. During winter, or the period of rest, the sap does not retrogade or return to the roots, neither is all the "juices"–blood if you please —expended, but stands still at its post, ready to obey with new energies in the spring, the same laws and perform the same movements.

2d. "Does the sap circulate the same in plants as it does in trees?"

Yes; the same general laws govern all vegetable life, modified of course by difference of structure, constitution, &c., &c.

3d. "Are the properties or sustaining qualities of the sap extracted from the earth or atmosphere, or both?"

From both. Some plants derive most, or nearly all their nourishment from the atmosphere, while others obtain most from the soil; but perhaps all derive more or less from both sources.

P. R. HOY.

Racine, April 1st, 1851.

Millet for Fodder.

In answer to many inquiries in regard to raising millet, by those who were not subscribers to the first volume of the Farmer, we republish the following article from vol. 1, page 111.—[Ed. Farmer.

It is worthy the notice of Western farmers, that in the absence of meadows—and very few have turned their attention to, or have been successful in, the cultivation of grasses, so far at least as our State is concerned—millet may be profitably cultivated as an article of fodder. When sown on good ground, such as would grow a good crop of corn, it yields more abundantly—say from two to four tons the acre. One bushel sown upon four acres of good rich soil, has produced three hundred bushels of seed and six tons of fodder. It is said to succeed the best on light land, if it be in good condition. "It requires in all cases fine tilth, and as much strength of soil as is necessary to produce heavy oats." The time for sowing it is from the first of May to the 20th of June, usually, though when culti-

vated solely for fodder, a little later in the season can make no difference.

There are various opinions as to the quality of seed to be sown to the acre—from four to thirty-six quarts are sown—we would sow at the rate of five bushels on four acres. Cut it when in the milk, or early in July. If for seed, from the first to the middle of September.

Of its value for feed, a farmer thus testifiestifies: "Whilst my oxen consumed millet in its green state they performed their work with more spirit and vigor than they had done before, or have shown since, except when fed with grain. My cattle, of all ages, prefer it to both red and the best white clover, meadow, or timothy hay." It cannot be doubted that it would be vastly to the interest of our farmers to grow the millet for fodder, even though plentifully supplied with marsh hay. Stock consume vast quantities of the latter, and still do not thrive—without very much additional feed they are not 'well kept,' while with far less of the former, and with little else besides, comparatively they will pass through the winter in good condition, and spring ll find them—not mere fleshless skeletons, an, gaunt, staggering, starved—ghosts to haunt and torment the farmer—but hale, heart y, plump and sleek.—Try it and see.

Sagacity of the Hog.

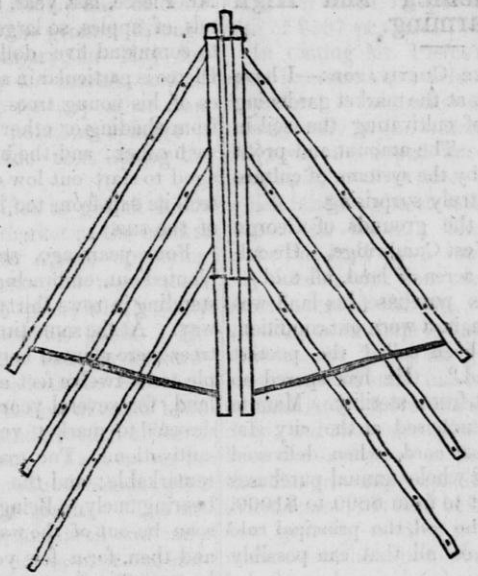
The hog is a stubborn and self-willed animal, and some call him stupid; but he is no fool after all. Cobbett says hogs can tell when a storm is coming, and even which way the wind is going to blow. This he proved by referring to a sow with a litter of pigs, which he had on his place when he lived on Long Island, many years ago. He says that he used to watch her motions at night before she retired with her piglings to rest. One evening, about sunset, he perceived her making observations, and turning her snout this way and that, as if to ascertain what was coming. She then took up her quarters on the South-easterly side of a barn or pen where she usually quartered, but soon she came out again, and after making sundry other observations in her way, and *smelling* the *wind* this way and that, she went in, and routing her brood, carried them round to the other side and laid down for the night. Next day there was a storm, and the wind blew from the South-east, and would have drenched madam Suz and her children had they stayed where they first pitched their tent, We have noticed hogs, that ran out in a field in which there was a shelter for them during the summer, to lie down in the open air, if the weather was fair and was to continue so, but on the approach of a storm, even before it could be discovered by men, they would take to the shelter at night.

A writer in the Southern Planter, who seems to have studied the manners and customs of this animal pretty thoroughly, says: "When left to themselves, they select with unerring sogacity the warmest spot on the farm for a bed. Besides, only look at them, if you please, when turning in for the night in a cold spell—why, they are per *connoiseurs* in the art of *snuffing up*, and laying aside all animosities, jarrings, and violations of courtesy manifested at feeding time—they unite with one consent to make each other comfortable."

We have often observed with what unerring certainty a small pig, only four or five weeks old, when taken from the litter and carried for miles, shut up in a dark box or basket; will, if set at liberty, return to the spot from which it was taken. Pigs are no fools.—[Maine Farmer.

Watertown Register copies the table of Imports and Exports of Milwaukee for the past year, then talks very sensibly as follows:

A word or two with our farmers in relation to these figures. By the first portion under the head of imports, it will be seen that we have resorted to other states for a supply of many articles of produce, which could be produced by ourselves. We have resorted to a foreign market for that which should have been sold from our own storehouses. In the article of pork, we find 2310 barrels imported into Milwaukee alone At an average price of $10 per bbl. this pork is worth 23, 100.—Apples, dried and green are worth$27,665. Butter and cheese, worth about 40,000. Live Hogs, worth about $9000. Potatoes, corn and oats, valued at about 5500. Here then is an aggregate of $105,265 which should have gone into the pockets of our farmers, paid out at one single port in our State.



HARROW—A NEW KIND.

For the Wisconsin and Iowa Farmer.

MR. EDITOR:

Sir—I send you the plan and description of a harrow similar to the Geddes harrow, with the cost of the same. You can publish it, or not, as you please.

It consists of eight pieces of scantling, three inches square and six feet long; there are two center scantlings into each of which are mortised three side pieces at a distance of six and a half inches from each other; these are made firm and stationery by a brace an inch thick, by five wide, passing through the scantlings near the ends, as shown in the accompanying plan. The two parts of the harrow are connected by an iron rod three-fourths of an inch in diameter, running through two pairs of "eye hinges" which pass diagonally through the center pieces and are fastened on the lower side by a nut and screw; the fore end of the center pieces are rounded and an iron band driven on tighty, through which the fore hinges pass, as above described.—There are forty teeth in the harrow, ten inches long, and seven-eights square at the upper end, and located as represented in the plan; the two teeth in each center piece are set one on the right and the other on the left side, and the points inclined outward so that each tooth in the harrow will run within two inches of the other.

The expense is as follows:

Cost of Timber, - -	$0 50
Framing and putting together,	1 50
40 teeth 1½ lbs. each at 10c. per lb., - - - -	6 00
Bands, Rod and Hinges, -	2 00
Total, - - - - - - -	10 00

I have used harrows of various patterns, and believe this to be superior to any other in use; it will do the work much more thoroughly and a third more of it, at least, in the same time, than any other kind, with which I am acquainted. A farmer who has once used it, will never after be without one.

GEO. D. CURTIS.

ROSENDALE, April 4th, 1851.

DOES IT PAY?—It is estimated on the authority of official documents, that for the last sixty-five years our military establishments have cost at least $950,000,000.

Market Gardening and High Farming.

Editors of the Cultivator:—I have been taking a look at the market gardening and other modes of cultivating the soil in the city of Boston. The amount and profit per acre obtained by the systems of culture there practiced, is truly surprising.

I first visited the grounds of George Pierce, Esq., in West Cambridge. He cultivates twenty-six acres of land, all told.—At the time of his purchase, his land was a light sandy loam, in a worn out condition, and would have been called the poorest kind of "plain land." He has spared no pains to redeem it from sterility. Manure has been largely purchased at the city stables, costing $7 per cord, when delivered on the farm. His whole annual purchases of manure amount to from $800 to $1000. In applying it to the soil, the principal rule observed is to put on all that can possibly do good.

Mr. Pierce considers that a light warm sandy loam is the most favorable soil for market gardening; and that although at first it may be comparatively unproductive, yet, when made fat by high cultivation, the crops are sure, and the land is more easily worked than heavier loam.

Seven acres are principally devoted to the raising of fruit. In the apple orchard, the trees stand 39 feet apart, each way. As they are mostly large trees, the ground is pretty much given up to them. A moderate coat of manure is spread over the surface, each spring, and plowed in, without particular reference to the roots of the trees, but with special care to prevent the barking of their trunks. All weeds are kept down, that the trees may have full possession of the soil. The apples are in consequence large and fair, the product is large, and the fruit brings top prices in the market.—While the trees were young and growing, heavier dressings of manure were applied to the ground, and the open spaces between the rows were occupied with vegetables for the market. By means of this constant working of the land, the trees begin to bear some fruit in six years from the time they are set out; and in thirteen years to fifteen years, they will produce, in favorable seasons, an average yield of five barrels per tree. From four trees of the Porter apple, Mr. Pierce, last year, sold twenty-four barrels of apples, so large, smooth, and fair, as to command five dollars per barrel. Mr. Pierce is particular in so training the branches of his young trees as to prevent them from shading or otherwise interfering with each other; and the branches are encouraged to start out low on the trunk, to protect its sap from too high heat by the rays of the sun.

Four years ago, an apple orchard was planted out, embracing four acres, the trees standing in rows thirty-six feet apart, each way. At the same time, about 1000 peach trees were planted between the rows of apple trees, twelve feet apart each way. The land, for several years previous, had been devoted to market vegetables, under high cultivation. Tne growth of trees is very remarkable; and the peach trees are now bearing finely. Being short lived, they will soon be out of the way of the apple trees; and then, for a few years, vegetables will be grown in the open spaces.

Nineteen acres are devoted to the raising of vegetables for the Boston market. As before intimated, this land is highly manured; it is also deeply worked, as deep as the plows can be made to run. A great variety of vegetables is here raised, in order seasonably to supply the successive requirements of the market. For several weeks, in the height of the producing season, two or three wagon loads are daily sent to market, embracing 12 to 15 varieties of vegetables.

It is a leading and principal idea with Mr. Pierce, so to adapt different vegetables to the land and to each other, as to obtain at least two, and often four crops in a season, from one and the same piece of ground. For instance: on one plat of land early radishes are sown broadcast, and early peas are sown in double drills, say five feet apart; at the proper time, either melons, squashes, or cucumbers are planted between the rows of peas; the radishes get out of the way of the peas, and the peas get out of the way of the vines; and thus three crops are successfully matured. Enough manure is put on the ground in the spring to afford full sustenance to all the crops. On other ground, early potatoes are raised, and marketed in season to sow turnips and obtain a full crop. Or perhaps after the potatoes the land will be sown in August to onions. In the fall

they are covered with swamp hay or other litter; they remain in the ground through the winter, without injury; in May following they are ready for market, and in June the land is ready for any other crop. Or perhaps after the potatoes, spinage is sown for greens, and the next spring the land is clear.

It is also a leading idea to get all kinds of vegetables into the market at the earliest possible period, for any article appearing there a week or two before its usual time, commands a very high price, which richly rewards any extra labor or pains. Mr. Pierce has extensive hot beds for forwarding his various productions for an early market. He has 250 sashes, or some 1400 surface feet of glass, under which all sorts of vegetables are started. Last spring he went largely into the production under glass of early dandelions for greens. The receipts from this source, in March and early April, amounted to $3 per sash, or one shilling per surface foot of ground. Tomatoes are sown under glass; and as it is important in early spring to economise the room in the hot beds, they are first transplanted from the seed bed to a vacant space in the hot bed, 9 inches apart, and when too large to stand so closely, they are again transplanted twelve inches apart, and when the weather is right, they are taken up and placed in the open plat, where they are to mature. At one picking of tomatoes, this season, thirty-two bushels were obtained, which, from their earliness, sold at $1 75 per bushel. Pole beans are produced early by digging large deep holes for the hills and filling them partly with fresh hot horse manure; over that a suitable covering of earth is placed, and the beans are planted. For all early vegetables the ground is stoutly dressed with hot horse manure, which is plowed in, and which, by its fermentation, keeps the land warm and mellow, and brings the plants along very fast. Early potatoes are first started either on manure heaps undergoing fermentation, or in hot beds; and when the weather will admit, and the sprouts are six to eight inches long, they are carefully taken up by hand and transplanted in the drills in the open plats. This process forwards the crop from 15 to 20 days. On one quarter of an acre, managed in this way, this season, 81 bushels of marketable potatoes were dug, which, for their earliness, sold at $1 75 per bushel, or at the rate of $567 per acre.

In visiting Mr. Pierce's grounds, I was most interested in a field on the borders of Spy Pond. Originally a high bank, shut down nearly to the water, This bank was dug away and tipped into the pond, until a long strip, or three acres of land was made, which raised eighteen inches above the surface of the water. The earth taken to make this land was a sandy and fine gravelly subsoil, with the exception of two or three inches of the top, which was surface mould, placed there to form an immediately tillable soil. The waters of the pond will come into and stand in a hole dug anywhere on this land, more than eighteen inches deep; and the moist exhalations from below keep the surface so moderately moistened, that the growing crops do not suffer in the driest season, the land being of a sandy and fine gravelly nature, it admits of much moisture without becoming cold, heavy or baked; and as it has been abundantly enriched by manure, it produces the finest vegetables when, perhaps, other fields are suffering severely with drought. The crops are grown upon ridges or beds, formed by back furrowing with the plow, and varying from two to six feet in width. This is done to prevent any bad effects that might otherwise arise from heavy rains falling upon a flat surface, already moist enough. In general three crops are taken from this land, each year. For instance, on the wide beds, a row of early beets grow on each border; a row of hills of summer squash in the centre, and celery in the dead furrows. The beets are first off, and then the squashes, and the soil composing the beds is used in earthing up and bleaching the celery.

Mr. Pierce's average weekly sales of vegetables for nine months, in 1849, were as follows:—

In March	40 00
April,	50 00
May,	80 00
June,	90 00
July	140 00
August,	139 00
September,	140 00
October,	180 00
November,	39 00

The total cash receipts for the sale of fruits and vegetables, for 1849, were as follows:—

Of Peaches,.....	$591 60
Porter Apples, ...	148 60
Bartlett Pears,.....	18 12
Bell do	4 75
Greening Apples,...	12 50
Baldwin do (windfalls,)....	36 00
39 bbls, do (picked,).....	185 50
	$997 07
Total vegetables of all kinds,	2,628 72
	$3,626 79

These are certainly large receipts to derive from the products of 26 acres of land. It is true that Mr. Pierce has the advantage of a ready market and good prices; but after making every allowance that exists, or can be thought of, I think we must all conclude that high cultivation is the true system: that

"'*Tis folly in the extreme* to till
Extensive fields, and till them ill;
For more one fertile acre yields,
Than the huge breadth of barren fields."

For the Wisconsin and Iowa Farmer.

Science, Wealth, and Morals.

The undersigned very respectfully invite public attention to two great objects of individual and general prosperity—the development of the natural resources of our country, and the promotion of practical science. To a large extent these two objects are one and the same, as a knowledge of the natural resources of industry and of wealth is pre-eminently practical science.—The more this knowledge become individual, making every farmer acquainted with the character and capabilities of his own fields, all classes familiar with the natural wealth immediately surrounding them, the more thoroughly will it be promoted, the more widely diffused.

The most direct—perhaps the only—mode of securing effectually these two objects, combined in one, is by making practical science a subject of primary instruction in schhools, especially aided by the reciprocating efforts of families. Such a step, at once simple and direct, is rendered vigorous and effective by the eagerness with which children pursue, and the rapidity with which they acquire, knowledge of natural objects, so richly scattered around them by the hand of the Creator. Thus occupied, interested, and instructed, they are most effectually drawn from subjects and pursuits leading to disorder, lawlessness, and violence, now but too manifest in all parts of the country, threatening, if unchecked, the perpetuity of our republican institutions.

As the two leading objects of human pursuit are agriculture and mechanism, it is a self-evident truth that institutions especially designed to fit those entering upon the stage of action for their future vocations should teach primarily and thoroughly subjects connected with those pursuits, that schools teach prominently and vigorously, subjects and modes fundamental in the success of the farmer and mechanic. The sciences especially embracing agriculture and mechanism are geology, chemistry, and geometry, to be taught practically and experimentally.

The unparalleled progress made in these sciences, especially the first, within a few years past, renders their future advancement easy, certain, and rapid, directly applied to the daily pursuits of all classes.—The developments and presentations made of these subjects by Mr. Josiah Holbrook, and the results of his past efforts in aiding their advancement, render it proper that special attention be directed to the plans and measures now proposed by him for their continued progress and still wider diffusion.

Such being the plain dictates of common sense, suggested by the progress of our country and the spirit of the age, the undersigned invite to them the attention of all interested in human progress, and especially the public functionaries whose official duty and highest pleasure must alike induce them to give the whole subject their prompt efforts and hearty reciprocations. We only add that we consider the plans and proposals of Mr. Holbrook, as shown above, of great value, and entitled to the favorable consideration of the public.

J. M. Mason, of Virginia, U. S. Senate.
Sam. Houston, of Texas, do.
Jas. Whitcomb, of Indiana, do.
Henry Dodge, of Wisconsin, do.
Solon Borland, of Arkansas, do.
James Shields, of Illinois, do.
John Bell, of Tennessee, do.
Lewis Cass, of Michigan, do.
Jas. Cooper, of Pennsylvania, do.
Wm. Upham, of Vermont, do.

Solomon Foot of Vermont, U. S. Sen.
Rich. Broadhead, of Penn. do.
S. A. Douglass, of Illinois, do.
Wm. H. Seward, of N. York, do.
A. C. Dodge, of Iowa, do.
Alpheus Felch, of Michigan, do.
Truman Smith, of Connecticut do.
Jackson Morton, of Florida, do
John McLean, Supreme Court U. S.
Levi Woodbury, do. do.
John McQueen, of S. Carolina, M. C.
Thos. S. Bocock, of Virginia, M. C.
James Mc Dowell, of Virginia, M. C.
F. P. Stanton, of Tennessee, M. C.
J. R. J. Daniel, of N. Carolina, M. C.
S. W. Harris, of Alabama, M. C.
Robert C. Schenck, of Ohio, M. C.
Wm. Duer, of New York, M. C.
Preston King, of New York, M. C.
Emory D. Potter, of Ohio, M. C.
Jos. Henry, Sec'y Smithsonian Inst.
Jeremiah Morton, of Georgia, M. C.
Allen F. Owen, of Georgia, M. C.
C. B. Calvert, Pres't Md. Ag. Soc'y.
Edmund Burke, Ex-Com'r of Patents.
Elisha Whittlesy, First Compt'r Treas.

WASHINGTON CITY, 1851.

A Fact in Deep Plowing.

Having been for a long time an attentive reader of the Newspaper, especially the farmer's department, and having seen many articles on the cultivation of corn, I have concluded to give you my experience for the last two years. Previous to that, I had followed the old plan of shallow plowing and high hilling. Now for the other way.

In the spring of 1849, I took five acres of ground that had wheat on it the year before, and had for a number of years been rather hard run by sowing in wheat one year and planting to corn the next, until the surface soil was worn so low that 12 bushels of wheat and 40 or 50 of corn were an average crop. On the five acres I put 87 loads of barn-yard manure, the greater part of it straw, only partially rotted, and plowed it as follows:—Taking two teams and two plows, I began by a furrow seven inches deep with the first plow, then followed in the same furrow with the other plow, turning another furrow six inches deep, making 13 inches of soil turned. I then harrowed and marked it, making the rows four feet apart both ways, and planted on the 22d of May. As soon as the corn was large enough to follow the rows, I cultivated it out both ways, and had a man to follow with a hoe to set up the hills that were partially covered up. I went through it twice afterwards with the cultivator, but made no hills, leaving the surface as level as possible. I cut it up the 17th of September, and, from the five acres, husked 906 bushels of ears.

Now, I don't call this a brag crop, for I am well aware that it can be beat; but it shows the difference between half doing work and doing it well. The corn was hauled off the ground sowed to wheat, being plowed as deep as a pair of horses could plow it; and from the same ground I have this year harvested and threshed 199 bushels—38 bushels to the acre. I have managed my corn ground in the same manner this season, and from present appearances shall have as good a crop as I had last.—[Dollar Newspaper.

INCOMBUSTIBLE HEMP.—The St. Louis Republican contains a very interesting notice of the trial of *incombustible hempen rope*, recently made in that city. A piece of prepared rope and a piece of wire rope were put into a blacksmith's fire. The heat was intense enough to weld the strands of the wire rope together, whilst the hempen rope was only slightly charred on the outside. Another test was made; the piece of rope and a small bar of iron were placed in the same fire, and the iron brought to a white heat, yet the cordage was but little if any more affected by the fire than in the previous experiment.—[Rural New Yorker.

AVERAGE PRODUCTS OF AN ENGLISH FARM.—The following are the averages of some of the products of a farm of 740 acres near Brighton, England, occupied by Wm. Rigden. He has 250 acres of wheat, averaging 26 bushels per acre; 40 of barley, 40 bushels; 60 in oats, 60 to 80 bushels; 240 acres in clover and grasses, two tons hay. He keeps 350 South Down ewes, which average yearly about 400 lambs; average quantity of wool yielded by the flock, four pounds per fleece, and it sells at 25 cents per lb. He keeps 21 cows, which yield on an average ten quarts of milk per day, the year round.

HORTICULTURE.

F. K. PHOENIX, EDITOR

Grape Cuttings---New Mode of Planting them.

In the common mode of preparing and planting grape cuttings we have generally had very poor success. A neighbor of ours tried a new plan last spring with such excellent results that we feel bound to give it a thorough trial this season, and give others the same opportunity.

He used single eyes or buds and planted them nearly flat in rich soil, covering them bud and all about an inch deep. A great proportion of them lived and made a very fine growth while but few comparatively, of a lot prepared at the same time in the old method grew, and those but just made a live of it.

Making Garden Beds.—We think it a great error to elevate the beds intended for vegetables as many are in the habit of doing. The fact is our soil and climate are quite dry enough, as a general thing, without digging trenches to carry off the little moisture afforded to plants.

The Curculio.—Mr. Harvey Green, of Jefferson, N. Y., says, tie up straw in bundles about as large as a man's arm, run a long handle into them, set them on fire and pass them quickly round the trees; the insets fly into the blaze and perish.

To Raise Cabbage Plants.—Sow the seed in a box, in rich soil, and place it some five or six feet above the ground. Thus elevated the turnep fly or flea is not so apt to destroy them.

Mulching.—Let all newly planted trees be thoroughly mulched—*not by the spoonful either*, as were some trees of our neighbors who promised us to try mulching faithfully—and then, to our mingled amusement and vexation, put around each tree perhaps a shovel full of chip manure!! Let there be a good heavy coating of straw or litter not less than four feet in diameter.

The Osage Orange as a Hedge Plant.—There is quite a war among our Illinois friends over this thorny subject in which we opine some will certainly get scratched "some," and are bound to come off second best, as in the extreme of their mutual opposition, both cannot be right.

In this section we have little if any hope of its being sufficiently hardy to withstand our winters, but earnestly hope and can but believe it will succeed a couple of degrees further South.

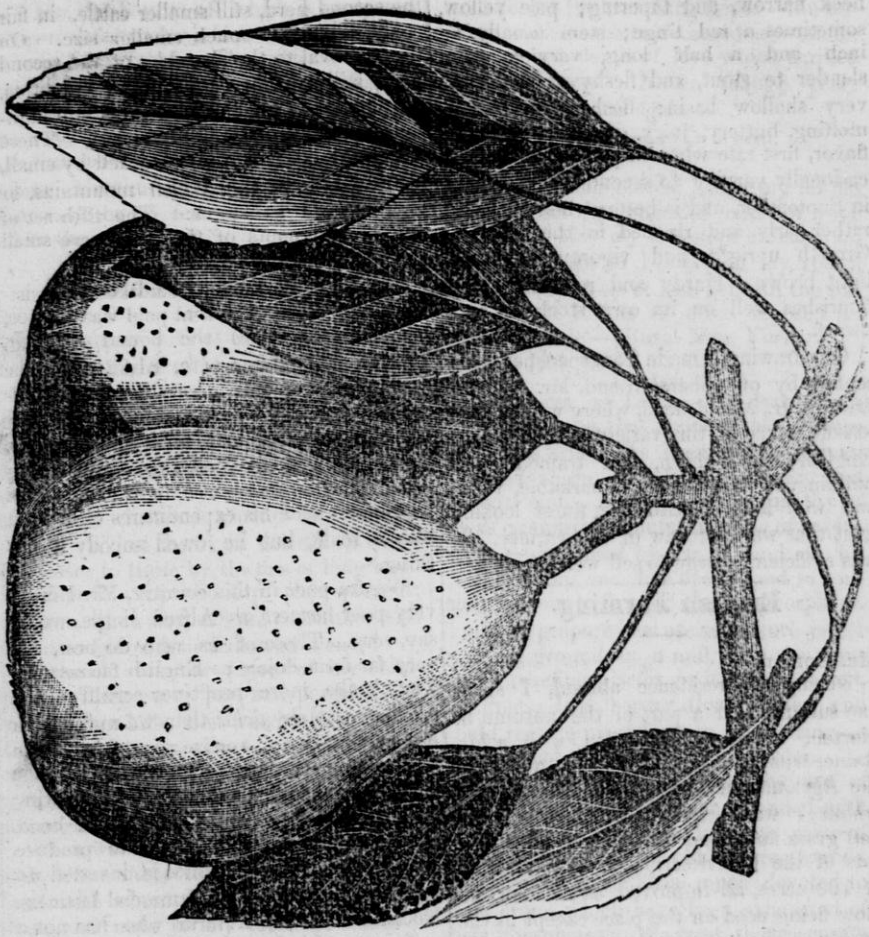
Curculio.—The very best and only effectual remedy against this pest, is by "manipulation"—spreading a sheet under the tree and thoroughly jarring or shaking the insects down, then killing them—this to be done early in the morning, and as long as they can be found—commencing as soon as the fruit is large enough to be attacked.

This is considerable trouble, to be sure, but pays well where the fruit is scarce and high. An excellent preventive or palliative, is to allow pigs, poultry, &c., among the trees or plant near the house or where the insect will be frigtened off by constant noise, passing, treading, &c.

Cultivation of Cranberries.

There is now no longer any question as to the practicability of growing this excellent fruit on any soil that is constitutionally capacitated for the production of Indian corn. Abel Burnham, of Essex, N. H., in a communication published not long since in one of our Agricultural Journals, in reference to this subject, says: "I commenced the middle of last April, and set out about one third of an acre; the soil was of a loamy nature. I planted corn on the same land the year before, and cut up some of the plants with a hoe, about six inches square on the turf; others nothing but the vines; both did equally well. My method was to set out between the old hills without plowing or harrowing. The first of June I went over all the old hills with my cultivator, making it all smooth and light. I thus had the plants, and made no use of any manure. They have done wonders, and to my astonishment, bloomed about the 30th of July. The fruit is large and handsome, and many hills yield a pint of berries."—[Olive Branch.

Manure for Apple Trees.—To every cart load of swamp muck and lime mixture, after it has lain a fortnight, add two bushels of air slacked lime, and mix them well together.



THE ST. GHISTLIN PEAR.

This pear is of a fine texture, and usually high quality. It is a native of Belgium, and ranks among the best pears for garden culture, under careful management. But notwithstanding the excellent quality of the fruit, it is not adapted to general orchard culture for the market, or for this market, as it is too small to sell for what it is really worth. We have seen them in the market, in fine condition, but the sale dull; and one cultivator of this fruit in this vicinity, who has about twenty trees, informs us that he shall change them to some other variety, as the size is too small for the market, though the quality is first rate. Sometimes a superior pear attains a high reputation, and sells well in market, though rather small. This is the case with the Seckel; but it comes in when pears are not usually very plenty, and it attained its high character when but few varieties were cultivated. With the great variety of excellent pears now generally known, and several ripening with this kind, and as the St. Ghistlin, like most foreign pears, is variable, it will never gain a notoriety that will cause it to sell for what it is worth in the market—that is, in this market, with the present preference for large fruit.

Characteristics—Size medial; pyriform,

neck narrow, and tapering; pale yellow, sometimes a red tinge; stem usually an inch and a half long, varying from slender to stout, and fleshy at the fruit; very shallow basin; flesh whitish, fine, melting, buttery, juicy, of a fine delicious flavor, first rate when in perfection, but occasionally varying to second rate. Ripens in September, and is better when gathered rather early, and ripened in the house.—Growth upright and vigorous. Shoots light brown. Hardy and productive. It flourishes well on its own stock or as a dwarf.

Our drawing is made from specimens presented by our liberal friend, Mr. Andrew Lackey, Jr., Marblehead, where we saw, last season, a tree of this variety, grown on the English white thorn, and trained on a building, of large size, remarkable vigor, and well loaded with the finest looking fruit that we ever saw of this variety. It was sufficiently large to sell well in market.

English Farming.

Mr. Editor:

During my residence abroad, I spent one summer and a part of the autumn at Merton, in Surry domiciled with a Mr. Raine, tenant to Mr. Middleton, author of the Agricultural Survey of Middlesex, with whom I was acquainted. It was a hay and grass farm, and the management of it was of the best description. It consisted of 160 acres, all improved as meadow, no plow being used on the place except in the garden. The course adopted was as follows:

Early in the spring the fields were all shut up. As soon as the hay was secured, and this was a great labor, the teams commenced carrying it to London for sale, *loading back with manure.* And now commenced that course of judicious conduct which excited my warmest admiration at the time, and has remained my beau ideal of good management ever since. The second growth of grass being well shot up, Mr. Raine went to the cattle fair, and bought large beeves, in high condition. In his rich and clean meadows, these were soon ready Smithfield market, to which they were sent, and their place supplied by other beeves, still in high condition, but of much smaller size. On the removal to the shambles of the second herd, still smaller cattle, in fair condition, but of much smaller size. On the removal to the shambles of the second herd, still smaller cattle, in fair condition, were bought to be initiated into a still higher preparatory degree of fatting. These were sold off, and were succeded by small, lean cattle from the Welsh mountains, to be improved as stores. The fifth set of temporary tenants of the farm were small sheep, to be wintered.

The farm, as I have remorked, consisted of 100 acres. The rent paid was £2 10s. per acre, at $4,80 the pound sterling. Twelve dollars per acre, $1,020 for the farm. Paying this enormous rent,—saddled with heavy taxes, and at a large outlay for manure, and farm servants, Mr. Raine was still accumulating large riches upon it. His house was in the style of a gentleman, and his expenditures on a most liberal scale, but he owed nobody a farthing.

We are poor in this country, Mr. Editor, very poor farmers, as Alfred Jingle would say, very. Those of us who do best, are very far from doing as English farmers do. They make more profit per acre from the *borders of their fields* than we make from our best intervals; realize as much gain in the shifting stock to consume the herbage of a single summer, as we do from growing for three years the same number of head. Every thing there is made to produce profit. As large a capital is invested as we invest in a thrifty commercial business. No man can rent a farm who has not a sufficient capital to stock it, work it, and lay out of the price of a year's harvest. The outlay of capital on a large farm is very great. A fair estimate of the required sum on a farm of a thousand acres, is five thousand pounds sterling. It would astonish the American farmer to see the book of "bills receivable and payable" of an English lessee of a farm.

Yours, * *

—[N. Y. Jour. Com.

The Potatoe Rot.—Dr. A. A. Hays, known as high authority, has commnnicated to the Massachusetts Agricultural Society, the results of careful and decisive experiments made by him on the potato rot. He finds that sulphur destroys the fungus; and recommends that, when potatoes are found to be affecte l, they be dug and placed

in a bin, the bottom of which is composed of open slats, under which sulphur (brimstone) is to be burnt. The fumes of which, passing up through the potatoes for an hour or more, will effectually put a stop to the disease. Dr. Hays says this is a fact he has established by numerous experiments. Sulphur fumes are so volatile that there need be no fear of any taste being left in the potato.

The Old Familiar Places.

In the sunny days of early spring time I feel a fresh desire to look again upon "The Old Familiar Places." Shut so long by the inclemency of the weather, from rural rambles, my mind is busy with the pictured memories of my chosen haunts in childhood. And who loves not the familiar objects which clustered around his youthful home? Whose heart is not drawn closer and closer to these by the ties of long association and companionship when present; and who, when afar, will not remember with ardent longings their hallowed scenes?

O, the old familiar places of my childhood! They seem part and parcel of life itself. The hills, the woods, the purling streams and sunny slopes, are endeared to my mind by the recollection of past pleasures, with which I can still hold sweet communings.

When walking along this secluded forest path, I remember the friends of my boyhood, with whom I have strolled here so often, and most vividly arise the scenes of long ago. When I sit on this mossy bank, still the haunt of early spring flowers, whose delicate leaves seem pictured with memories of the olden time, my mind reverts to the blessed days when with beloved sisters I gathered their scented treasures—our hearts as free from care and sorrow as were the blossoms of which we wove our fragrant garlands. When reclining beneath this solitary tree, I think of one who long, long ago sat with me here; who has since braved the dangers of the world, and shared its honors and rewards, as felt its disappointments,—while the scene of my humble labors and influence has ever been within sight of its spreading branches.

And younder sunny hill-side—can I walk there without remembering one who shared my noonday rambles when at school? Can I forget the trembling hopes—the unspoken wishes—the half-formed aspirations, and unowned depth of love which thrilled my heart even? Never, though years teach me again and again—

> "Spring bids full many buds to swell,
> Which cannot grow to flowers."

Ye old familiar places! May my life be passed within the charmed circle of your influence. May my last steps on earth be along the paths so beloved in my youth, and my body sleep at last beneath the sod upon which it has so often reposed in dreamy reverie.—[Rural New Yorker.

Maple Hill, N. Y.

PHOSPHATE OF LIME.—We learn from Dr. E. Emmona, that an inexhaustible supply of this article has been discovered on the west shore of Lake Champlain, and Crown Point. A considerable quantity of it was quarried last autumn, some of which has been examined by Dr. N., and also by Prof. Norton, and has been found to contain from four to five per cent. of phosphate. It may be prepared for use as manure, either by being ground in a mill, after the manner of grinding plaster, or it may be burnt, like lime. It is harder than plaster, and would require more force in pulverizing.—When burnt, it readily falls to powder.

It will be recollected that the use of phosphate of lime has been attended with highly favorable results in some parts of Europe, particularly on old pasture grounds, and such as have been much devoted to grain crops, which have been exhausted of their phosphates. We trust that accurate trials of this article will be made the coming season, in comparison with bones and other manures, for various crops and on various soils, and that the results will be given to the public. Farmers will then have some criterion by which they may determine its relative value, and the expediency of purchasing it as a manure.—[Cultivator.

STRAWBERRIES.—We have been favored with some very fine specimens of this fruit, says the Danbury (Ct.) Times, grown since the 1st of January, by Mr. Joseph Crofut, of that town. They are of the monthly variety, and when the plants are placed under cover and protected from the frost during the winter, as in the present instance, they will yield their fruit at the return of of each month.

Leached Ashes as a Manure.

The value of leached ashes on dry soils, and in dry seasons, as a manure for grain and grass lands has been conclusively shown, in this and other countries, by carefully conducted experiments. Yet, as it seems useful and necessary to "keep before the people" such facts as are not fully understood and considered, we give some observations drawn from experiments heretofore published, for fear that this subject, in the hurry of the season, might otherwise be neglected and forgotten.

The German agriculturalist, Albert, of Roszlan, gives a circumstantial account of an experiment commenced in 1827, and continued for five years. A dry, sandy soil, which had lain in grass for eight years, was dressed with leached ashes at the rate of sixty-six bushels per acre. The sod was first carefully turned under, then the ashes hauled on and spread, and covered with a plow about two inches deep; remaining in this condition six or seven weeks it was again plowed three inches deep, so as to bring up the ashes, and sowed to buckwheat. A portion of the field to which no ashes were applied, was treated in the same manner, so that the difference might be noted,

The cost of the application was $6,25 per acre. The increased product of the first year was at the rate of five and a half bushels of buckwheat, with four hundred and seventy pounds of straw, estimated at $4 05. The increased product of the second year, when sown with rye was six bushels per acre, with six hundred pounds of straw, estimated at $5 25. The increased product of the third year, when in oats, was ten and half bushels, with five-hundred and fifty pounds of straw, estimated at $3 62 ½. the fourth year, the increased product, when in pasturage, was estimated at $3 per acre. The fifth year it was again sown to rye, and the increased product was four and a half bushels, with four and seventy pounds of straw, estimated at $4 06 per acre. The value of the increased product is $20 and we have no reason to suppose their effects were exhausted when the experiments were concluded. The estimates were made by Mr. Wagner, the translater, from the prices paid at the time in this country, as also was the cost of the ashes and labor.

Unleached ashes produce a more powerful effect, and hence a less quantity is required. In the Albany Cultivator for 1842, the result of an experiment is given, on an old meadow, mowed nearly half a century, of clay soil, stocked with all kinds of grass, where strong ashes were applied, at the rate of thirty-two bushels per acre, producing an increased product of nearly one-fourth of a ton, while the same quantity of air-slacked lime produced no benefical result; and two bushels clear, dry cow dung increased the product by one hundred and four pounds, and the same quantity of horse manure but sixteen pounds per acre.

In the first of these experiments, four thousand four hundred and twenty-two pounds of leached ashes were applied, producing, in five years, an increase of four thousand three hundred and forty-one pounds of grain and straw, besides pasturage equivalent to at least a ton of hay. In the second, about one ton of ashes increased the product, in one year, one fourth that amount of hay; and in favorable seasons, we cannot doubt but that its effect would continue at the same rate for four years longer. So the action of the ashes must be chemical in its nature, giving a capacity to appropriate other fertilizers, which it does, perhaps by imparting to the soil its potash, which dissolves the *silica*, or flint of the soil, producing *silicate of potash*, which, according to Liebig, is required by all plants of the grass kind, in large quantities.

On wet ground, it should be borne in mind that ashes produced no beneficial effect; and in wet seasons, the benefit is much less than in dry. — *Rural New Yorker.*

Amount of Seed Wheat to the Acre.

Mr. Holmes:—A writer in your paper enquires why two bushels and a half of wheat should be required to seed an acre in Aroostook, when a bushel, or a bushel and a peck, is sufficient in Kennebec. In reply, I would say that in England and Scotland the best farmers uniformly sow three bushels; that in New York the best farmers now admit they have been in the habit of seeding too lightly, and that two bushels

and a half is better than a less quantity upon an acre; that the winter wheat sown here, upon the Kennebec principle, of a bushel to the acre, has uniformly been too thin, and that from experiments made, no less quantity than two and a half bushels should be used. Let the wheat be put in with ever so much care, a part of it will be likely to winter kill, and the quantity above stated, would, in my judgment, be sometimes too much, and perhaps sometimes too little, according to the severity of the winter. A field of wheat that would be pronounced about right by some, would be deemed altogether too thin by others. Farmers in this county generally sow from one to one and a half bushels of spring wheat to the acre. I sow three bushels of spring wheat, and five bushels of oats to the acre. The first of July my neighbors thought I should have little or no wheat, but it is now in the stock or in the barn, and will yield about forty-five bushels to the acre. I had fifty-four bushels to the acre last year, with the same quantity of seed. My wheat, this year, was on pasture land, and no extra care was taken in preparing the ground. If friend Tabor will try a bushel and a half, I think he will be encouraged to sow two bushels next year, and will not stop increasing the quantity of seed until he reaches two and a half or three bushels to the acre.

I freely admit that a less quantity of winter wheat would be required, if it did not winter kill; but with us, in ordinary winters, we may calculate upon losing from one-fourth to one-half by the frost. H.

Aroostook, Aug. 24, 1850.

—*Maine Farmer.*

Air, Steam and Water Engine.

This invention of Mr. Black, described and illustrated in former numbers of the *Farmer and Mechanic*, seems in all experiments which have been made with it to be perfectly successful. Messrs. Coons & Aiken, the asignees of the patent, have constructed one on a larger scale, which was exhibited and put in operation at Albany recently, in the presence of some two or three hundred spectators. The editor of the Knickerbocker, who was present, after describing the arrangements of the machine remarks:

"In the experiments which we witnessed (which was only a temporary arrangement,) three of the four jets emitted very little steam if any at all, and to the surprise of all present, a single jet of steam but an eight of an inch in diameter, caused that massive wheel (weighing 1,600 lbs.,) to revolve at the rate of thirty to thirty-five revolutions per minute, and no two men present were able to check the motion in the least. We were informed by the proprietors of this patent that they have several smaller engines in operation, and they all work admirably.

This invention, we think, must produce a complete revolution in all stationary motive power. The remarkable simplicity of its entire construction, its neat and beautiful appearance, its safety, and its adaptation to all the various uses to which power may be applied, together with its low price and durability, must soon give it a preference over every other engine in the market. Of its simplicity our readers may judge, when we state, that any person of ordinary capacity, whether a mechanic or not, needs but an hour,s instruction to make him fully competent to manage the whole of the machinery.

This machine will, when completed, be placed in our press-room, and taught to turn one of Hoe's mammoth presses.—When ready for company, we shall announce the same, when the public will have a better chance of understanding the wonder than any written description can possibly enable them to do at present."—*N. Y. Farmer and Mechanic.*

Ashes.—Take especial care of all the ashes made on your place—don't permit them to be exposed to the weather, but keep them under cover. Five bushels of ashes, mixed with two double horse-cart loads of marsh river mud, muck or peat, will convert the whole into good manure. A hogshead or two of soap suds would do the same thing—therefore, among your other things, save and utilize them.

Seeds. Lieut. W. Porter, of the United States Navy has presented to the editors National Intelligencer, for distribution among practical farmers, a variety of choice seeds from the mediteranean. Among them is the lasting melon of Naples, which it is said can be kept good and fresh for one year by hanging it up in a cool place.

Life Every Where.

The microscope has revealed to us some heretofore hidden wonders, that while they increase our stock of knowledge, may sometimes make our stomachs a little uneasy; for it is not very comfortable to suppose that our favorite acid may be full of mineature dragons, pythons and snakes, or that the surface of a delicate fig is a vast continent inhabited by worms in excellent condition, or—but we will say no more of the edibles as we anticipate dining some day. However, if it had not been for the microscope, we should not have known that the limestone so abundant in the west was once a mass of living atoms, that the coral reefs and coral islands were formed by the prolonged labor of countless insects, and that the organization of the most delicate plants and animals is so perfect, that it formed one of the strongest arguments in favor of the Deity's existence.

With the aid of very imperfect instruments, Dr. Ehrenbergh has made some of the most extensive researches yet attempted. An article from a foreign journal states, that in 1839 he instituted special researches upon the form of the harbor at Wismar, in the Baltic. The result of his investigations shows that from one-twentieth to one-fourth of the mass of deposited mud consisted of living infusoria in part, and partly of the empty shells of dead ones! In this harbor it appears that every week there is deposited upwards of 200,000 pounds of mud. During the last hundred years there have been deposited by the running waters at Wismar, 3,240,000 hundred weight of this mud. About one-tenth of this deposit consists, on the average, of infusorial animalcules! At Pillau, M. Hagen found that often half the entire volume of mud consists of infusoria. He calculated that at this place not less than from 7,200 to 14,000 cubic metres of pure microscopic organisms are annually separated from the waters and deposited in the form of mud. In the course of a century this would form an accumulated deposit of from 720,000 to 1,140,000 cubic metres of infusory rock, or Tripoli stone. Ehrenbergh pursued his inquiries with his all-revealing microscope upon the mud of the Nile, the fertilizing properties of which have for ages attracted the notice of mankind. In all the specimens he has examined, he has found that infusory animalcules—beings of microscopic size—exist in such vast abundance, that there is not a particle of the soil left by the retiring waters of the size of half a pin's head which does not contain one, and frequently many, of these animals. How striking the idea thus furnished to us! From time immemorial it has been customary to attribute much of the fertilizing influence of these deposits to ther chemical constituents derived from degraded rocks, or to decaying vegetable remains. Yet the microscope has told us, on the contray, that it is to neither of these causes that this effect is chiefly attributable, but rather to the multitudinous accumulation of infinitely minute forms of animal life, wholly undiscernable to the naked eye in themselves, but in the mass constituting no insignificant portion of the solid soil. Truly it is a humbling thought for a man—as year by year he piles his huge dredging machines, summoning the aid of steam, and the appliances of mechanism, to remove an aggregation of beings, thousands of which could lie on the end of his finger—to reflect that he is put to all this labor and cost by the most insignificant in the whole range of creation! The microscope, which disclose these particulars, also seems to promise to be of service in the purposes of agriculture. The deposit of all rivers and irrigation are not always successfully resorted to by the agriculturist. Probably this instrument would inform him whether the deposits in the muddy waters of the river were suited, or otherwise, to the necessities of his fields.

Sugar Curing of Butter.

Persons who put up keg butter for their own use, or for a distant market, usually salt their butter very high. This high salting necessarily detracts from its quality, injures its ready sale, and reduces its price. If we can modify this excess of salt, by using more palatable substances, equal efficiency, as preservatives, it will be an improvement. Chemists tell us that sugar is of these substances; and experience gives the same information. Who is not familiar with "sugar-cured hams?" If pork can be cured with sugar, why may not butter be so preserved also! is the common sense in-

quiry. Experience has shown that it may. Dr. James Anderson, the celebrated agriculturist, whose treatise on the management of the dairy, particularly with the making and curing of butter, is still our highest and best authority on the subject, found, from some years' trial of it, that the following named composition—the properties of which we believe, were discovered by his amiable lady—was far preferable to salt alone, as it not only preserves the butter more effectually from all taint of rancidity, but makes it also look better and taste sweeter, richer, and more marrowy, than portions of the same butter cured with common salt.

Composition.—Take of sugar, one part; of nitre, one part; and of the best Spanish great salt, (or rock salt,) mix them well together, and put them by for use. The Doctor continues:

"Of this composition one ounce should be put to every sixteen ounces of butter; mix this salt thoroughly with the butter as soon as it has been freed from milk, and put it without loss of time, down into a vessel prepared to receive it, pressing it so close as to leave no air holes or any kind of cavities within it. Smooth the surface, and if you expect that it will be above a day or two before you can add more, cover it close with a piece of clean linen, and above that a piece of wetted parchment, or for want of that fine linen that has been dipped in melted butter, that it exactly fitted to the edges of the vessel all around, so as to exclude the air as much as possible, without the assistance of any watery brine; when more butter is to be added the coverings are to be taken off, and the butter applied above the former, pressing it down and smoothing it as before, and so on till the vessel be full. When it is quite full, let the two covers be spread over it with the greatest care, and let a little melted butter be poured all round the odges, so as to fill up every cranny, and effectually exclude the air. A little salt may be then strewed over the whole, and the cover firmly fixed down to remain close shut till it be opened for use. If all this be carefully done, the butter may be kept perfectly sound in this climate for a number of years. How many years I cannot tell; but I have seen it two years old, and in every respect as sweet and sound as when but a month old."

It deserves to be remarked, that butter cured in this manner does not taste well till it has stood at least a fortnight after it is salted; but after that period is elapsed, eats with a rich, marrowy taste, that no other butter ever acquires; and it tastes so little of salt, that a person who has been accustomed to eat butter cured with common salt only, would not imagine it had got one-fourth part of the salt that would be necessary to preserve it.

It is to be hoped that some of our farmers, on reading the above, will follow its recommendations.—[Farmer and Mechanic.

Flax-Dresser.—We are informed that Mr. S. A. Clemens of this town, the inventor of the new Cotton-press which received the award of the gold medal, at the late Mechanic's Fair, in Boston, has invented a machine for dressidg flax, which will dress, from the rude mrterial, one ton of flax per day, leaving it clean and ready for market. Men who know how much of a day's work it is to swingle twelve pounds, will understand the value of this invention, and western farmers, we imagine, will be in a hurry to get at it. Mr. Clemencs has also invented a machine for dressing the Yucatan hemp, and last week shipped three machines for that country. They have been throughly tested and proved to be highly practicable and valuable.—[Springfield. Mass., Repub.

Ashes to Prevent Bad Odors.—Wood coal, or half burnt peat, or ashes thrown occasionally into privies, destroys the bad smell, and renders them susceptible of being cleaned out and used as a manure (and none more valuable can be obtained) without being attended with any disagreeable smell—and producing a benefit to health, and comfort and wealth of community.

Minnesoota Corn.—The Pioneer [St. Paul's] states that a Mr. Middleton, living a few miles southeast from St. Paul's, between the St. Croix and Mississippi rivers, has raised this year, 90 bushels of corn to the acre. The corn is large swelve-rowed Pennsylvania flint-corn, and the ground from which it was raised was never artificially manured in any manner. This speaks well of farming in that vicinity.

Flax vs. Cotton.

Some considerable inquiry has of late been made in relation to the probabilities of a sufficient supply of flax cotton in the Northern States, in case there should be a demand for it for manufacturing purposes. The following data, gleaned from reliable sources, will be satisfactory to those interested in the growth of cotton, or the manufacture of linen therefrom.

The annual imports of fine linens average about $6,500,000, and the wholesale prices of these cloths range as high as to average 65 cents per yard; while the retail prices go up to 95 cents and 1 20 per yard.

In 1840, the number of acres of land on which grain, &c., was grown in ten of the Northern States, was about $29,000,000; and the flax crop of that year in all of the States north of the Ohio river, including Maryland, covered some 4,000,000 acres.

The average crop of flax lint is about 350 lbs. per acre, of which one third, or say 120 lbs., is flax cotton, leaving 120 lbs. of coarse tow for paper, bagging, or any other article it will make.

The flax seed is about 15 bushels per acre, and is generally worth $1 00 per bushel.

We may readily suppose that in all the States suitable for the growth of flax, 8,000,000 of acres could now be turned to that crop without at all disturbing the *present* serial crop, or diminishing the quantity now devoted to the culture of other crops.

This basis gives us the following results:

8,000,000 acres, average, 120 lbs. flax cotton per acre,.....960,000,000 lbs.
8,000,000 acres, average 15 bushels seed, per acre,.....100,000,000 lbs.
8,000,000 acres, average, 230 lbs. flax tow, rough, per acre,.....1,840,000,000 lbs.

This being sufficiently near the amount of such a crop of flax, the following figures give us the value of the same, as near as we can determine from our present limited knowledge of its properties:

960,000,000 lbs. flax cotton at 7c. per lb., at factory,..... $ 67,200,000
100,000,000 bushels seed at $1 per bushel at factory,.....100,000,000
1,840,000,000 lbs. coarse tow, at 3c. per lb. at the factory,..... 55,200,000

Total value of the crop,..... $222,400,000

The cotton crop of '49 and '50 was about 2,200,000 bales, at say 400 lb. per bale; and the price averaged 11⅓ per lb., value, $90,400,000.

The flax cotton would be 2,400,000 bales, of 400 lbs each, giving above the present average of cotton, 200,000 bales.

The difference in the total value of the two crops would be $132,000,000 *in favor of the flax crop.* Allowing these estimates to be high, still $132,000,000 is quite a margin to work on.

For the new Leavitt machinery, the flax may be either mowed or cradled, so that the harvesting of the crop may be done on the cheapest possible scale.

Farmers would do well to consider these facts and act accordingly; for that there *will* be a demand for their flax crop of the coming season, there can be little doubt.

Those who raise flax should, after threshing the seed, bind up the stalk in convenient bundles to handle. It should then be laid as even as possible, and in this condition stacked away and covered with straw, to dry and prepare for the market.

Ants, &c., in Bee Hives.—Noticing an inquiry from "Laborer," in your valuable "newspaper," for a remedy to prevent ants, moths, &c., from destroying the bee-hives, I would in answer say, please nail around the bottom of your hive a thin piece of narrow sheet zinc, so that, to gain access, the insect will be obliged to pass the metal and I have no hesitancy in saying none will cross the barrier. Try it.

I have been engaged in selling the patent bee-hive, known as "Colton's", for a few years, and have never heard that those who have used zinc, even in the common hives, complain of moths or auts troubling them in any respect.—[*Dollar Newspaper.*

Richmond County, Staten Island.—The following extracts from the last annual report of the Society in Richmond, will be interesting:—

Potatoes—Experiments as to proper depth to plant—Mr. John Thompson, made an experiment to ascertain the best depth at which potatoes should be planted. The seed was planted in trenched ground at depth of 3, 6, 9, and 12 inches. Those produced at 12 inches were few and small; those at 9 and 3 inches were of equal quantity and those at 6 inches, much the most numerous and largest. The *deeper* the potatoes were planted, the *more mealy* and finer was the quality.—[N. Y. Transactions.

EDITOR'S TABLE.

FAILURE OF THE WHEAT CROP.—As we have anticipated we hear complaints of the bad appearance of the growing wheat crop from various parts of the State, and especially throughout the southern portion. During a recent journey through the counties of Racine, Walworth, and Rock, we did not see but a few fields which promised even a return of seed. The farmers are active in putting in a large amount of spring wheat.—The Canada Club is esteemed the best variety for spring sowing. We were told by one farmer, near Janesville, that this kind of spring wheat has sold at as high prices in the Milwaukee market, the past season, as winter wheat.

The want of snow to protect the roots of the wheat has been the principal cause of its failure. The spring has also been unfavorable on account of the drouth.—From present indications, the crop put in last fall must prove a total failure, in this part of the State, at least.

POTATOE ROT.—The government of Massachusetts have offered a reward of $10,000 to any person who shall discover a complete remedy for the potatoe rot, to be tested by experiment for five years to the satisfaction of the Governor and Council.

GERMANS IN WISCONSIN.—Of the two hundred thousand souls in Wisconsin, more than one hundred thousand are said to be Germans. This race of men are settling the country on the sources of the Mississippi very rapidly, and in that region, if in any part of the Union, the German character and custom seem likely to impress themselves on the population.—*Maine Farmer.*

You should have said 400,000 souls, instead of two hundred thousand, Mr. Farmer. ED. FARMER.

SUBSOILING FOR ORCHARDS.—We have an inquiry whether it will pay the cost to subsoil the land for an orchard on clayey hills. We think that on almost every soil, excepting low wet lands, where the trees should be set on the surface, that subsoiling for trees will be profitable. Some roots run down and draw up nutriment and water from the subsoil; and there is a great advantage in having the soil well pulverised so that the roots can penetrate it freely. The cost of subsoiling an acre is small, but we cannot go into an exact estimate unless we have the price of wages where the work is to be done.

A good team of four oxen and two hands will subsoil nearly or quite an acre a day, if the soil be favorable. As to the kind of fruit trees that will be most profitable, we cannot answer definitely so general a question. To decide on a subject of this nature, it would be necessary to know to what market the fruit is to be sent, and then learn what kinds are most cultivated, in order to cultivate those fruits to which but little attention is paid.—*N. E. Farmer.*

NEW CHEMICAL DISCOVERY.—A number of scientific experiments have recently been made made by a celebrated chemist of Paris, the result of which have positively established the fact that, for agricultural purposes, plaster, or the sulphate of lime, in itself possessing no alkali basis, or fecundating powers; that in order to be useful for such purposes, it must be mixed with ammoniacal ingredients, and that it may be replaced by any saline matter which contains ammonia.

ECONOMY IN BUILDING MATERIALS.—Let us examine whether it would be economy for the farmers to use stone, brick, and iron almost exclusively in building.—In most parts of the United States, buildings can be made of wood far cheaper than of any other material I suppose that a barn built of wood, for instance, which would cost $300, might cost $1000 if made of stone, or brick, and iron. The interest on the excess of cost, $700, at 7 per cent., is $49 per annum, a sum sufficient to build a new frame barn every six years. Would it be economy to expend the $700 in building a barn of imperishable materials, notwithstanding it might "last a century," or even untold centuries? I fully believe that iron might be economically used in some cases, for building in cities, but I doubt the economy of substituting it for wood, in farm buildings, in a country where wood is so cheap as it is in the United States. It is nevertheless true, that "farmers and others of this country too frequently build for temporary use." It is still more true, that those do not study economy who, as is very often the case, "build themselves out of house and home."—I fear that this would still more often be the case, if farmers generally undertook to follow the advice of Mr. Cooke, and "discontinue the use of all kinds of lumber hitherto employed in the construction of houses." Much more might be said upon this subject,—*New England Farmer.*

TO MAKE YOUNG PEAR TREES BEAR.—I was afflicted by the sight in my garden for four five years, of the most luxuriant and thrifty young pear trees, which would not bear, but all their strength ran to wood.—Vexed at this, I resolved to try the effect of bending down the branches so as to check the flow of sap and cause them to form fruit buds instead of wood buds. Accordingly, the first week of December, 1847, I filled my pockets with stout twine; I drove down some pegs into the ground underneath my trees, (which had branched low, so as to make dwarfish heads;) I then tied a string to the end of every long shoot, and gradually bringing down the end of the limb till it curved down so as to make a considerable bend or bow, I fastened it in that position either by tying the other end of the string to the peg, or to another branch or a part of the trunk.

According to my expectation, the tree next year changed its habit of growth, and set an abundance of fruit buds. Since that, I have had plentiful crops of fruit without trouble—taking good care not to let many branches go on the upright system.—[Horticulturist.

FARMS IN CANADA.—The New York Tribune says that, in Canada, any person of good character can obtain a good sized farm at the hands of the Government, merely by applying and paying for the cost of the papers, some few shillings.

☞ We would invite the attention of our readers to the advertisement found on the following page, of Messrs. Wheeler, Millick & Co., of Albany. Their establishment is one of the largest, for the manufacture of Agricultural implements, in this country.

RUSSIA AND THE WORLD'S FAIR.—The Emperor of Russia has commissioned his agents to purchase every model at the Great Exhibition, which may be useful to Russian manufactures. A letter from St. Petersburg announces that the Emperor intends to spend $10,000,000 silver rubles in such purchases.

KEEP HORSES CLEAN, CURRYING, &C.—The experiment has often been tried, of the benefit to horses from being well combed and kept clean. It has been found that horses neglected as to cleanliness, will not be so well conditioned for either fatness or strength, though they may have abundance of food. Frequent combing and rubbing not only produce a healthy state of the skin, which is very conducive to a correct state of the bowels, but add essentially to the appearance and activity of the animal.—[Maine Farmer.

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tion, including the Pennsylvania State Fair, the Provincial Fair of Upper Canada, and the Michigan and Ohio State Fairs, together with numerous County Exhibitions in the different States.

THE TWO HORSE MACHINE, with from three to five hands will thresh from 125 to 200 bushels of Wheat per day, or twice that quantity of Oats.

The One Horse Machine will thresh rather more than half that quantity.

PRICE AT ALBANY.

For Two Horse Machines,.....$145 00
For One Horse " $129 00

Machines will be shipped to any part of the United States or the Canadas,

The subscribers are now shipping Powers and Threshers to their agents on the Mississippi and Ohio rivers, and in the interior of the Lake States. They will be delivered at all our agencies with only the cost of transportation added to our home prices. Persons wanting to purchase, may, by writing to us, learn where they can obtain our machines most conveniently,

N. B.—*Our* Machines *are warranted* as heretofore *to work to the satisfaction of the purchaser*, or they may be returned within 60 days after they are received, and the purchase money (if paid) will be refunded.

We want a few more agents in most of the States. To competent men who can give satisfactory references, liberal comission will be allowed.

WHEELER, MELICK & CO.
Corner of Hamilton and Liberty Streets, Albany.
April 1, 1851. (near the Steamboat Landing.)

CAUTION!

The subscribers Patentees of WHEELER'S PATENT HORSE POWERS, having noticed that an Agricultural Firm is advertising that Wheeler's Patent Horse Powers and Overshot Threshers are manufactured and sold by them, when in fact they have not obtained from us any liberty to use our Patent, we hereby caution all persons that said Firm has no right to use our Patent, or manufacture or sell said Horse Powers, and that a sale, by them, will confer no right upon the Purchaser to use such Power.

Messrs. WHEELER, MELICK & CO., of Albany, and their Agents, are the only persons authorized to make or sell WHEELER'S PATENT HORSE POWERS; and every such Power made or sold by them, or any person having a License to do so, has upon one of the Cast Iron Semi-Circles at each end of the Power, the words

"WHEELER'S PATENT—WHEELER, MELICK & CO. MAKERS, ALBANY, N. Y"

A due attention to this fact will enable Purchasers to avoid imposition and fraud.

No person or Firm in Albany, except WHEELER, MELICK & CO., is authorized to make or sell said Horse Powers.

A. & W. C. WHEELER, PATENTEES.

Premium Wheat Drill!!

INVENTED BY

R. J. GATLING,

OF INDIANAPOLIS,

TO WHICH WAS AWARDED THE MEDAL AND PREMIUM

At the Ohio State Fair.

GATLING'S WHEAT DRILL.—A correspondent of the *Ohio Statesman*, who attended the Great Ohio Fair, recently held at Cincinnati, thus speaks of the Improved Wheat Drill of Mr. Gatling of this city, (Indianapolis.)

"Among the most useful farming implements on the ground, is a Wheat Drill, invented by Richard J. Gatling of Indianapolis. This Drill, to our mind, is superior to any yet introduced to the American Republic. This, probably, is saying as much in its favor as possibly could be done, inasmuch as the ingenuity of our mechanics has brought into use a very great number of Wheat Drills within the past eight years, and nearly the whole of which have their admirers, in those section of country where they are in use. In arriving at the opinion so freely expressed above, we have not been confined to a single hurried inspection of its comparative merits, but have repeatedly on various occasions, had ample opportunity to examine its principles, and similar opportunities have also had to examine minutely the working powers of all the other wheat drills of the country, as those manufactured in Europe. Gatling's, we are prepared to say, stands at the head of the list, and entertaining this view, we should deserve censure, were we to neglect giving a brief sketch of its principles.

From the Indiana State Journal.

We copy the notice below of Gatling's Premium Grain Drill, from the Somerset *Post*, published at Somerset, Perry County, Ohio.

We give the article a place in our paper, believing it to be of interest and value to the agricultural portion of our readers.

Experiments made both in Europe and in this country fully establish the fact that wheat planted in drills will produce more than when sown broadcast, the usual way.—Every farmer, therefore, should be interested in knowing that a machine that is free from all objections has at last been invented.

The above machine was awarded the *premium*, diploma, and a Silver Medal, at the Ohio State Fair held at *Cincinnati*, the 2d, 3d, and 4th days of October last.

This machine was introduced into Perry County, this fall some time during the seeding season, and used by a number of our best farmers, whose certificates are appended below. The drill is free from every possible objection, and is especially clear of those objections which have been so successfully urged against all other machines intended for the same purpose. One of the principal objections urged against other machines, is the irregularity in the feeding process, which this machine wholly and entirely overcomes. The feeding of the drill is carried on by means of revolving screws or augurs placed in conjunction with the hoes, which are arranged in two different rows, so that the front teeth divide the space of those in the rear, making the distances between them just double what they would if they were placed all abreast. By this method, the feeding goes on with perfect regularity, as indeed it would be impossible for it to do otherwise, in consequence of so admirable an arrangement. But the perfection of this machine is not its only advantage, it can be got up in first rate style and be sold at from $55 to $60, some $20 or $30 cheaper than any other machines of the kind that can be had.

In speaking thus freely of this useful and admirable drill, we do so, not from any representations of persons interested in the sale of it, not from unqualified approbation of its merits we meet in the best newspapers and periodicals of the day, but from a personal knowledge of its construction, its modus operandi, and the evidences of its superior utility visible in the unequalled regularity and thriving condition of the wheat in our neighborhood put in by this machine. It is said that "the proof of the pudding is the chewing of the bag," and we want no better evidence of the merits of this machine, and the regularity with which it works, than what we have seen with our own eyes in several instances during the last seeding time, when we were present and saw its operations.—We introduce the following certificates to show the entire practicability of this Drill.

SOMERSET, O., Sept. 25, 1850.

This is to certify that I have used R. J. Gatling's newly invented *Wheat Drill*, in putting in some 12 acres of wheat, and must say, it is the best mode of putting in grain I have ever seen. E. BIRKHIMER.

SOMERSET, OHIO.

In October last, I used Gatling's Improved *Wheat Drill* in putting in some twenty acres of wheat, and I take great pleasure in stating that the machine worked far beyond my most sanguine expectations, and am satisfied that the use of it would be of an incalculable advantage to the wheat-growers of Ohio, and shall purchase one as soon as an opportunity presents itself.

DANIEL C. McCRISTAL.

I used the machine in putting six acres, and fully concur in the above statement.

OLIVER M. HOLLISTER.

The Western Pathfinder, Cincinnati, Oct 25, 1850, devotes nearly a page to the Ohio State Agricultural Fair," "Exhibition of the Ohio Mechanics' Institute, and "Ohio State Board of Agriculture." Under the head of "Ohio State Agricultural Fair" has the following:

Among the Agricultural Implements, the *Wheat Drill*, by Richard J. Gatling, of Indianapolis, Ind., is one of which we would like to give a full description, but our limits will not allow us to do so. It is said by competent judges to be the best Wheat Drill ever invented and offered to the farmers of this or any other country. And this, if it needs recommendation at all, is quite enough. It is simple in its construction, durable and cheap. Price from $50 to $100.

D. S. CURTISS is Patentee's sole Agent for the manufacture and sale of *Rights* in *Wisconsin*, and will visit the Counties in a few days, to introduce it n3.

WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

VOL 3. RACINE, WIS., JUNE & JULY, 1851. NOs. 6 & 7

PUBLISHED ON THE FIRST OF EACH MONTH, BY
MARK MILLER,
RACINE, WISCONSIN, NO 137 MAIN STREET.

PUBLISHED ALSO BY
R. SPAULDING, DUBUQUE,
To whom all orders must be addressed from the State of Iowa.

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Postmasters and all others who feel an interest in the circulation of the FARMER, are invited to lend their aid in procuring subscribers and extending its circulation.

PREMIUM LIST.

The annexed is the premium lists proposed by a committee appointed by the Agricultural Society and Mechanics' Institute of Rock County, for the Fair of 1851:

1st. FARMS.

The best managed Farm of not less than forty acres of land, refference being had to the general system of mannagement and profits obtained, rather than to natural advantages and expensive improvements.—2nd best as above.

2d. GARDENS.

The best managed Garden and Door-Yard, not exceeding one acre of land, refference being had to usefulness and beauty of arrangement. 2nd best as above.

3d. FIELD CROPS.

Best 5 acres of Winter Wheat. 2nd best of same.

The best 5 acres of Spring Wheat. 2nd best of same.

The best 5 acres of Oats, Barley and Corn. 2nd best of same.

The best half acre of Flax and Potatoes. 2nd best of same.

4th. FARM STOCK.

Horses.—1st, 2nd, and 3d best Stud Horse; 1st, 2nd and 3d best Breeding Mare with foal at her side; 1st, and 2nd best span of Gelding Work Horses; 1st and 2nd best span do. Pleasure Horses; 1st and 2nd best 1 year old Colt; 1st and 2d best 2 years old Colt; 1st and 2nd best 3 years old Colt.

Neat Cattle.—1st and 2nd best Durham and Devon Bulls; 1st and 2nd best Grade Durham and Devon do.; 1st and 2nd best Native Bulls, 3 years old or under; 1st and 2nd best Durham or Devon Bull Calf; 1st and 2nd best grade, do; 1st and 2nd best Native Bull Calf; 1st and 2nd best Durham, Devon and Native Milch Cows; 1st and 2nd best pair Working Oxen of four years old and upwards; 1st and 2nd best pair of three years old Steers; 1st and 2nd best pair of two years old Steers; for the best fat cattle, from one to five head.

Sheep.—1st and 2nd best Merino South Down and Leicestershire Bucks; 1st and 2nd best do. Ewes; 1st and 2nd best do. grade Bucks; 1st and 2nd best do. grade Ewes; 1st and 2nd best flock of Sheep of not less than twenty.

Hogs.—1st and 2nd best Berkshire Boar; 1st and 2nd best breeding Sow; 1st and 2nd best grade Boar; 1st and 2nd best grade breeding Sow.

Poultry.—For the best lot of Poland Fowls; grade do.

5th. DAIRIES AND THEIR PRODUCTS.

The best dairy of not less than ten cows, reference being had to the quality of the cows and the general management of the same; 1st and 2nd best 25 and 50 lbs. of Cheese; 1st and 2nd best 5 and 10 lbs. of Butter.

6th. DOMESTIC MANUFACTURES.

1st and 2nd best piece of home made Fulled Cloth of not less than ten yards; 1st and 2nd best piece of Rag Carpeting of not less than 20 yards; 1st and 2nd best piece of Linen home made cloth of not less than ten yards.

7th. MISCELLANEOUS ARTICLES.

Bed Quilts; Patch Work; Coverlits: Comfortables; Blankets; Socks, linen.

woolen and cotton; Mittens; Hearth Rugs; Woolen Yarn; Needle Work, &c.

8th. MECHANICAL DEPARTMENT.

The best Threshing Machine; do. Reaper; Fanning Mill; Plough, Breaking and Crossing; Cultivator; Hay and Manure Fork; specimen Edge Tools; Wagon; Buggy; Sawing Machine; piece of Cooper Work; specimen of Tin Ware; Copper Ware; Book Binding; Pamphlet Printing; Card or Handbill; Hat and Cap; pair of Boots and Shoes; specimen of Tailor Work; Stone cutting and Brick Making; Penmanship; Saddle, Trunk, Harness, single and double; set of Chairs, Rocking Chair and Sofa; Bedstead and Dining Table; piece of Broadcloth and Satinet; Architectural Drawing; Landscape Drawing, Painting; 3 best plans and elevation of a Farm House, Cottage and Villa; best plan of Barn, Cowhouse, Piggery and Hen House; specimen of Milinery and Dress-Making; barrel Flour; Confectionery, Crackers and Bread; Sash, 12 by 18, eight panneled Door; Cooking Stoves; Window Blinds.

That competitors may understand the manner in which premiums are to be provided, the following sections from the by-laws of the society are appended:

Section 3, The president of the society shall deliver an address on the first day of each annual fair, immediately after which, the treasurer of the society shall report the amount of funds on hand, the manner in which money has been expended, and in general to make a full exhibit of the financial state of the treasury.

Sec. 4. The board of managers or a committee appointed by them, shall, immediately after the closing of the fair, proceed to apportion the funds in the treasury to the respective competitors who shall be enti tled to premiums.

By Order of the Committee.

RACINE AGRICULTURAL SOCIETY.

At an Adjourned Meeting of the executive Board of the Racine County Agricultural Society, held at the house of J. D. Searls, in the town of Yorkville, on the 10th day of June inst., the President and Vice President being absent, Ezra Burchard was elected President *protem*; E. W. Washburn, Secretary.

The object of the meeting having been stated, the following classes of articles for which premiums will be awarded were formed, and the respective Judges elected, viz:

COMMITTEE TO AWARD PREMIUMS,

1ST CLASS. Best cultivated farms,	$10 00	5 00
Best reclaimed marsh of not less than 3 acres	4 00	200
Judges—Ruben M. Wait, W. H. Roe, J. Scott.		
2ND CLASS. Best field of Indian Corn, not less than 1 acre,	6 00	3 00
Best field of winter wheat, not less than one acre,	5 00	2 50
Best field spring wheat, not less than one acre,	5 00	2 50
Best field of oats' not less than 1 acre,	3 00	1 00
Judges—Peter Van Vliet, S. E. Chapman, Peter VanAlstine,		
3RD CLASS. Best field potatoes, not less than ½ acre,	4 00	2 00
Best field carrots, not less than ⅛ acre,	2 00	1 00
Judges—Samuel N. Basey, James Weed, John Appleyard.		
4TH CLASS. Best working oxen,	5 00	2 50
Best steers, 4 years old,	4 00	2 00
" steers, 3 years old	3 00	1 50
" yearlings,	2 00	1 00
" calf,	1 00	50
" bull over 3 years old,	5 00	2 50
" yearling bull,	3 00	1 50
" bull calf,	2 00	1 00
" native milch cow,	5 00	2 50
" native heifer, not over 3 years old,	4 00	2 00
" native yearling,	3 00	1 50
" " calf,	2 00	1 00
" blood cow,	5 00	2 50
" " heifer not over 3 years old,	4 00	2 00
" blood yearlings,	3 00	1 50
" blood calf,	2 00	1 00
Judges—Phinaes Cadwell, Thos. West, Wm. Ballack.		

5TH CLASS. Best stallion for draught, 4 years old and over,	5 00	2 50
Best stallion for carriage, over 4 years old,	5 00	2 50
" stallion, 3 years old,	4 00	2 00
" gelding for draught, 4 years and over,	4 00	2 00
" gelding for carriage, 4 years old and over,	4 00	2 00
" breeding mare,	5 00	2 50
" sucking colt,	2 00	1 00
" gelding or mare. 3 years old,	3 00	2 00
" gelding or mare, 2 years old,	3 00	2 00
" yearling gelding or mare,	2 00	1 00

Judges—Thaddeus G. Kellogg, Wm. Smith, David S. Teft.

6TH CLASS. Best buck,	3 00	2 00
Best ewe,	2 00	100

Judges — Thos. Hackney, James Catlin, Robert Thompson,

7TH CLASS. Best boar,	2 00	1 00
Best Sow,	2 00	1 00

Judges—L. P. Brown, Rufus Waldron, James A. Neil.

8TH CLLSS. Best 12 lbs. butter,	2 00	1 00
Best cheese, not less than 10 lbs.,	2 00	1 00

Judges—Eliphalet Cram, Orson Sheldon, D. D. McEachron.

9TH CLASS. Best ploughing ¼ acre in one hour.	5 00	2 00
10TH CLASS. Best plough,	2 00	
Best Fanning mill,	1 50	
" ox yoke,	50	
" churn,	50	
" threshing machine,	5 00	

Judges—S. D. Clough, Ezra F. Weed, William Stock.

11TH CLASS. Best printing,	1 00

Judges—Mark Miller, S. O. Bennett, John Hockins.

12TH CLASS. Best cabinet work,	1 00

Judges—J. I. Case, L. S. Blake, J. D. Searls.

13TH CLASS. Best 10 yards cassimere,	2 00
Best ten yards satinett,	1 00
" ten yards flannel,	1 00
" ten yards tweed,	1 00
" ten yards sheeps grey	1 00

Judges—A. H. Lee, R. M. Norton, J. Kendall.

14TH CLASS. There will be premiums awarded for the best variety of apples, pears, plums, quinces, grapes &c.

Also for onions, beets, cabbages, turnips, squashes, radishes, &c., either in books or diplomas—which shall be discretionary with the Judges of the Fair.

Judges—J, C. Bunner, Daniel Slauson, Michael S. Coffin.

15TH CLASS. This committee on Ladies' manufacture and needle work, will be appointed on the day of the Fair.

Resolved—That the Secretary be authorized to procure 500 Circulars for distribution.

Resolved—That persons intending applying for the premiums on cultivated farms, and reclaimed marsh land, will notify the Judges before the first day of August next, in order that the lands may be duly examined.

Resolved—That the Executive Board adjourn to meet at this place on the 1st Tuesday in September next. at 10 o'clock A, M.

EZRA BHRCUARD Pres't pro tem.
E. W, WASHBURN, Sec.

IOWA COUNTY AGRICULTURAL SOCIETY.

Saturday, July 19, 1851. Pursuant to adjournment, the Society met at the Court House in Mineral Point, for the purpose of receiving the Report of the Committee on "Articles of association, Rules and regulations of Premiums, and nomination of officers."

FRANCIS J. DUNN Esq., was appointed Chairman and

Gen. WM. R. SMITH, Secretary.

The object of the meeting was fully stated by the President. W. R. Smith, as Chairman of the Committee appointed on

the 10th of June last, to report at this time, made report of "Articles of association of the Iowa County Agricultural Society."

Which were severally considered, amended and adopted. The report of the same committee on nomination of Officers was read, and a vote having been taken seperately on the names proposed, the following officers were declared duly elected:

H. L. LEFFINGWELL *President.*

Vice Presidents:

HENRY M. BILLINGS, JOHN HAND,
LEVI STERLING, FRANCIS J. DUNN,
PATRICK O'DOWD, GEO. GOLDTHORP,
SAMUEL CRAWFORD, *Treasurer.*
WM. R. SMITH, *Secretary.*

ARTICLES OF ASSOCIATION OF THE "IOWA COUNTY AGRICULTURAL SOCIETY.

Article 1. The Society shall be called "The Iowa County Agricultural Society" and shall hold semi-annual meetings at Mineral Point on the second Fridays and Saturdays in May and October in each year, and extra meetings may be called at any time for special purposes, on notice of two weeks being given by the President and Secretary, and published in the Mineral Point newspaper.

Article 2. The officers of the Society shall be elected by the members of the same at the first annual meeting in each year; and shall consist of a President, six Vice Presidents, a Secretary and Treasurer. Standing committees on Premiums shall be appointed at each semi-annual meeting of the Society.

Article 3. The duty of the President shall be to preside at the meetings of the Society—to call special meetings when necessary—to appoint all committees, except committees on Premiums, in which latter appointment the concurrence of at least three of the Vice Presidents shall be required. The duty of the Vice Presidents shall be the same as that of the President, at the meetings in his absence. The duty of the Secretary shall be to record all the proceedings of the Society; to receive all moneys due to the Society; to pay the same to the treasurer. taking his receipt therefor; and he shall receive for his services such sum annually, as may be awarded by a vote of the society at its meeting in October, in each year. The Treasurer shall receive all moneys belonging to the Society; keep accurate accounts of his receipts and disbursements, and exhibit the same to the Society at its semi-annual meetings, and at any other time when required—He shall pay all premiums awarded by the committee, on orders signed by the President and attested by the Secretary. He shall receive such sum for his services annually as may be awarded by a vote of the society at its meeting in October in each year.

Article 4. Every member of the society shall pay into the Treasury the sum of one dollar annually, and shall be entitled to all the privileges of voting and serving as members of committees at the meetings of the society. A failure to pay annual contribution shall be deemed a forfeiture of membership.

Article 5. The society shall hold a semi-annual Cattle Show and Fair on the second Fridays and Saturdays in May and October in each year, at Mineral Point or elsewhere in the county of Iowa, as may be determined on by a vote of the members of the society at each semi-annual meeting.—At each of such Fairs, Premiums shall be awarded to the exhibitors of the best Horses, Cattle, Sheep, Swine, Farming Implements, Crops, Articles of Home manufacture, and such other discretionary premiums as may be determined on by the committee. Persons competing for premiums shall in all cases be the owners, raisers, manufacturers, producers or inventors of the subject matter of the premium. If in any of the grades of Horses, Cattle, Sheep or Swine, the exhibitor shall be entitled to more than one premium, he shall receive a certificate to that effect instead of the premium. All persons exhibiting farming implements must test them in the presence of the committee as far as circumstances will permit. Premiums on Crops and Seeds will be awarded at the May meeting, for the year preceding. All persons competing for premiums on grains, roots, &c., must make an affidavit to the cemmittee of all facts relating to the management of the land, measurement of grain and roots, &c., likewise the kind of seed, soil and mode of cultivation, and said statement must be placed in the hands of the committee on or before the meeting of the society in May annually.—No person will be permitted to compete for

a premium unless he become a member of the society by the payment of a dollar on or before the day previous to the Fair. No animal or article having taken the first premium in any class of a previous Show of this Society, can take it again in the same class, but may if the committee consider it entitled receive a diploma certifying the same.

Article 6. Until otherwise provided for by a vote of the Society the following shall be the amount of premiums to be awarded to each specified class and grade of animals and articles exhibited at each Cattle Show and Fair subject to the decision of the committees thereon as to the propriety of awarding the same.

HORSES.

Best stud horse,	$10 00
Best brood mare and colt,	8 00
Best colt two years old,	6 00
Best pair of matched horses,	6 00
Best three years old colt,	6 00
Best single horse,	6 00
Best year old colt,	4 00

CATTLE.

Best Durham Bull,	$6 00
Best Devonshire Bull,	6 00
Best Grade Bull,	6 00
Best Durham Cow,	4 00
Best Devon do	4 00
Best Milch do	4 00
Best Cow of any breed,	4 00
Best Durham heifer under 3 y's,	4 00
Best Devon do do	4 00
Best Grade do do	4 00
Best Durham Calf und. 9 mos. old,	2 00
Best Devon do do do	2 00
Best Grade do do do	2 00
Best yoke of Durham work'g oxen,	4 00
Best do Devon do do	4 00
Best do working oxen any breed,	4 00
Best do Fat Cattle,	4 00
Best yoke of three year old steers,	2 00
Best do two do do	2 00
Best do yearling do	2 00

SHEEP.

Best Saxon Buck,	$4 00
Best 4 Saxon Ewes,	4 00
Best 5 Saxon Lambs,	2 00
Best Merino Buck,	4 00
Best 4 Merino Ewes,	4 00
Best 5 Merino Lambs,	4 00
Best Buck of any distinct breed,	4 00
Best 4 Ewes do do do	4 00
Best 5 Lambs do do do	2 00
Best Grade Buck,	4 00
Best 4 Grade Ewes,	4 00
Best 5 Grade Lambs,	2 00

SWINE.

Best Boar,	$4 00
Best Sow and Pigs,	4 00

Best Jackass,	$6 00
Best pair of working Mules,	4 00

FARMING IMPLEMENTS.

Best Lumber Wagon,	$4 00
Best Plough,	6 00
Best Horse Rake,	2 00
Best Corn Sheller,	2 00
Best Fanning Mill,	2 00
Best Straw Cutter,	2 00
Best Vegetable Cutter,	2 00

ARTICLES OF HOME MANUFACTURE.

Best piece of Flannel not less than 12 yards,	$4 00
Best piece of Woolen Cloth,	4 00
Best piece of Woolen Carpet,	4 00
Best Counterpane,	2 00
Best pr Woolen Stockings,	2 00
Best Sample of Needlework,	2 00

CROPS.

Best 3 acres of Winter wheat,	$8 00
Best 3 acres of Spring wheat,	8 00
Best 3 acres of Barley,	8 00
Best 3 acres of Oats,	8 00
Best 3 acres of Corn,	8 00
Best 3 acres of Potatoes,	8 00
Best bushel of Clover seed,	4 00
Best bushel of Timothy seed,	4 00

DAIRY.

Best sample of Butter, not less than 10 pounds,	$2 00
Best sample of Cheese, not less than 10 pounds,	2 00

In all cases of awarding premiums, it shall be discretionary with a Committee to award to the second best of each class of animals and of articles exhibited, a premium of an approved work on agriculture.

Article 7. The committee of premiums shall make a report of their proceedings and awards, at each semi-annual meeting of the Society, and upon their awards so made, orders shall be drawn on the Treasurer, and certificates issued, signed by the President and attested by the Secretary.

Article 8. All premiums awarded by the committee may be paid in money if requested by the Exhibitor; but otherwise

shall be paid in such Piece of Silver Plate, honorary Medal, or other article of equal value with the premium awarded, as may be selected by the committee; and in all such cases, suitable inscriptions shall accompany the premium awarded.

Article 9. Suitable Certificates and Diplomas, for distribution by the Committees on Premiums, shall be procured by the Secretary, and when issued to such Exhibitors to whom they shall be awarded shall besigned by the President and attested by the Secretary.

The following Resolutions were adopted.

Resolved, That each member of the Society act as an agent to procure the names of additional members and subscriptions to aid the funds of the Society and report the same to the Secretary.

Resolved, That Francis J. Dunn Esq., be requested to deliver a discoure at the next meeting of the society, on the subject of Agriculture, and the object and purport of this association.

Mr. Dunn stated that he would comply with the request.

Resolved, That every member of this society be requested to contribute all such information, on the subject of Agriculture and the objects of this association, as may be in his power, in order that the same may be published in the "Wisconsin Tribune."

The meeting then adjourned until the second Friday in October next.

F. J. DUNN, Chairman.

Wm. R. Smith, Sec'y. *Tribune.*

Janesville, June 16th, 1851.

Mr. Editor:

After all the doubt and fear about crops, we are likely to have a pretty good season. Wheat looks well. A good deal of winter wheat was killed, and *some* was ploughed up, which was supposed to be dead, but would have borne a fair crop if let alone.—This may be a caution for the future.

It is generally truly urged that Wheat should be sowed early. If as early as the 25th of August it will not do as well as the first week in Sept. There is occasionally a season when late spring wheat succeeds better than early, but this is an *exception* to the rule,

It has been suggested that oats sowed with winter wheat will sprout up before the wheat and protect it from freezing out.—Has any one tried it?

Scattering straw over winter wheat will shield it from the frost. There is another benefit in using straw in this manner—it promotes an immediate and vigorous vegetation. Better use straw in this way than dissipating its useful gasses into the air by burning.

Corn is backward, but is coming forward finely. Probably some of your readers were late in planting their corn, this year. It rained and kept on raining, till the time past when corn could be safely planted.—*Better be a little to early with corn than too late.* If you are to early, you can replant—if too late, you may plant, but your corn may be destroyed by autumn frosts and all your labor of cultivating lost.

It is generally supposed that there is a great deal of *lime* in our prairie soil. May this not be a mistake? Prairie soil is porous and the subsoil is mostly gravel—rain percolating through soil carries off lime in solution—in this way is it not possible that too much is carried below, and that our soils need replenishing with lime? I have seen a great deal of sorrel growing on our prairies which indicates a want of lime.

There may not be anything very original or striking in what I have written above, but I wanted to say just about so much, by way of breaking the ice, and setting an example of writing for your paper which may be followed by abler pens than mine, among the intelligent farmers of Rock.

Almost any one, as may be seen above, can say something, if he will only take up his pen and "let drive" with his ideas. It is a good time for farmers to compare notes and decide where they are, for some of them have been at sea, for some time. Every one can do something towards arriving at a correct course, if he will write and give the public the advantage of his observations.

B.

INSECTS ON FRUIT TREES.

MR. MILLER:

SIR:—I have been a subscriber the past year, for your valuable Agricultural paper, and I think I have not seen anything in it, in regard to the little green Insects, that have been very troublesome to the apple trees in this section of the country, for the two past seasons. I am trying to raise a few thousand Apple trees, but these Insects have made such havoc among them, that they look as though they had been hard dealt with. I should think that they had killed some three or four thousand, within the last two years. The last year, they came onto the young and tender shoots the fore part of June, and covered the part that had grown that season, as thick as they could lay. They seemed to suck the sap from the young twigs, for about ten or fifteen days, and then they left, and another recruit came on, and they remained about the same lenght of time, and then they left, and then the third recruit came on, consequently, the trees did not grow but very little for the season. What there are that have not been killed, are so stunted that they do not look very promising. To get rid of them, I dipped them in strong lye, and then I wet the trees and sprinkled on dry ashes, on some, and dry lime on others, but neither had the desired effect. I then applied strong soap suds to some of the trees, and this also was of but little use.—I then boiled some tobacco, and bent the trees into a kettle of strong juice of the tobacco; this had but little effect. I next tried Anguintum, I took a sharp pointed pen-knife, and stuck into the Anguintum, then through the bark on the body of the tree, and in less than twenty-four hours, there was not an insect to be seen on one of the trees, that I had applied the Anguintum to in this way. I tried some more the second day, with the same result, and in one or two days after this, they all left the rest of the trees, I hope never to return. But, in case they come on them this summer, I shall apply the Anguintum immediately. Now, if my experiments will be of any benefit to you, or any of your numerous readers, it is at your disposal, to do with it as you see fit.

Can you, or any of your readers, state the cause of their troubling the trees, year after year, or tell me of any better remedy? It will be thankfully received.

Your's Respectfully,

WM. C. WOLCOTT.

ELDORADO, Wis., May 1st 1850.

CIRCULAR.

To the friends of Agricultural pursuits in Wisconsin.

A State Agricultural Society having been organized, the proper officers elected, and the first Annual Fair and Cattle Show appointed to be holden at Janesville, on the first Wednesday and Thursday of October next, the Exeeutive Committee now invite *all* friends of Agriculture and the Industrial pursuits, to immediately become members of that organization. It has been well and truly said, that "the cause of Education is the cause of all mankind," and were we to change the phraseology, and apply it to the cause of Agriculture, we would express a truth both forcible and of the most vital importance to the best interests of the whole people. It is from a suecessful cultivation of the soil that we must all look for a permanent foundation—and a living spring, to our prosperity as a State.

Agriculture is a science—should be taught as a sciencee, and carried out and practiced on scientific principles. Then, and uot till then, will its importance be fully developed, and those who till the soil, reap the reward of well directed labor. It is to aid in bringing about so desirable a state of things, that an Agricultural Society has been organized, and the friends of the enterprise invited to become members and attend the first fair at Janesville as above stated, at which time an appropriate address will be delivered by the Hon. John H. Lathrop, Chancellor of the Wisconsin University.

Owing to the absence of the requisite amount of funds, the Executive committee

have deemed it advisable as yet to prepare a list of premiums, which must of necessity, be small the present year, and limited to the product of certain departments of Agricultural Science. Such, for instance, as the best specimens of stock, of manufactures &c., and the best samples of grains or vegetable products, will be considered, where it is the result of careful, scientific culture, and accompanied by a written statement of the exact process of cultivation by which it was produced.

These are some of the brief outlines by which the committee will be governed in arranging and awarding premiums. A full and complete list will soon be prepared and forwarded to each member of the Society.

But it shall be borne in mind that no specimens of stock or manufactures, or samples of grain or other vegetable products will receive any premium at the Fair, unless the owner, manufacturer, or producer, first becomes a member of the Society.

As the only fund at present in possession of the Society, from which to award premiums, is that arrising from the initiation of members, the early attention of farmer in the State is called to the provisions of article 1, of the constitution, wich is to be found below.

By a proper effort on the part of the friends of Agriculture and all Industrial pursuits throughout the State, we can yet secure a very respectable fund from which to award premiums at the First Annual Fair thus placing the Society in a position to give an enlivening, vivifying influence to the cause of Agriculture throughout our beautiful Wisconsin.

EXECUTIVE COMMITTEE.

Erastus W. Drury,	Roswell C, Otis,
Chauncey Abbott,	Royal Buck,
Timothy Burns,	Adam E. Ray,
Henry M. Billings.	Wm. F. Tompkins,
Albert G, Ingham,	H. Johnson.
Andrew Palmer,	John H. Rountree,

Art. 1st of the Constitution reads as follows:

The Society shall consist of such citizens of the State as shall signify in writing their wish to become members, and shall pay on subscribing not less than one dollar, and annually thereafter one dollar; and also of honorary and corresponding members.

The President of County Agricultural Societies, or a delegate from each, shall be *ex-officio* members of this Society.

The payment of ten dollars or more, shall constitute a member for life, and shall exempt the donor from annnal contribution.

P. S. Persons desirous of becoming members of this Society, will please forward their names to the Recording Secretary, Albert G. Ingham, at Madison Wisconsin, who will enter them upon the books and remit a certificate of membership.

How to Enlarge Vegetables.—A vast increase of food may be obtained by managing judiciously, and systematically carrying out for a time the principles of increase. Take for instance a pea; plant it in very rich ground; allow it to bear, the first say half dozen pods only; remove all others save the largest single pea of these; sow it the next year, and retain of the produce three pods only; sow the largest on the following year, and retain a pod; select the largest, and the next year the sort will by this time have trebled in its size and weight. Ever afterwards sow the largest seed, and, by these means you will get peas, or any thing else, of a bulk which we have at present no conception.—[Boston Cultivator.

Encouragement of Agriculture in Indiana.—The Legislature of Indiana, at their late session, provided for a State Board of Agriculture, with auxiliary societies in each county. The following liberal provisions have been made: Whenever thirty or more residents of a county have organized themselves into a county society and raised fifty dollars, they may draw on the county treasury for a like amount, to be paid out of funds collected for license of menageries, circusses, shows, &c. This fund is to be appropriated for premiums at a fair, to be held annually, and reports of their proceedings are to made to a State Board of Agriculture. Each county society may send a delegate to the State Board, and the State Treasurer may pay the ordinary expenses of two meetings per year of said Board. They are to hold a State Fair, and report the proceedings annually to the Legislature, together with an abstract of the county reports. One thousand dollars per annum is appropriated out of the

State treasury to carry out the objects of the bill.

Farming and Farmers.

Can a young man, who intends to pursue farming, afford to spend the time and money necessary to attain a knowledge of scientific Farming? The common opinion among our farmers think they can afford to give their sons some education above what is necessary to transact the ordinary business of the station. The old notion that a young man who has cyphered as far as the Single Rule of Three, knew enough, is now fortunately exploded. But if any additional education is to be given a young man, why not give him that which will be of benefit to him in after life? If mental training is sought, the study of Agricultural Chemistry will give him that, and besides fit him for practical business.

But cannot the young man devote a little additional time to studies of this kind with benefit? Which is best, for a young man to learn his trade fully of a competent workmen at a greater expense even, or to learn it of a *bungler?* In which way will he be likely to accumulate the most property? And to be the most successful?

But we are told that farming won't pay. Now will any half-learned trade pay?—The results of the labors of those who have prosecuted farming on scientific principles, show conclusively that farming may be more profitable. And if one does not properly understand his business, he most assuredly ought to expect failure rather than success. The clerk is willing to spend time to acquire a knowledge of his business, before he can reap any profit from it, and the professional man is obliged to spend years, and be at a heavy expense in getting his profession, which when he has got, hardly pays him a better per cent. than many of the well cultivated farms do their owners. But the value of a scientific knowledge of farming is not a vain or an imaginary thing. Many men have taken the pains to acquire such knowledge, and by the application of it to the farming business are far outstripping in the point of profit, those who have not acquired it.

But to acquire this knowledge it is not necessary to spend years at our colleges.—The means for attaining this, which are within the reach of all, have been already alluded to in a previous number. But we are told, a man who spends all his time reading books wont know how to carry on a farm. Nor will one know how to carry it on properly if he *merely reads* books. There is a science in farming and he who best knows its principles and how to apply them will be most successful in business.

Some provisions ought to be made then in our Academies, and higher Seminaries, by which our young farmers can have an opportunity to gain a knowledge of these principles. But when shall it begin? Will the farmers call for it? If there is a demand, there will doubtless be a supply.—Nor in fact do I imagine the time is far distant, when Agricultural Chemistry will become one of the studies usually pursued in our Academies. This, if properly taught, would doubtless be of very great benefit to the largest, and in many respects by far the most important class in the community.—[Semi-Weekly Eagle.

Analysis of the Apple.

A paper on the analysis of the fruit of the apple, by Dr. Salisbury, furnishes some facts worthy of notice. Owing to the lateness of the season (in spring,) before the analysis was commenced, the following sorts only were examined, viz: Swaar, Kilham Hill, Rhode Island Greening, English Russets, and Talman Sweeting. From the numerous table of results, the following facts are drawn:

The English Russet contains less water and more dry matter than any of the other sorts. This is doubtless the reason why this variety is so hard to freeze. The Talman Sweeting contains more, the Greening still more, and Kilham Hill most of all; ranging in all these from 79 to 86 per cent. A fresh potato contains about as much water as the Russet. These results show the reason that apples, when manufactured into cider, produce nearly their own bulk of juice, a fact which has often puzzled many who merely regarded the solid nature of the fruit.

A striking difference in the composition of the apple and potato, is the entire absence of starch in the former, while in the latter it constitutes about one-half of the

solid part. The apple contains about twice as much of the compounds of nitrogen as the potato.

The Russets were found to contain a larger portion of tannic and gallic acids than other sorts. These acids impart a stringency, and are indicated by the black color given to a knife of iron or steel used in cutting this fruit. The apple is rich in phosphoric and sulphuric acids and potash and soda. Hence we may infer that bone dust, ashes, salt and plaster, would be likely to prove useful as portions of the manure applied to a bearing tree, in addition to what is already contained in yard manure.—[Trans. N. Y. Ag. Society.

TO PLOW IN CLOVER, WEEDS, &c.

Those who have undertaken to plow in green crops, know the difficulty frequently attending the opperation, on account of the liability of the plow to be clogged, and the vegetable matter being left uncovered. A correspondent of the American Farmer gives the following description of a contrivance he has adopted, which is stated to answer the purpose completely:

Saw off a block from some hard, durable and heavy wood, say about ten inches long, and three and a half or four inches in diamiter; then take a piece of trace chain, about three feet long, confine one end to the block, by driving a staple in the end, having first passed the staple through the end link of the chain. Point the other end of the block, and attach a carge chain in the same manner to that. Tie the short chain (attached to the spuare end of the block,) to the rod which passes through the mould boardand at that place; drop the block in the bottom of the furrow which has been already opened, (of course on the mould-board side,) draw up the long chain, and attach that to the clevis; be sure that you have both chains just tight enough to permit the block to lie in the furrow; allow no slack. The short chain gathers the clover, weeds, &c., and bends them down; the weight of the block prevents the chain from raising, and the plow laps the dirt over the weeds, whilst they are in a recumbent position. I am this day turning under weeds as high as the heads of the plowmen, which are almost wholly concealed.—*Columbus Enquirer.*

BUTTER MAKING.

From the Report of the Essex Co., Mass., Agricultural Society.

There is so much time missspent, and labor lost in the making of poor butter, that we feel it to be an imperitive duty to endeavor to impress the minds of farmers, and of their wives and daughters, with the importance of giving heed to this subject.—There are some things in relation to it so well settled as to be universally known by all those who have any knowledge in the matter. There are others on which there remain great difference of opinion and variance of practice; as for instance, in the statements before us, we find some of the makers of butter apply *cold water* freely to the butter, both before it is taken from the churn and afterwards; "to aid in extracting the buttermilk, and to harden the butter," as they say. Others bring it into form without the use of water, and say that its use impairs the flavor, and essetially injures the quality and quantity of the butter.—How shall it be determined which of these are right? This is a practical question, applicable to every churning—quite too important, thererefore, to be left in doubt.—Probably most persons do as their mothers used to do, without inquiry whether there is a better mode of proceeding. In an intelligent article upon this subject, from one of the most succesful makers of butter in this country, (see Transactions for 1840, p, 72,) we find this sentence:

"More depends on this than any part of the process of making good butter. If our dairy women would apply double the labor to half the quantity of butter, and thereby thoroughly remove all the particles of buttermilk, this one-half would be worth more than the whole, in the condition it is usually sent to market."

Mr. Howard of the Albany Cultivator, authority second to none in the country, says:

"According to our experience, the best butter is not produced by a very *short* nor a very *long* period of churning. If it is churned too quick, the separation is not complete, and the butter besides being less rich, is deficient in quantity—if the process is continued too long, the butter is likely to be *oily*. We think our best butter makers would decide churning for ordinary quan-

tities, say from ten to twenty pounds, should occupy from thirty to fifty minutes." This corresponds entirely with the opinion expressed by Mrs. Nathaniel Felton, who said she did not want the butter to come in less than thirty minutes—it is not so good when it comes in a shorter time."

We are informed, by some of those who have been most successful in the management of their daries, that they look more to the quality of the milk given by the cow, than the *quantity*; and in selecting their cows to be kept for this purpose, they choose only those which give milk adapted to the purpose. It is unquestionably true, that one quart of milk from some cows, will yield as much, or more butter than two quarts from others. In selecting cows, therefore, the quality of their milk should be tested, either by making butter from it, or by the use of a *lacometer*, which shows the comparative thickness of the cream that will rise on similar quantities of milk. Mr Holbert, an experienced farmer in New York state, says, "I find by churning the milk separate, that *one of my best cows* will make as much butter as three of my poorest cows, giving the same quantity of milk." We have heard the same thing substantially, from dairy women themselves. Let those cows which abound in *quantity only*, be turned over to those who care only for filling their measures—and let those that afford *substance*, as well as show, be kept to supply the churn.

To Farmers, Teachers, & Editors.

We invite the special attention of farmers, teachers, and editors to the following articles on "AGRICULTURAL GEOLOGY."—They are so simple, direct, practical and elementary, as to afford both interest and instruction to farmers, now so generally seeking the science of their art—SCIENTIFIC AGRICULTURE. If generally inserted in papers and read in schools, newspapers would become school books, and much of the surplus *boy power*, now exhibited in lawlessness, violence, and rowdyism, would be converted into practical science—the worst boys in many cases, changed into the best:

Agricultural Geology—No. 1.

BY JOSIAH HOLBROOK.

No class of the community have an equal interest in geology with farmers. No science is so interesting to farmers as geology, in connexion with chemistry. The two sciences cannot be separated and justice done to either. While the elements of our globe, especially of soils, require chemical tests to determine their character, these very elements are absolutely essential for experiments to determine the fundamental principles of chemistry. Oxygen, the most chemical agent in creation, is also the most abundant material in rocks and soils. The one as an element the other as an agent, are alike essential to each other, and both indispensable, as at the foundation of all agricultural science.

A knowledge of each is as feasible as it is important—entirely within the comprehension of a child six years old. Each is a science of facts more than abstract reasoning—of facts, too, equally instructive and delightful to every young mind.

Take an example: The child has placed before him two glass tumblers—the one containing quartz, the other lime or sand and chalk. The name of each is as readily learnt as the name of iron, lead, gold, tree, horse, or any other object in nature or art. Into each tumbler is poured some sulphuric or muriatic acid. In the tumbler of lime the pupil observes an action—in that of quartz no action. He is told this action is called effervescence. He hence learns to recognise lime and quartz, and the more certainly from the recollection that the one effervesces with acids and the other does not.

Here is an example of geology and chemistry, alike useful to the farmer and interesting to the farmer's child, or any child. The same simplicity and direct fundamental instruction run through the whole of both of these exceedingly practical sciences.

I may hereafter point out a few of the leading principles of these two sciences; their connexion with each other; their essential importance to all classes, and, most of all, farmers; their exceeding fitness for the early instruction of children, and the entire feasibility of having them among the "first lessons" taught in each of the eighty thousand American schools.

Agricultural Geology—No. 2.

BY JOSIAH HOLBROOK.

Oxus is the Greek word for *acid*; ginomai, in Greek, means *make;* hence the lit-

eral meaning of oxygen is *acid maker.*—Combined with sulphur it forms sulphuric acid; with nitrogen nitric acid: with carbon carbonic acid, &c. Respiration, combustion and fermentation are the three principal operations producing the combinations of oxygen and carbon; the results carbonic acid.

Acids combine readily with metals, earths and alkalies—as iron, lime and potash. By chemists these combinations are called salts, designated by the termination *ate.* Sulphuric acid combining with various bases, produces sulphates: nitric, nitrates; carbonic, carbonates. Sulphate of lime is gypsum or plaster of Paris; sulphate of iron, copperas; of soda, glauber salts; of magnesia, epsom salts. The carbonate of lime is common limestone, marbles, chalk, and many beautiful crystals. Carbonates of iron, copper, and lead are ores of these metals.

About a century ago water was found to be composed of oxygen and hydrogen, and common air of oxygen and nitrogen. About half a century ago oxygen was found by Sir Humphry Davy to be an element of rocks, of course of soils, as it was of the alkalies, combined with oxygen, were found by the same great chemist, to be metals very peculiar in character.

It hence appears that oxygen is an element in air, earth and water, existing abundantly in solid, liquid and aerial forms. In the whole it constituses nearly half our globe. It is, of course, the most abundant element of the material world. It is also the most important agent in producing changes in matter essential to human existence. It is very appropriately called *vital air*, as neither animal life nor any life can exist without it. It is no less essential to combustion than to life. It also acts with great energy upon metals and other solid substances. In this action it produces three very large and very important classes of bodies—oxydes, acids and salts. Iron rust is the oxyde of iron; the dross of lead, the oxyde of lead; burnt lime, the oxyde of calcium; pure potash, the oxyde of potasium; pure soda, the oxyde of sodium; silex or flint, the oxyde of silicium. The combination of one part oxygen and one of nitrogen constitutes the atmosphere; three parts oxygen and one nitrogen form nitric acid, aquafortis. Combined with other substances, it forms numerous acids. Saltpetre is the nitrate of potash. The large quantity of oxygen it receives from the nitric acid fits it for a material in gunpowder.—giving to that powerful agent its principal power.

A plate, tumbler and scrap of paper, with a little water, will enable any teacher or parent to perform an experiment on oxygen equally simple, instructive and interesting. In a deep plate pour some water. On the water place a scrap of thick paper, piece of cork, or other light substance; on that another piece of paper or cotton moistened with oil. On lighting the paper or cotton, place over it a large empty tumbler. The combustion continues for a few seconds, and when it is extinguished the water occupies about one fifth of the space in the tumbler, showing the necessity of oxygen for combustion, and that it constitutes about one fifth the air we breathe. What man, woman, or child would not like to be familiarly acquainted with an element so abundant and agent so active as oxygen, especially when such an acquaintance is equally simple, useful and delightful?

Agricultural Geology—No. 3.

BY JOSIAH HOLBROOK.

Rocks are the oxydes of metals. Silex, the most abundant ingredient in rocks, mountains, and soils, is the oxyde of silicium. This oxyde constitutes nearly one half of the solid matter of our globe. It is the principal element of quartz, in all its varieties, which are exceedingly numerous, and some of them very beautiful. Quartz is the only mineral found everywhere. Sand is pulverised quartz. Pebbles are fragments of quartz, rounded by attrition. Gunflint is quartz, breaking with a conchoidal (shell like) fractnre. Jasper is red quartz, with a fine compact texture. Amethyst is purple quartz, frequently found in six-sided crystals, which is the common shape of quartz crystals in its different varieties. Agate is clouded quartz, in numerous varieties, some of which are much used for watch-seals, finger rings, breast pins, and other ornaments. Carnelian is quartz of a fine texture and of a yellowish red color. Chalcedony, bloodstone, catsye, and many other gems, are varieties of quartz.

Most, perhaps all, the gems used in the breast-plate of Aaron, the high priest, were quartz of different textures, colors, and

hues. The precious stones presented by the queen of Sheba to the King of Israel were probably quartz. The stones mentioned in the Book of Revelations as forming the streets of the New Jerusalem, with all the gems referred to, were but varieties of stones used for paving our streets, and to the earth moved to the plow and the hoe of the farmer, and for the dirt carted for filling our docks.

The coloring matter giving most of the beautiful hues to gems, and an endless variety of colors to quartz, is the oxyde of iron. The oxyde of silicium and the oxyde of iron are hence united in this same most abundant mineral in the world.

Next to duartz feldspar, or clay formed by the decomposition of feldspar, is the most abundant element of soils. This, too, is composed of several oxydes of metals in chemical combination. Feldspar is also very extensively united with quartz in the formation of rocks, not by chemical combination, but mechanical mixture. The feldspar and the quartz can be separated by the hammer. Not so with the oxygen and silicium, forming silex. Chemical agency alone can separate chemical combinations. Such combinations in rocks, soils, and other mineral bodies, are exceedingly numerous, complicated, and delicate. The most common stone that meets the eye in any part of the world is composed of two oxydes.—The oxygen and metals are each united by chemical affinity, and then the two oxydes are again combined by the same agency to form a "*common stone*," evidently worthy of more respect than it *commonly* receives.

An experiment: Pour upon a little perlash in a tumbler some strong vinegar. An effervescence will follow producing carbonic acid. A burning candle immersed will be extinguished, showing that carbonic acid is fatal to combustion. It is equally so to life.

FLAX COTTON.—Buffalo seems to have taken the lead in the manufacture of this new article. The editor of the Republic of that city, says he has seen a specimen, spun at the factory and under the superintendence of Mr. R. H. Heywood, of that city, from flax taken from the field and rotted in six hours. The yarn can be spun as fine as No. 60. It consists of five-eights flax and three-eights cotton, and makes an excellent article.

From the London Chronicle

Flax Cotton.

The experiments at Rochdale connected with the adaption of flax to cotton machinery, we are happy to state are progressing in the most favorable manner.—In addition to the proceedings connected with the spinning of the yarn in different portions of flax and cotton, and from the pure fibre, and the weaving of some considerable quantities of hose, flannel, and other fabrics from the yarns so produced, we are informed that several pieces of calico are in a state of great forwardness, and will be completed in a day or two. Within the last few days it has also been satisfactorily demonstrated that long fibre can be prepared from the flax with as much ease and advantage as the short fibre, and that prepared upon this process, it is capable of being spun dry, instead of by the present process of wet spinning. The benefits of this invention will be, therefore, not simply confined to the cotton and wool manufactures, but the flax spinners themselves will eventually find in the discovery the means of most materially improving their present system.

We have hitherto, abstained, for obvious reasons, from alluding even to the principle upon which the flax fibre is treated so as to bring it into a substance similar to cotton, and capable of being spun either alone or in combination with cotton or wool; and if we do so upon the present occasion, it will be simply for the purpose of showing to persons who may have heard of or read of previous attempts and failures to transform flax into cotton, how widely different is the principle adopted by Chevalier Claussen to that of other persons who have come forward with the same subject.

Persons in the slightest degree conversant with the subject will know that there is a vast difference in the structure of the fibre of flax and cotton; and we were not surprised that our announcement of the practicability of substituting the one for the other was received at first with a considerable degree of hesitation. The fibre of cotton is what may be termed "ribbon formed," while that of flax is cylindrical.—We were fully aware of this material difference in the two articles; but we also knew that the mode adopted in the prepar-

ation had the effect of so completely changing the matter of the flax as to make it a matter of the utmost difficulty to distinguish it, when properly prepared from cotton. Upon the removal of the woody substance, which forms one of the component parts of the stem of the flax plant, there remains a quantity of fibre held together by the gluten, or gum resin, which adheres to them. In order to separate these fibres it is necessary to employ fermentation, or other chemical agency, which will have the effect of dissolving the glutinous matter, and of setting the fibres free, and in such a state as to fit them for the further manipulation required in the processes of manufacture. These fibres, when so separated are, however, coarse, harsh, and elastic, as compared with cotton, and their length would evidently unfit them for spinning in the existing cotton machinery. If their length, however, were the only obstacle, it is obvious that there are many modes by which that difficulty might be obviated; the great points to overcome being their harshness and elasticity.

By the present mode of steeping in hot or cold water, and the subsequent operations of "breaking and scutching" usually resorted to, a partial decomposition of the resinous substance and separation of the fibres takes place, sufficient to adapt them to the linen and other manufactures in flax is now employed. But, for the reasons above indicated, it is requisite that a more complete separation should take place before the material can be operated upon for the purpose of adopting it as a substitute for cotton. A complete division of the fibres and removal of the resinous matter is therefore the first step resorted to by Chevalier Claussen. This is affected by him either by operating directly upon the flax stem as it comes from the field, or upon the fibre, after it has been cleared, by purely mechanical means from the woody portion of the plant. The present modes of steeping are entirely dispensed with, and one of the greatest obstacles to an extension of the growth of flax is thus effectually removed. The grower is not required to transform himself into a clumsy chemist, or to resort to tedious and expensive process in order to prepare his produce for the market. He may, where convenient, dispose of his flax in the straw, or by simple mechanical means he may move the wood from the plant, which will form valuable food for cattle, and thus facilitate the means of transport by reducing its bulk. That which under the present system is imperfectly done at great expense, and in periods ranging from two or three days to as many weeks, is accomplished by Mr. Claussen, by chemical agency, in less than three hours, and without deteriorating or injuring the material. Complete, however, as may be the integration obtained by this process, the cylendrical flax fibres still possess all that harshness and elasticity which is necessary to remove before they can be adopted as a substitute for cotton. In order to effect this removal the inventor splits the fibres into a number of small ribbon-like strips, possessing flat sides and ragged edges, of a gravity somewhat less than cotton, and which examined under the microscope, present all the appearance of that material. We are not at liberty at present to state further than that this result can be effectually obtained by the application, in a very ingenious and simple mode, of electro galvanic or chemical agency. It is in this part of the process that the really valuable part of the invenion comes into action; and those who are acquainted with any of the other systems by which flax has been endeavored to be transformed into cotton-like substances, such as boiling in sea-water, lime, or other solutions of a similar character, will at once perceive the great difference in the mode of treatment adopted by Mr. Claussen, and that of other persons, for the purpose of affecting that object. It is obvious, therefore, that any argument which might be drawn from previous failures in similar attempts can have no weight whatever in the decision on the merits of an invention, the principle and details of which are so perfectly unique in their character.

The fibres having been split, and their cylindrical character thereby completely destroyed, they are in a fit state for the ordinary treatment required in placing cotton upon the machinery. In addition, however, to this change of structure in the material, and its consequent adaption to cotton purposes, another very important article is at the same time removed. Owing to the great difference in the relative gravities of the two materials, and the advantage in the length of fibre which could be obtained

from a given weight of cotton, as compared with flax, it would be obvious that, in an economical point of view, the latter could never be substituted for the former, unless a considerable dimunition in the cost of the one, or increase in the price of the other, were to take place. Thus 1 lb. of "fair bowed Georgia" cotton, consisting, say 8 d. per lb. spun into 30's, would yield 25,200 yards; 1 lb. of flax, however, costing the same price, 8 d. per lb., spun into 70's, that number in "line" being about equivalent to 30's in cotton, would produce but 21,000 yards, being a difference in length of yarn, in favor of cotton over flax, of upwards of 4000 yards, or about 20 per cent; but the cotton yarn could be prepared at a cost which would admit of its being sold at 11 d. while the "line" yarn would not be sold for less than 18 d, being a difference of 7d. in the pound in favor of cotton. By the process above described, however, the produce in yarn, of a pound of flax, is increased from 50 to 100 per cent over the old mode of treatment; and by regulating the proportions and strength of the agents employed, it can be increased to a far greater extent. It is not requisite, however, that the finer and higher priced flax should be procured and used for this purpose; but on the contrary, by this mode of treatment the full ripe and coarser kind of flax is that which can be used with the greatest advantage. This is a circumstance highly favorable to the extension of the growth of flax, as the grower will not be under the necessity of pulling his flax before the seed is fully and completely ripened.

Flax vs. Cotton—Comparative cost of Production.

The Maysville. (Ky.) Eagle, in reference to the experiment now making to substitute flax for cotton, says:

'We have a sample before us of flax cotton,' which is as white and soft, and fine as any cotton, but of a richer and more glossy, silk-like appearance, and which evidently can be spun into very fine yarns, as cheaply as cotton. Now this material can be produced from unrotted flax, for seven cents per pound! and we know that unrotted flax can be procured so that the lint shall stand at one and a half cents a pound, leaving a pretty wide margin for the preparation to bring the material to seven cents. It is known that there is *no* object in growing cotton for a less sum, so it is far from being an impossibility that linen may yet be produced as cheap as cotton."

The inventor, Mr. Leavitt and his associates, are making arrangements to introduce its manufacture as immediately and extensively as possible. The Glasgow, (Scotland) Post says:

"We have had handed to us a piece of fine lawn muslin, figured with the flax cotton, and it is no exaggeration to say that the flowers have all the lustre and glossy appearance of silk. This, we believe, is the first time in which the flax cotton has been used for the purpose of figuring fine muslins, and the result, we understand from practical parties, is most satisfactory and conclusive. Independent altogether of the opinions which may be entertained as to the effect which the general substitution of home-made flax for slave-grown cotton is calculated to produce, the invention by which the material is animalized gives it a superiority over cotton which cannot fail to secure its general adoption by parties engaged in the silk, woolen and linen trade."

From the Albany Cultivator.

On the Nutritive Value of Oat Hay.

LETTERS FROM PROFESSOR NORTON—NO. 8.

ANALYTICAL LABORATORY, YALE COLLEGE, *New Haven, Conn. July*, 1850.

EDITORS CULTIVATOR:

In the January No. of the Journal of Agriculture, published by the Highland Agricultural Society of Scotland, I notice an article "on Oat Hay, and the nutritive value of oats cut green and fully ripe," by Dr. A. Voeleker, Prof. of Chemistry in the Royal Ag. College at Cirencester. The subject is one which has long interested me, and I call attention the more readily to the statements made here, inasmuch as Dr. Voelcker is an old friend, in whose results I have much confidence. We have worked together in the Laboratory of Malder, where he was first assistant, and I am sure that he will benefit the cause of agricultural science, now that his whole energies are devoted to it.

The idea of cutting grain while yet green, and of making it into hay in the

same manner as grass, is not by any means entirely novel. Experiments of an imperfect nature have been made before the present ones, with this same end in view. Some of these have perfectly succeeded, while others have, if not unsuccessful, been at least less striking in their success. We have needed in the occurrence of these unsatisfactory experiments, some general principles upon which to reconcile them if possible, or at least discover the source of error, or by means of which we might more fully attain our object of inquiry. We need also the union of scientific with practical knowledge. Upon this subject, in order to the certain determination of many points, I will copy two or three sentences from Dr. Voelcker's paper.

"On the other hand, I am convinced that practical men will remain in the dark on many of the most important points of agriculture so long as they despise the aid of chemistry, and persist in solving inquries connected with agriculture by mere blind experimentising; by experiments I mean made without plan, or anything clearly defined and distinctly understood. If those engaged in such *random trials* would bear in mind that nature does not give a precise answer to an indistinct question; and if they would be candid enough to believe, in all cases in which an experiment has failed to answer their expectations, that the experiment itself, or the anticipated result, must be false in principle, and that consequently the fault is their own, and not on the part of nature—a great deal of good would be effected. Unfortunately, however, most men are as quick in condemning the value of the materials used in a bungling experiment, as they are eager to praise and enthusiastic in recommending every result when the experiment proves favorable to their views; and when such an experimenter has some kind of theoretical notion in his head with which the experiment can be *made* to tally, the case is still worse. In this way a great deal of harm has been done, and the progress of scientific agriculture retarded instead of advanced."

There is much of sound practical sense in the above remarks, and every person who has studied over the numerous unprofitable and wearisome discussions, which fill up many of our agricultural papers, will fully appreciate it. It is for want of knowledge as to what they are about, that the contradictory results of most experimenters are to be ascribed.

In the present Dr. Voelcker seems to have happily united science with sound practical views, and we consequently have intelligible and reliable statements from him.

The first point to which attention was directed, regarded the proportion of water contained in the straw and grain of the ripe and unripe oat representatively; both samples being of the same variety and taken from the same field. As might have been expected, the green oats contained most water; this is shown by the following table:

Oats fully ripe.

Per centage of Water.		Proportion of Straw to Grain.	
Straw.	Grain.	*Dry* Straw.	Grain.
38.48	20.65	57.56	46.44

Oats cut green.

53.30	28.66	65.43	34.56

I have taken the mean of the various results given, as some discrepancy appears in the single determinations. By this table, several general conclusions are indicated—

1. That the proportion of water in the unripe plant is greatest.

2. That the proportion of the *dry* straw in the unripe plant is greatest.

3. That when the plant is dry, the grain bears a larger proportion to the straw than would have been imagined; being, even in the green plant, more than one-third of the whole weight, and in the dry plant nearly one-half.

The next step taken by Dr. Voelckert was to determine the nutritive value of his several samples. In this case regard was had only to the amount of nitrogen contained in them, that being considered the most important ingredient, in estimating any particular variety of nutritious food.—He calls the body in oats which contains nitrogen, by the general name of protein; this name applying to a class of bodies that contain about as much nitrogen, and that are about as nutritious, as lean meat when it is dry.

The proportions, or per centages of protein obtained by Dr. Voelcker were as follows:

I. *Oats fully ripe—Mean results.*
II. *Oats cut Green.*

No. II. was cut when the stalk and leaf were yet quite green, and the grain quite

milky, but fully formed. They were cut at the same time, the green oats having been sown about one month later than the others.

The conclusions to be drawn from the above results are not only extremely interesting in a scientific point of view, but are of much practical importance.

1. We see in comparing the numbers in the ripe and unripe straw, that the latter contains 3½ per cent. more nitrogen than the former.

2. That the unripe grain also contains more nitrogen; this may seem a very strange result, but may be explained when we consider the fact, that the unripe oats, although they had not attained their full bulk, had received most of their nitrogenous compounds, and that the after increase while ripening, must have consisted mainly in an accumulation of starch, and other non-nitrogenous bodies.

In addition to the facts established by these analyses, it is to be borne in mind, that the unripe straw is also much richer in starch, gum, sugar, and other compounds of the same nature, all of them both nutricious and easily digestible, but which are for the most part in ripening, gradually converted into woody fibre.

Here too the larger quantity of water, which has been already shown to exist in the unripe straw, is to be brought into account. This water helps to render the food more soluble, and more easily digestible by the animal. We find then that an equal weight of the unripe straw and grain, contains more nitrogen, more sugar and gum, and also more water; so that while it is more nutritious, it is also at the same time more easily assimilated and digested by the animal. This last is a point of more importance than is usually imagined. Of two kinds of food containing equal quantities of nitrogen, one may be vastly superior in its effects when fed, and this simply because it can be readily digested; a large portion of the other may even pass through the body unaltered.

Dr. Voelcker gives, in addition to his theoretical results, two letters from farmers who have seen oat hay triod. One of them says, "that when cut fine, oat hay goes one-fourth farther than if the oats and straw had been allowed to ripen."

In many parts of the country, it is very difficult to produce grass for cutting, but easy to grow quite tolerable oats, at least so far as bulk of straw and appearance of head is concerned. The grain may not fill out as well if allowed to stand, but still would serve a good purpose as fodder when cut green and made into hay. There is no loss of the grain by shelling when cut in this way, and the hay would be highly relished by stock.

I have no doubt but the same system would do well in the case of rye, or other grains; hay made from them would also be exceedingly nutritive. The facts given in the report of Dr. Voelcker, are quite sufficent to warrant my calling attention to this subject, and recommending experiments in such districts as feel the need of good winter fodder, and this of a variety that can be obtained without great expense.

JOHN P. NORTON.

Do Bees make Wax from Honey?

Yes, they do. Can they make honey from wax? We do not think they can, though one would be no more strange than the other.

It is generally believed that bees, in their collection and deposit of honey, do nothing more than collect little by little what honey is naturally secreted in flowers, and that they cannot and do not change this in any way. Admitting this to be true, they can nevertheless make wax out of it. This has been tried a thousand times by confining bees to the hive and feeding them with honey, or even sugar prepared into a syrup, and they will prepare and use it in the formation of comb.

How they change this we cannot exactly tell. The change produced is a chemical one. Honey and sugar, fat and wax, are all made up of the same materials. The difference consists only in the *different proportions* of these materials.

Prof. Thompson, in his experimental researches on the food of animals, speaking of the production of butter from the sugar of food—says—the connection between sugar, oil, and wax, is exhibited by the following formula:

	Carbon.	Hydrogan.	Oxygen.	Differeuces.		40
				Carb.	Hyd.	Oxy.
Sugar,	48	44	44			
Fat,	44	40	4	4	4	2
Wax,	40	40	2	4	0	

C. H. McCormick's Improved Virginia Reaper for 1851.

EDITOR'S TABLE.

APOLOGY.

Again it becomes our unpleasant duty, to apologise to our patrons, and ask their kind indulgence, for the non-appearance of the Farmer for the past two months, or since the issue of the May Number. The reason is: that our time and attention, has been so fully occupied in disposing of, and closing up a business of some years standing, that we could not controll sufficient time to do any justice to the Farmer. In fact, we have scarcely been permitted to be at home more than one day at a time for two months past. However unpleasant, not to say annoying, this interruption in the publication of the Farmer may have been to its readers, we can assure them, that our inability to deal justly, and meet their wants, has been to us a source of painful anxiety.

We issue the present number for June and July, in some haste, and shall immediately issue another number for August and September. We adopt this course, because our time is limited, and we wish to be enabled to effect some arrangement for the enlargement and improvement of the Farmer, and also for its removal to a more central part of the State for publication. If this and the succeeding number, should appear somewhat deficient, we assure our subscribers that we will make up for the deficiency before the close of the current volume, by increasing the amount of reading matter, and the number of illustrations in the remaining numbers.

By making the enlargement contemplated, each number will contain a much larger amount of matter than has been given monthly, while the subscription price will stand the same as at present.

Of our plans and future course, in the publication of the Farmer, we shall speak more fully in the October number.

Ceresco, June 8, 1851.

Mr. Editor,—We send you by the bearer a specimen of an insect that has commenced depredations on our apple trees. It eats into the limb at the place where this year's wood had started, in many places cutting the twig entirely off. It also eats off new buds which have just started. But few of them have made their appearance. They are, however, very destructive.

If you can give any account of the habits and history of the animal, together with any means you may know of destroying it, you will much oblige your subscriber.

WRIGHT & BAKER,
Nurserymen, Ceresco.

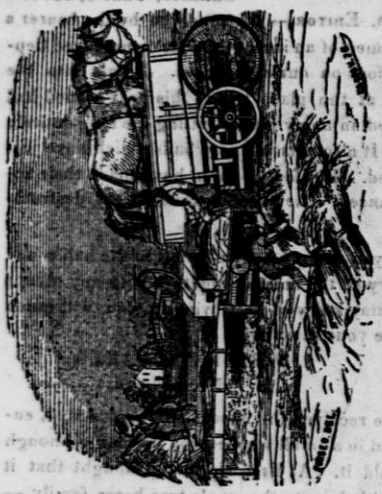
We received the insect safe and sound, enclosed in a small wooden box just large enough to hold it. At first sight we thought that it might belong to the apple tree borer family.—This was also the opinion of others who examined it, in whose judgment we placed more reliance than in our own opinion. We kept it tightly boxed for three weeks before it seemed to lose any of its activity, or show signs of parting with life. We then, through Dr. Hoy, of this city, sent it to Professor Kirkland, of Cleveland, for examination. He informs us that it is the *Curculus Novaboracencis* (or the *Ithyrus Novaboracencis* of Forster,) is rare, and nothing known respecting its depredations on fruit trees, or of its habits.

Inasmuch as it is a very rare insect, and judging from its mechanism, must be very destructive on whatever it may fancy to gratify its appetite, we hope our friends, Wright & Baker, will carefully observe its habits and let us hear from them again.

The Importance of Leaves to Plants.—Leaves are the principal organs of nutrition, through the gores, (stomates,) of which they receive a large proportion of their food. The number of absorbing pores upon a square inch, is shown in the following table, the chief part of which, it will be seen, are found on the under side of the leaf:

	Upper side.	Under side.
Vine,	None.	13,600
Rhubarb,	1,000	40,000
Lilac,	None.	160,000
Cherry Laurel,	None.	90,000
Mistletoe,	200	2 0
Olive,	None.	57,600
Holly,	None.	63,600
Clove Pink,	38,500	38,500

THRESHING MACHINES.



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THRESHING MACHINES,

Adapted to the use of one or two Horses, made in Albany, New York, which he offers for sale at his shop in Waukesha, at

ALBANY PRICES,

Adding transportation. Farmers and Threshers who study Economy, will find it to their interest to examine the above Machines—it having obtained the Premium on Exhibition in New York, Pennsylvania, Ohio, Michigan, and other States, give it such character that further recommendation here is deemed unnecessary; also,

CORN STALK AND STRAW CUTTERS,

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To be attached to said Horse Power, may be had of the subscriber. Said Machines will be delivered at any point in the State at reasonable charges.

We, whose names are hereunto annexed, being practical Farmers, and having used Case's and other Threshing Machines now in common use, do not hesitate to say that the above machine far supersedes any we have used or seen used in durability, cheapness, and ability to perform their work perfectly, which can be done with only from one foot to eighteen inches elevation.

John Thomas,	Richard Smart,
Howel Cobb,	Nathaniel Walton,
Adam Shultis,	E. D. Clinton.

Waukesha, June 28th. W. D. BACON.

SEED WHEAT.

WISCONSIN FARMERS, it is your interest to enquire for, and select the best seed wheat, both winter and spring, but especially winter, therefore, by seeing my growing crop you will see that it had stood the severe winter without injury, while other sorts of wheat have much suffered. I have eleven acres sown on spring wheat and oats stubble land, and I invite all farmers wishing to raise good crops, to come and see the superiority of the ETRURIAN WHEAT over many other kinds. It is a white bald wheat, the stalk or straw does not grow very long, and is hard and early, and not liable to be injured by the rust. Twenty cents per bushel over spring wheat is an object, besides the increase in bushels in favor of winter wheat. I have two acres of said wheat sown after a machine of my own invention, and the growing wheat is worth seeing; there is not a square foot of land but what there is a stool of wheat growing, I believe.

N. LE PROVOST.

Oakland Farm, Mount Pleasant, Racine Co. June, 1851.

IMPORTANT TO FARMERS!

J. I. CASE'S

Lever and Tread Power

THRESHING MACHINES,

Manufactured at Racine, Wisconsin.

THE important fact is now ascertained, that there is now manufactured and for sale at Racine, the best Threshing Machines that can be obtained this side of any place!

I would particularly invite the attention of those who would make Threshing their business, to my Improved Two Horse Tread Power, with Separator. Having had more than ten years experience as a practical Thresher, and using all kinds of power both

LEVER AND TREAD,

I am prepared to warrant the Two Horse Tread Power with four good heavy horses, capable of doing as much business during the season of Threshing as any Eight Horse Lever Power that can be produced.

OVER TWELVE HUNDRED DOLLARS

Have been earned with one during the season of Threshing, with less than one dollar repairs on the Machine. I will also keep on hand and for sale, the most improved kinds of

LEVER POWERS.

Barber's Climax I consider the best. They run at least one-sixth lighter than the common power, and I warrant them against breaks for one year, with proper care. My largest size Separators, with three foot cylinder and elevators attached, cannot be beat. I will warrant them to clean grain fit for market, without waste, with any Eight Horse Lever Power in use.

RECOMMENDATIONS.

From the Chicago Prairie Farmer.

EDITOR OF PRAIRIE FARMER.—Allow me, through the columns of your paper, to introduce to the favorable notice of your numerous readers, the two horse tread power Threshing Machines with Separator, manufactured by J.

I. Case, Racine, Wisconsin, which Machine I consider far superior to any other kind of Threshing Machine in use.

I employed Messrs. Marcher & Flack to do my threshing with one of them last season, and in justice to the manufacturer, must say that I never before saw so perfect a working Machine, or one that done its work with such neatness and despatch. As a sample of their ability, they threshed for me eight hundred and eleven bushels of oats in eight hours and thirty minutes, and cleaned them fit for market, under the following disadvantageous circumstances: The weather was extremely cold, and the straw was so large that about one-third of it was badly lodged before it was cut. Consequently much of the grain was shelled and wasted before it was got to the Machine. The Machine is compact and simple and I should judge not at all liable to get out of repair as with the common Machine. It is easily set for operation, both Horse Power and Separator being and remaining on wagons. You only have to drive them on the ground in range with each other, put on the belt, drive one stake, and all is ready for operation, without lifting or unloading as with the common machine. I would advise those wishing to purchase a Threshing Machine or having grain to thresh, to give one of the above named a trial, and I think whoever does so will fully concur in the opinion I have expressed, and save about one-third of the usual expense of threshing.

S. BURLISON.

Mequocata, Jackson Co., Iowa.

☞ Any person wishing a good article of any of the above kinds of Machines, can be accommodated by calling on or addressing the subscriber, who will ship them a Machine to any Port they wish, and send Agents to assist in starting them, and if they do not fully answer the description given there shall be no sale.—My terms are $50 on delivery of the Machine, and on the balance I give a liberal credit. I also deduct ten per cent. off for all moneys over $50 paid down.

Alvah H. Viles Dubuque, is my General Agent for Iowa. Persons ordering machines shipped to any port on the Mississippi river, will, on the receipt of the Machine, inform Mr Viles at Dubuque, who will attend immediately to starting the Machine for them, and make full arrangements as regards the pay.

J. I. CASE.

The following is a postscript we find in a letter written and dated, Shanghai, Dec. 13, 1849, by Bishop Boone, to the Board of Missions of the Protestant Episcopal Church in the United States, and published in the May number of the Spirit of Missions, page 156:

"P. S.—I add a line to my hurried letter to request you to send on some Quinine and some Cholagogue.

"The India Cholagogue is prepared by Doctor Charles Osgood, a friend of our dear deceased brother Spaulding. Dr. Osgood was kind enough to send him six dozen bottles of this excellent medicine, as a present. We have used it very freely and with the greatest success. It has proved successful in many cases where quinine had wholly failed. Some notice should be taken of Dr. O's handsome gift, in the Spirit of Missions, and it was the intention of our dear Spaulding to have addressed you on this subject. I trust the Dr. will find a very extensive sale for his medicines, as I am sure it will do great good in these regions of the country, where intermittents prevail.

"We have recommended its use extensively

SAND'S

SARSAPARILLA

IN QUART BOTTLES.

For Purifying the Blood, and for th ure o e

SCROFULA, RHEUMATISM, STUBBORN ULCERS, DYSPEPSIA, SALT RHEUM, FEVER SORES, ERYSIPELAS, PIMPLES, BILES, MERCURIAL DISEASES, CUTANEOUS ERUPTIONS, LIVER COMPLAINT, BRONCHITIS, CONSUMPTION, FEMALE COMPLAINTS, LOSS OF APPETITE, GENERAL DEBILITY, &c.

IN this Preparation we have all the restorative properties of the root, combined and concentrated in their utmost strength and efficacy. Experiments were made in the manufacture of this medicine until it was found it could not be improved. Accordingly, we find it resorted to almost universally in cases of Scrofula, Liver Diseases, Salt Rheum, General prostration of the vital powers, and all those tormenting diseases of the skin so trying to the patience and injurious to the health. It is a tonic, aperient and disinfectant. It acts simultaneously upon the stomach, the circulation and the bowels, and thus three processes, which are ordinarily the result of three different kinds of medicine, are carried on at the same time through the instrumentality of this one remedial agent. There are many ways of relieving pain for the time being, but there is only one way of removing disease. No palliative, no anodyne, no tropical application will remove it. It must be attacked at its source, in the fluids of the body, which convey the poison to the localities where it is developed in inflammation, sores, ulcers, tumors, abcesses, glandular swellings, &c., as the case may be.

These fluids must be reached, acted upon, purified by some powerful agent. Such an agent is SANDS' Sarsaparilla, which gently stimulates while it disinfects and expels from the stomach and bowels all that is irritating, and at the same time restores their vigor and tone. Its great merit is that it meets and *neutralizes* the active principle of disease itself, and when that is gone, the symptoms necessarily disappear. The rapidity with which the patient recovers health and strength under this triple influence is surprising. Each new case in which it is applied, furnishes in the result a new certificate of its excellence: and we have only to point to the accumulated testimony of multitudes who have experienced its effects to convince incredulity itself of its real value.

Lieut. Miller of the Army has kindly sen us the following letter from California:—

MONTEREY, Jan. 18, 1850.

MESSRS. A. B. & D. SANDS:—Gentlemen—I beg leave to add my testimony in favor of your invaluable medicine, hoping it may lead some other unfortunate being to try its effects, and that they may be benefited as I have been.

I arrived here from the United States by the overland route, about the first of October last. A few days after I was attacked with a very disagreeable eruption of the skin, which my physician could not cure. I happened to find your Sarsaparilla in a store in this place, and remembering the popularity of the medicine at home, I purchased three bottles, which had the desired effect of removing my difficulty entirely.

With high regards, yours, &c.,

J. H. MILLER, U. S. A.

Prepared and sold, wholesale and retail, by A. B. & D. SANDS, Druggists and Chemists, 100 Fulton street, corner of William, New York. Sold by Druggists generally throughout the U. States and Canadas. Price $1 per bottle; six bottles for 5 dollars.

EDWIN HUNT,

BRANCH OF THE WHOLESALE IMPORTING HOUSE

No. 20 Platt Street New York,

WHOLESALE AND RETAIL DEALER IN

ENGLISH, GERMAN AND AMERICAN

HARD-WARE.

Iron, Nails, Glass, etc, etc.

NO. 134 MAIN STREET,

AT THE SIGN OF THE RIM LOCK

RACINE, WISCONSIN.

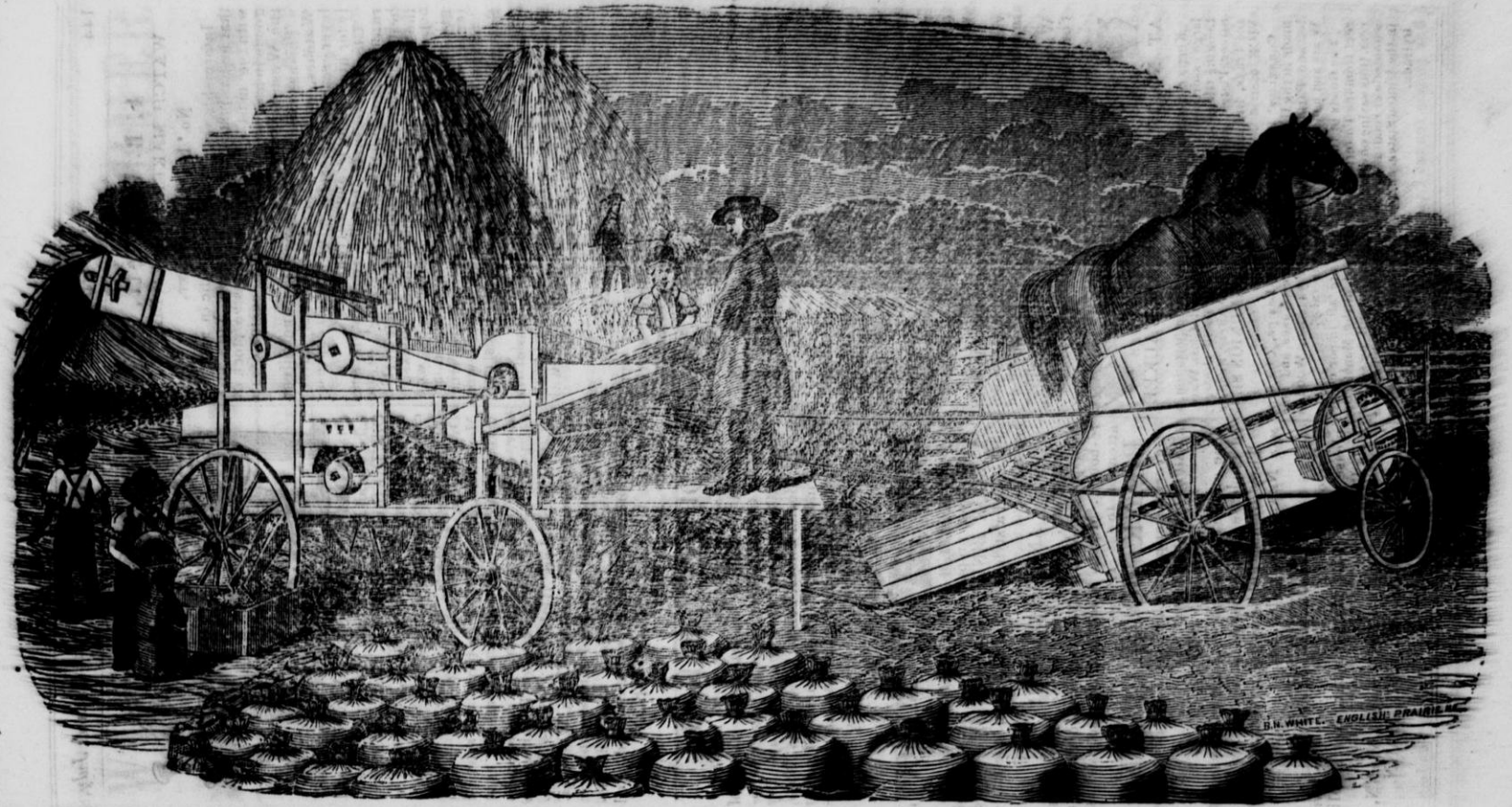
ALSO AT

No. 79 Lake Street, Chicago, Illinois.

W. D. RUNYON, 134 Main Street, Racine.

EDWIN HUNT 20 Platt Street, New York.

August, 1850.


B.N. WHITE. ENGLISH PRAIRIE MS

WISCONSIN & IOWA FARMER
AND
NORTHWESTERN CULTIVATOR.

VOL 3. RACINE, WIS., AUG. & SEPT., 1851. NOs. 8 & 9

PUBLISHED ON THE FIRST OF EACH MONTH, BY
MARK MILLER,
RACINE, WISCONSIN, NO 137 MAIN STREET.

PUBLISHED ALSO BY
R. SPAULDING, DUBUQUE,
To whom all orders must be addressed from the State of Iowa.

50 Cents a Year in Advance:

Five copies for $2, if directed to one Post Office, and at the same rate for a larger number. All subscriptions to commence with the volume. Back numbers supplied to new subscribers

Postmasters and all others who feel an interest in the circulation of the FARMER, are invited to lend their aid in procuring subscribers and extending its circulation.

For the Wisconsin & Iowa Farmer.

Sheboygan County Crops—Contrast between Prairie and Timber Farms, &c.

MR EDITOR—As the prospect of the crops in the different portions of the country is ever a subject of interest to the farmer, perhaps it would not be amiss to give your readers some information in relation to the crops in the "Sheboygan Woods." The winter wheat crop is yielding an abundant harvest. Occasionally complaint is heard of slight injury by the rust; but that injury is, comparatively speaking, but a drop in the bucket. Spring wheat has been somewhat severely affected by the "rot" in the head. Some pieces will scarcely be worth harvesting. The wet weather is supposed to be the cause, and undoubtedly is the true one.—Oats were never more promising in any country than at the present time in this county. If supply and demand govern the market, oats must be exceedingly low this season in this vicinity as there is certainly a surplus now growing: and where will that surplus find a market? Tame hay is very abundant. The wet weather has been very favorable for that crop. In fact I never saw finer timothy grass than grows upon the rich bottom lands of Sheboygan County. Potatoes and other vegetables promise an abundant crop. I have heard of but two cases of the potatoe rot in this county; and those were upon rich, wet bottom lands, where potatoes are never a sure crop. Corn is backward, but will probably mature, generally. To sum the matter of crops in a few words, I may safely say, that the County of Sheboygan, so long an object of ridicule and contempt for the citizens of other Counties, will produce a sufficient amount of breadstuffs to support her own permanent and transient population the present year, and probably a little to spare; an independence of which some of the counties in this State, heretofore considered "at the top of the heap," cannot boast. I do not speak this in derision. It is true, we rejoice in the prosperity of our own county; but, at the same time we regret the misfortunes of our neighbors. Every farmer feels an interest in the welfare and prosperity of the country; and, consequently as the farmers are the basis of the population and prosperity of our country, he feels a deep interest in the welfare of his own class, and of his class the American farmer may well be proud, for the world does not afford a more noble and deserving set of men. The success of a neighbor farmer does not create within the bosom of the unsuccessful farmer, (if he is a reasonable man) the slightest sensation of envy, although it may excite emotions of regret. He looks upon the fields of his neighbor, yellow with the golden harvest, with pleasure and delight, although his own may have been blasted by disease, or laid waste by the elements. He rejoices in the prospect of an abundant harvest, for in that he reads the advancement and prosperity of his country. Base and narrow must the mind of that man be, who looks upon the honest prosperity of his fellow man with envy, jealousy and distrust.

I have been led to these reflections by the contrast presented between the wheat crops of the different portions of this State at the present time. Upon the prairies, in the southern part of the State, the wheat crop has, for several years in succession, proved almost a total failure. In the timbered lands, in Northern Wisconsin, that crop has generally been abundant and of good quality, wherever cultivated.—What is the cause of this difference? And what is the remedy for the failure of the crops on the prairies? Is nature or art defective in its operation? The former I cannot admit; and I

have too high an opinion of the farmers of this State generally, to conceal my reluctance to assent to the latter. It is true that the prairie mania has ever prevailed among the eastern farmers coming to settle in the west. This is the result of a fancied convenience among new settlers, and a wish to gratify that thirst for novelty which is inherent in the minds of those who have been reared among the hills and vallies of the New England and middle States, where Nature, in her prairie beauty, has never appeared. But that prepossession in favor of prairie farms is rapidly yielding to the formation of a more rational conclusion. The absence of many of the common conveniences of life, which are enjoyed in the timber—the want of health, and the failure of crops from year to year, are obstacles in the path of prosperity, which exist upon the prairies, and which can never be entirely surmounted. These will henceforth prove a barrier to their settlement, and will have a tendency to direct emigration to a forest home. Experience, the best of masters, is daily teaching this lesson to settlers upon the broad prairie. The angry wintry wind, which sweeps over their heads in its course for hundreds of miles, unbroken by any obstacle, save the slight undulations upon the bosom of the prairie, where neither tree nor shrub appears to shelter the weary traveller from the keenness of the blast, which often threatens him with immediate destruction—the searching rays of the summer sun, maddening and destroying the brain, and other manifestations in nature, all speak to the settler, in language not to be misunderstood, of disease and death in its most horrid form. There disease, in every form destructive to vegetable life, is stalking abroad, and ever and anon lays its withering grasp upon the fruits of the toil of the laboring man, and deprives families and neighborhoods of the means of subsistence, leaving poverty and destitution to prey upon its victims, until another year shall have rolled its sluggish course, bringing but too often in its train the same fearful consequences. This is not an overwrought picture. It is true, but nevertheless painful to draw, as it shows the sad condition of many of our citizens. And thousands, I fear, who are seeking health, wealth and pleasure in their prairie homes, will be deeply disappointed in their eager expectations. May Heaven order it otherwise.

I have already written too much, but I cannot close this article without calling the attention of your readers to the fact of the organization of an Agricultural Society in this County. A Cattle Show and Fair is to be held at Sheboygan Falls on the 24th and 25th of September next. It is only a commencement, and therefore, we cannot expect to compete with the counties of the older States, where they have been organized for years. But we shall make an effort; and, I should not be astonished if we should prove a close match for your southern counties. At any rate you will be compelled to force your grain team ahead or we shall overtake you. By-the-by, you will please make the Farmer as interesting as a new country will permit you to do, as a large number of copies are offered as premiums to the farmers and others of this county, at the ensuing Cattle Show and Fair.

Yours very truly,
SOLOMON LOMBARD.

Green Bush, Aug. 8, 1851.

SHEBOYGAN COUNTY CATTLE SHOW AND FAIR!

TO BE HELD AT SHEBOYGAN FALLS, *September 24th and 25th*, 1851.

At a meeting of the Executive Committee of the Sheboygan County Agricultural Society, held at the Office of the Secretary in Sheboygan, July 9th, 1851, it was

Resolved, That the annual Cattle Show and Fair be held on two successive days, Wednesday and Thursday, the 24th and 25th of September next. That the animals and articles of manufacture be exhibited on the first day.—That the Plowing Match take place on the second day, at 9 o'clock, A. M. That the Premiums be awarded at 2 o'clock P. M., and that the following Premiums be offered, and regulations adopted by the Society for the present year. At 2 o'clock P. M. of the first day, an Address will be delivered before the Society, by the President, Dr. J. F. Seely.

LIST OF PREMIUMS.

CATTLE.

For the best Bull,		$3 00
Second best bull,		2 00
Third best bull,	Prairie Farmer.	
Best 2 year old bull,	P. F. and	2 00
Second best 2 year old bull,	P. F. and	1 00
Third best 2 year old bull,		P. F.
Best 1 year old bull,	P. F. and	2 00
Second best 1 year old, bull,	P. F. and	1 00
Third best 1 year old bull,		P. F.
Best bull calf,		2 00
Second best bull calf,	P. F. and	1 00
Third best bull calf,		P. F.

Judges—J. L. Trowbridge, J. D. Parish, D. P. Roberts.

For the best milch cow,		2 00
Second best milch cow,	Wis. Farmer &	1 00
Third best milch cow,		P. F.
Best 2 year old heifer,		2 00
Second best 2 year old heifer,	W. F. and	1 00
Third best 2 year old heifer,		P. F.
Best 1 year old heifer,	P. F. and	1 00
Second best 1 year old heifer,		P. F.
Third best 1 year old heifer,		W. F.

Judges—Cyrus Webster, M. M. Flint, and Eliada Carver.

For the best pair fatted Oxen, 3 00
For the best fatted ox or steer, not less than 4 years old, P. F. and 1 00
Second best fatted ox or steer not less than 4 years old, W. F. and 1 00
Second best cow or heifer not less than 3 years old, P. F. and 1 00
Third best cow or heifer not less than 3 years old, W. F.

Judges—Isaac Brazelton, Jonathan Stoddard, John J. Smith.

For the best pair working oxen 2 00
Second best do W F and 1 00
Third best do P F

Judges—William Ashbey, Reuben Martin, R. W. Phillips.

For the best pair 4 yr old steers, W F and 1 00
Second best do 1 00
Best pair 3 yr old steers, W F and 1 00
Second best do 1 00
Best pair 2 year old steers, W F and 1 00
Second best do 1 00
Best pair 1 year old steers, W F and 1 00
Second best do 1 00

Judges—E. Hobart, S. Burr, and Reuben Abbott.

For the best team, not less than 5 yoke of oxen, 4 years old or more, from any one town, 5 00
For the best team, not less than 5 yoke of 3 year old steers, from any one town, P F and 3 00
For the best 2 yoke of oxen not less than 4 years old, belonging to any one individual, 2 00
For the best 2 yoke 3 year old steers belonging to one individual, 2 00

Judges—R. C. Brazelton, Albert Rounsville.

HORSES.

For the best stallion kept 6 months in county, 3 00
Second best do do do 1 50
Best 2 year old stallion raised in county, 3 00
Second best do do do 1 50

Judges—J. M. McShaffer, A. F. Smith, W. H. Prentice.

For the best 3 year old colt raised in the county, 3 00
Second best do do do 1 50
Best brood mare with colt, W F and 3 00
Second best do do W F and 100
Best 2 year old colt raised in the county, W F and 2 00
Second best do do W F and 1 00
Best 1 year old raised in county, W F and 1 00
Second best do do 1 00

Judges—John Maynard, of Plymouth, S. B. Ormsbee, and D. W. Gilbert.

For the best pair matched horses for carriage, 3 00
Second best do do do 1 50
Best pair farm horses, 3 00
Second best do 1 50
Best single horse, 2 00
Second best do 1 00
Best spring colt, W F and 1 00
Second best do P F

Judges—G. N. Lyman, Ira Bliss, and Geo. Quinn.

SHEEP.

For the best fine wool Merino or Saxony buck, 3 00
Second best do do do 1 50
Best pen, not less than 3, fine wool Merino or Saxony ewes, 3 00
Second best do do do 1 50
Best fine wool Merino or Saxony lambs, 1 50
Best long or common wool sheep, P F
Best fat sheep, P F and 2 00
Second best do W F and 1 00

Judges—Royal Gay, Samuel Camp, and Mr. Oetling.

SWINE.

For the best boar, 3 00
Second best do 1 50
Best sow with pigs, not less than 5, 3 00
Second best do do 1 50
Best 4 pigs not over 6 months old, 2 00
Second best do do 1 00
Best fat hog, W F and 1 00
Second best do 1 00

Judges—Orin Rodgers, James Little and Peter Souffrouw.

FARMING TOOLS.

For the best Plow, 1 00
Second best do P F
Best Harrow, P F
Best Ox Yoke, P F
Best Grain Cradle, W F
Best Straw Cutter, 1 00
Best Fanning Mill, 1 00
Best Farm Harness, 1 00
Best Hay or Grain Rack, W F
Best Farm Wagon, 1 00
Best Cooking Stove, P F and 1 00

Judges—David Giddings, J. B. Cole, Mr. Fagan.

DAIRY PRODUCTS.

For the best firkin, not less than 30 lbs. Butter, 3 00
Second best do do do 1 50
Best 20 lbs. roll butter 2 00
Second best do 1 00
Best cheese, not less than 20 lbs. 2 00
Second best do do 1 00

Judges—A. P. Lyman, R. M. Long and S. Wade.

FIELD CROPS.

For the best crop winter wheat not less than 1 acre, 3 00
Second best do do do 1 50
Best Indian corn, 1 acre, 2 00
Second best do 1 00
Best barley, 1 acre, 2 00
Second best do do 1 00
Best oats not less than 1 acre, P F and 1 00
Second best do do 1 00
Best rye not less than 1 acre, P F and 1 00
Second best, do do 1 00
Best ¼ acre potatoes, 1 00
Second best, do W F
Greatest quantity of red clover seed of good quality raised on one acre 3 00
Next greatest quantity. 1 50
Greatest quantity herds grass, 3 00
Second do do 1 50

Best acre cultivated hay,	3 00
Second best do	1 50
Best specimen of flax,	1 00
Second best do	W F

Judges—G. N. Lyman, H. H. Conklin, Jacob Moore,

NOTE.—Persons presenting claims for Premiums on crops must state in writing the following particulars: The kind of soil and condition of the same previous to the cultivation for the crop, the previous crop and cultivation, and quantity of manure used upon it, the quantity and kind of manure used the present season, the kind and quantity of seed used—the time and manner of sowing, harvesting, cleaning, etc. The expense of cultivation, the amount of crop determined by actual weight or measurement.

Applicants for premiums are also required to call the attention of the town committee of the respective towns to the crop or crops before harvesting, and to furnish in writing, satisfactory evidence to said committee, of the quantity of land and quantity and quality of crop, to enable such committee to report to the County Committee, who are to award the premium at the annual meeting of she Society in March.

DOMESTIC MANUFACTURES.

For the best rag or other carpet manufactured in the family,	1 00
Best quilt, do	50
Best counterpane do	50
Best specimen of embroidery, silk or worsted,	1 00
Second best do do	50
Best show of cabinet ware manufactured in the county,	2 00
Second best do do	1 00
Best show of boots and shoes,	1 00
Second best do do	W F
Best show tin ware,	1 00
Best ready made cloth,	1 00
Best bbl. potash	1 00
Second best do	W F

Judges—Charles E. Morris, Truman Parker, and Charles Morrill.

FLOWERS, FRUIT AND VEGETABLES.

For the best boquet,	1 00
Second best do	50
Greatest variety of flowers,	1 00
Greatest show of fruit raised by one person in the county,	1 00
Second best do do do.	50
Best show of garden vegetables,	1 00
Second best do do	50

Judges—J. M. McShafter, W. W. King, Mrs. A. P. Lyman, Mrs S. M. Abbott, Miss Sophronia McKnight, Mrs. Wm. S. Anable, Mrs. Geo. H. Smith.

FARMS.

For the best farm of 40 acres, or more,	5 00
Second best do do do	3 00
Third best do do do	2 00

Judges—Rev. L. W. Davis, Dr. J. J. Brown, and Dr. F. Bond.

NOTE.—Any person wishing to offer a farm for premiums, must give notice in writing to the committee of the town in which the farm lies, on or before the 10th of August.

The Town Committee will on or before the 25th of August, examine each farm so offered, and report to the Secretary the three best farms offered in each town

The Secretary shall give immediate notice to the county viewing committee, who shall before the day appointed for the annual fair, examine the farms so reported, and report their ward at the meeting of the society.

DISCRETIONARY PREMIUMS.

Should the funds of the Society fal short of the amount of premiums offered, premiums will be awarded in proportion to the amount of cash on hand. Should the funds of the Society admit, premiums will be awarded to such persons as may exhibit implements of husbandry, articles of manufacture or other products not enumerated, evidencing art or skill, or peculiar quality regard being had in all cases, to utility rather than fancy.

GENERAL RULES AND REGULATIONS.

No stock or articles will be received for exhibition or award of premiums, after 11 o'clock of the day on which they are to be exhibited. one of the committee of arrangements will be in attendance at the entrance of the show grounds, and another at the rooms of the Society, to receive stock and other articles for the above purposes.

Any person offering stock or other articles for exhibition, will be required to give a written list of all his stock or articles offered. To entitle any animal two years old or under to a premium, it must have been raised in the county.

No animal can take more than one premium at the same exhibition. Premiums will be awarded, when there appears merit, although there should be but one claimant, or may be withheld when there does not appear sufficient merit.

If it shall be discovered that any competitor for any premium, has made use of any disingenuous means by which the object of the Society has been defeated, or rules and regulations violated, such person shall be incapable thereafter of being a competitor for any premium of the Society. All premiums not called for within six months from the time the same are awarded, will be considered as donations to the Society. The several Viewing Committees are required to report in writing, and so far as practicable, give the reasons for the conclusions to which they may arsive, and that the same be signed by the Committee or a majori y.

The Society will meet at 2 o'clock P. M. of the second day, at the Baptist Church, to make reports, award premiums, and to transact such other business as may be presented.

Viewing Committees are particularly requested to be on the ground, and report themselves to the President, Dr. J. Seely, at the Baptist Church, by 9 o'clock of the first day.

Competitors for premiums will bear in mind, that no premiums will be awarded, except to members of the Society. Competitors will in all cases, if practicable, attach a card to the animal, giving the age and owner.

FUNDS.—It must be evident to all, that to enable the Society to pay all the premiums offered, a large amount of money must be raised. It is therefore, earnestly and confidently hoped, that the town committees will do their duty, and cit-

izens of the county generally, will respond promptly to this call, and furnish each their dollar in aid of the funds. The money may be paid to L. W. Davis, Treasurer, who will issue certificates of membersuip.

The Town Committee can obtain blank certificates by calling on the Treasurer previous to the Fair. The Ex. Com. will meet at Sheboygan Falls, on the Saturday previous to the Fair, at 2 o'clock, P. M.

OFFICERS OF THE SOCIETY FOR THE YEAR 1851.

President—J. F Seely, of Sheboygan.

Vice President—1st District—A. G. Dye, of Lima;—2d District—Hiram Smith, Sheboygan Falls.

Secretary—H. S. Anable, Sheboygan.

Treasurer—L. W. Davis, Sheboygan.

Executive Committee—H. Lyman, Sheboygan; Reed C. Brazelton, Scott; S. Lombard, Greenbush; B. L. Gibbs, Lima; N. C. Harmon, Lindon.

General Committee for the Towns—Greenbush, Milo Hard; Plymouth, Jas. Cleveland; Sheboygan Falls, Dr. F. Bond; Sheboygan, E. J. Smalley; Lima, Reuben Martin; Linden, J. D. Wigans; Wilson, Geo. W. Wheeden; Holland, Peter Souffrouw; Scott, H. N. Chase; Abbott, Eliada Baldwin: Harmon, Geroard Schleichtig; Mitchell, William Austin.

PLOWING MATCH.

The Plowing Match is to be on Thursday, the 2d day of the Fair. The quantity of land for each plowman will be ¼ of an acre. Rules respecting depth and manner of plowing will be made known to competi ors on the day designated for plowing. All persons who wish to compete for premiums, must give notice to H. S. Anable, Secretary of the Society, at Sheboygan, on or before the 20th day of September, to enable the Committee to fix on the number of lots, and avoid confusion and difficulty on the day. The following are the Premiums:

FIRST CLASS.

Team of 3 horses, 1st premium,	$3 00
do do 2d do	2 00
do do 3d do	1 00

SECOND CLASS.

Team, one pair horses, 1st premium,	$3 00
do do 2d do	2 00
do do 3d do	1 00

THIRD CLASS.

Single ox teams, 1st premium.	$3 00
do do 2d do	2 00
do do 3d do	1 00

Judges—Warran Smith, A. Fanno, and E. W. Baldwin.

☞ Notice will be given in due time of the location of the grounds.

Hay will be furnished on the ground for the stock, free of charge.

J. F. SEELY, President.

H. S Anable, Secretary.

☞ Science must be combined with practice to make a good farmer.

The finer the seed to be sown, the finer should the soil be made which is to receive it.

Agricultural Geology—No. XX.

BY JOSIAH HOLBROOK.

Schools gave the first impetus to geological surveys. The impetus thus given has led to legislative action for such surveys in almost every State in the Union. By such action the treasures of wealth and of science have been increased to an unbounded extent. Thousands upon thousands of scientific collections have been made; hosts of scientific men have been raised up, now scattered over our whole country, and hidden treasures of wealth brought to view for the special benefit of farmers, and directly or indirectly, of every American citizen.

The unparalleled progress made ftom such humble beginnings, in the advancement of these two great national objects, science and wealth, renders the completion or future progress of the work easy and certain. The schools of the country, indeed of all countries, are certain to be furnished with Cabinets of Nature and of Art, as instruments of primary instruction; thus giving to young minds at their start after knowledge real substantial ideas instead of the mere signs of ideas. As many thousand such collections have already been made by the pupils needing them, both at school and at home, by the aid of these, tens and hundreds of thousands will soon be added to the number. At least, a Cabinet of Agricultural Geology must inevitably soon be placed in each of the hundred thousand of American schools—virtiually, if not literally.

From such a provision, four advantages are evident; each making large returns for the outlay. *First*, increased qualification of teachers—all teachers.—Such a cabinet, properly explained by a manual, must increase knowledge and awaken mind in any teacher using it, giving increased value to its instructions far beyond its cost. To a certain extent, it might give to every teacher the advantage of a Normal School, brought to his own door, and into his own field of labor. *Second*, it would secure a more effective use of school funds. Probably no complaint touching schools is more universal on either continent than the partial or defective application of public funds provided for their use. A step so

certain to awaken general interest, and to enlighten the public mind, could not fail to suggest some better modes, or to correct some defects in applying funds provided for all. *Third*, the development of mineral and other natural resources. Collections likely to be made within a week after receiving a cabinet properly labelled, arranged, and described must amount to many times its cost. Discoveries would also be made, not unfrequently of rich ores, useful minerals, and beautiful gems, furnishing valuable resources to farmers, mechanics, and artists. *Fourth*, the advancement of farming interests. No one step could probably meet so directly or effectually the desire now common among farmers for agricultural science. Every farmer, still better, farmers' sons, might be put in a way to analyze ther own soils, and the best modes of improving them. To these four advantages, certain to arise from cabinets of agricultural geology for schools, many others might be added; but, as each of these must exceed many times the cost of the outlay, more cannot be needed:

EXPERIMENTS.—Some four years since, the pupils of the New York schools were requested by their Superintendent and Trustees to make collections for their schools and their homes. Within three weeks from the time of that request, not less than fifteen thousand *Family Museums* were commenced, each containing specimens showing the elements of mountains, rocks, and soils, with other natural and artificial curiosities. A similar request by Superintendents and Trustees of schools generally through the country must soon render collections of nature and art among the most common, as they evidently would be among the most interesting utensils.

The South American Forest.

The forest of the Amazons will not only cover the basin of the river, from the Cordilera of the Chiquitos to the mountains of Parima, but also its limiting mountain chains, Sierra Dos Vertentes and Parima, so that the whole forms an area of woodland more than six times the size of France, lying between the 18th parallel of south latitude and the 8th of north, consequently inter-tropical and traversed by the equator.—According to Baron Humbolt, the soil, enriched for ages by the spoils of the forest, consists of the richest mould. The heat is suffocating in the deep and dark recesses of these primeval woods, where not a breath of air penetrates, and while after being drenched by the periodical rains, the damp is so excessive that a blue mist in the morning hangs among the high stems of the trees, and envelops the entangled creepers stretching from bough to bough. A death-like atillness prevails from sunrise to sunset; then the thousands of animals that inhabit these forests join in one loud discordant roar, not continuous, but in bursts.—The beasts seem to be periodicaly and unanimously roused by some unknown impulse, till the forests ring in universal uproar. Profound silence prevails at midnight which is broken at the dawn of morning by another general roar of wild chorus. The whole forests often resounds when animals, startled from their sleep, scream in terror at the noise made by the bands of its inhabitants flying from some night prowling foe. Their anxiety and terror before a thunder-storm are excessive, and all nature seems to partake of the dread. The tops of the lofty trees rustle ominously, though uot a breath of air agitates them; a hollow whistling in the high regions of the atmosphere, comes as a warning from the black clouds; mdinight darkness envelops the ancient forest, which soon after groan and creak with the blast of the hurricane. The gloom is rendered still more hideous by the vivid lightning and the stunning crash of thunder.— *Blackwood's Magazine.*

THE GLORY OF AGRICULTURE.

It will almost create—Its influence on fruit and vegetables.—Nothing can more effectively show that Providence designed that we should improve the gifts which he has placed before man, than the wonderful change which cultivation has produced on the fruits and vegetables which at the present day form so large a portion of our food This is now so well established, that it is safe to say, whatever is *wild*, is *not* as good as that which is cultivated. This instructive philosophy is very happily expressed in a recent address of Dr. C. T. Jackson, of Boston, before the Plymouth County Agricultural Association. He says to the farmer and gardner:

"It is the glory of your noble art, that it possesses almost creative power. Not only

has every seed been made to produce 'after its kind,' but also to yield still other kinds; not, indeed, new species, but varieties so improved that they cannot by all the skill of science be identified with the wild plants from which they originated. Who cannot point out the native or wild grasses, from which our cereal grains have been produced? Botanists have suggested that they must have had such origins, but they have not been able to identify the particular species of grasses from which wheat, barley, rye and oats have been derived.

"Our large, plump, juicy and mellow *apples* are said to have originated from the bitter and sour wild crab-apple, which differs so much from them, that it is difficult for us to conceive how those rich fruits were derived from so humble an origin.

"From an insignificant and almost tasteless wild fruit, originated all our numerous varieties of delicious *pears*.

"Our large, plump and luscious *peach* would blush at seeing its dry, withered and bitter father; and our juicy plums would be slow (*sloe*) to recognize theirs. The apricot and nectarine cannot boast of the excellence of their ancestors. The apricot is said to be a variety of the peach.

"From nauseous and poison weeds have many of our garden vegetables sprung.—The tender and juicy asparagus is supposed to have been, originally, a bitter and disagreeable plant, growing upon the sandy shores of the sea. The *cabbage*, with its head full of tender and highly nutritious leaves was originally a weed growing in meadows by the sea shore; and the delicate cauliflower has no better parentage.

"Our mealy *potatoe* belongs to the same family with the deadly nightshade, and in its wild state was an insignificant plant, with little tubers not worth digging from the earth, or of eating when dug.

"The *onion* was a nauseous shore plant, growing in the sand, like its relation the medicinal squills.

"*Parsnips*, *turnips* and *carrots*, in their wild state, were also strong, unpalatable roots, unfit for food.

"From small beginnings came our plump cereal grains, our rich, juicy and delicious fruits, our nutritious esculents, and savory garden vegetables. Who, as it were, created wheat, barley and rye, or put the first fruits and vegetables in the way of improvment, may never be known.

I would suggest to you, that it is highly probable that the wild rice of the lakes and rivers in the northwestern portions of the United States, which is highly nutritious grain and very prolific, now feeding myriads of wild geese, ducks, pigeons and other birds, and supplying winter food to the Indian hunter, might be advantageously introduced into our flowed meadows, and be improved by cultivation. The wild sea kale has been successfully cultivated in Europe, and is now extensively used as food.

WALNUT LEAVES IN THE TREATMENT OF DISEASE.

Dr. Negrier, physician at Angiers, France, has published a statement of his success in the treatment of scrofulous disease, in different forms, by preparations of walnut leaves. He has tried the walnut leaves for ten years, and out of 56 patients, afflicted in different forms, 31 were completely cured, and there were only four who appeared to obtain no advantage.

The infusions of the walnut tree leaves are made by cutting them and infusing about a good pinch between the thumb and fore-finger, in half a pint of boiling water, and then sweetening it with sugar. To a grown person M. Negrier prescribed from two to three teacupsful of this daily. This medicine is a slightly aromatic bitter—its efficiency is nearly uniform in scrofulous disorders, and it is stated never to have caused any unpleasant effects. It augments the activity of circulation and digestion, and to the functions imparts much energy. It is supposed to act upon the lymphatic system, as under its influence the muscles become firm, and the skin acquires a ruddier hue. Dry leaves may be used thro'out the winter, but a syrup made of the green leaves is more aromatic. A salve made of a strong extract of the leaves mixed along with clean lard, and a few drops of the oil of bergamont is most excellent for sores. A strong decoction of the leaves is excellent for washing them.

The salutary effects of this medicine do not appear on a sudden—no visible effect may be noticed for 20 days, but perseverance in it, says M. Negrier, will certainly effect a cure.

As walnut-tree leaves are plenty and cheap enough in America, and as the extract of them is in no way dangerous nor

unpleasant to use; and as scrofula cases are not uncommon, a trial of this simple medicine should be made. In directing attention to it good results may be expected. It is our opinion that every country has within its own borders those medicines best suited to the want of its inhabitants—to discover where and what those medicines are, should engage the attention of our physicians.

OUR COUNTRY ABROAD—IMPRESSIONS IN GERMANY.

A German correspondent of the Philadelphia Bulletin eloquently writes of the collossal impressions which the people of Europe begin more fully, to entertain of our country, as they read of its extraordinary progress which the census returns so surely indicate:

"But never has the growth of material interests so surprised the world, as that brought to light by the late census in the United States. The statistics are mostly copied in the foreign papers, and such gigantic strides in wealth and population are looked upon with wonder here in the old world. Men say, and with truth I suppose, that the history of mankind has no parallel to such a steady, unexcited, firmly laid progress. And I have no question that the next ten years will show an increase of emigration from these countries of continental Europe, which will be more astounding—and be it remembered, too, an emigration of thorough, industrious laborers and mechanics, the best perhaps that we could have from Europe. I find men every where in these German States dissatisfied with the condition of their country, and, fearful for the future, looking eagerly to the free land over the waters—men often, too, not all among the ignorant classes. This is especially true of the smaller States, like Saxony, which can gain nothing from these wars and disturbances, and may lose every thing.

"It must make you at home look anxiously around at this immense foreign element infusing itself into our country, its society, and into the spirit which is to form its new institutions. However, as a mixture of races in the world's history has ever invigorated and single stock, and as the English language—the great language of the future—is an amalgamation of all languages, we need not fear for this corresponding amalgamation of nations—this meeting together of nearly all races of the earth on our wide, richly stored land. It is a grand experiment, however, and men watch anxiously the issue.

Is there an American

—"With soul so dead,
Who never to himself hath said,
This is my own, my native land?
If such there be go mark him well."

GERMAN AGRICULTURE.

Each German has his house, his orchard his road-side trees, so laden with fruit, that if he did not carefully prop up and tie together, and in many places hold the boughs together with wooden clamps, they would be torn asunder by their own weight. He has his corn plot, his plot of mangold wurtzel, or hay, for potatoes, for hemp, &c. He is his own master, and he, therefore, and every branch of his family, have the strongest motive for constant exertion. You see the effect of this in his industry and his economy.

In Germany nothing is lost. The produce of the trees and the cows is carried to market; much fruit is dried for winter use. You see it lying in the sun to dry. You see strings of them hanging from their chamber windows in the sun. The cows are kept up for the greater part of the year, and every green thing is collected for them. Every little nook, where the grass grows by roadside and river, and brook, is carefully cut with the sickle, and carried home on the heads of the women and children in baskets, or tied in large cloths. Nothing of any kind that can possibly be made of any use is lost: weeds, nettles, nay, the very goose grass which covers waste places, is cut and taken for the cows. You see the little children standing in the streets of the villages, in the streams which generally run down them, busy washing these weeds before they are given to the cattle.

They carefully collect the leaves of the marsh grass, carefully cut their potatoe tops for them, and even if other things fail, gather green leaves from the woodlands. One cannot help thinking continually of the enormous waste of such things in England—of the vast quantities of grass on banks, by road-sides, in the openings of plantations, in lanes, in church-yards, where grass from

year to year springs and dies, but which if carefully cut, would maintain many thousand cows for the poor.

To pursue still further this subject of German economy. The very cuttings of the vines are dried and preserved for winter fodder. The tops and refuse of hemp serve as bedding for the cows; nay, even the rough stalks of the poppies, after the heads have been gathered for oil, are saved, and all these are converted into manure for the land. When these are not sufficient, the children are sent into the woods to gather moss, and all our readers familiar with Germany will remember to have seen them coming homeward with large bundles of this on their heads. In autumn, the falling leaves are gathered and stacked for the same purpose. The fir cones, which with us lie and rot in the woods, are carefully collected and sold for lighting fires.

In short, the economy and care of the German peasants are an example to all Europe. They have for years, nay ages, been doing that, as it regards agricultural management, to which the British public is but just now beginning to open its eyes. Time, also, is as carefully economized as everything else. They are early risers, as may well be conceived, when the children, many of whom come from a considerable distance, are in school at six in the morning. As they tend their cattle or their swine, the knitting never ceases, and hence the quantities of stockings and other household things which they accumulate are astonishing.—Howitt.

ON FITTING HORSE-SHOES HOT.

The following is from a review of the Bulletin of the Central Society of Veterinary Medicine, published under the direction of its committee, and the editorship of M. H. Bouley, the Annual Secretary—in the London "Veterinarian:"

Although hot shoeing has had some enemies in our country we know of but few advocates for the cold plan. M. Delafond the author of the paper before us, concurs with the committee in the rejection of the podometre or foot-measurer, the invention of M. Riquet, and proceeds to inquire if there is any serious or real objection to fitting shoes hot to the feet.

Fitting shoes hot—hot shoeing as it may be called—is said to heat or burn the sole, to dry the hoof, to incline its fibres to separate, to incite inflamation in the internal tissues of the foot, and to produce organic alterations in them of a grave and hardly remediable character. It was not until the middle of the eighteenth century that hot shoeing came into practice, and the first author we find complaining about it is Lafosse, who, in his "Nouville Pratique de Ferrer les Chevaux," 3d edition, published in 1758 has spoken of such accidents under the names of heated and burned hoofs. And his son, (Lafosse, jun.,) has well described them in his "Guide du Marechal," and subsequent works.

If burning the hoof is an evil consequent upon hot shoeing, it is a frequent occurrence? The committee and M. Reynal have already come to the conclusion that it is not, and I am quite of their opinion. In order, however, to assure myself further than the mere on dit practice of the forge on this point, I resolved to institute a series of experiments on the conducting power of horn of caloric; and the results have proved as follows:

1. That the conducting power of the crust is inferior to that of the sole; whence we derive the indication in practice, that it is absolutely essential that the heated shoe be not allowed to come in contact with any substance but the crust.

2. That caloric is transmitted tardily either through crust or sole.

3. That it is not before the elapse of three, four or five minutes after combustion that the thermometer indicates the highest degree of heat in the hoof.

4. That the thinner the horn of the crust is the more heat becomes transmitted thro' it to the parts it envelops.

Having thus assured myself of the conducting power of heat of the hoof, I now sought to ascertain the amount of heat it was capable of transmitting to the living tissues enclosed by it, as well as the degree of heat required to produce burning.

Before, however, I proceed to give an account of these experiments, I wish to show the anatomical structure of the parts situated underneath the sole and the crust, and particularly of those subjacent to the points of junction between these two parts of the hoof.

When, through maceration, the horny sole has become detached from the parts beneath it, we come upon the sub-ungular tis-

sue which Lafosse and Bourgelat have named the fleshy sole; and which our honorable president, Mr. Girard, has designated, after Malpighi, reticular tissue, upon whose surface we observe numerous slender prolongations, filiform, which have gone under the names of fibres, filaments, villosities, and in later times papillae. Now, those villosities or papillae, which on account of their vasculo-nervous organization, I shall denominate villo-papillae. are extremely numerous over the entire surface of the reticular tissue, and particularly around the circumferent border of the coffin bone, where they come opposite to the parts burnt by the hot shoe. These villo papillae, extremely important to be known, and which even up to the present hour authors have not described with sufficient minuteness, vary from four twenty-fifths to six twenty sixths of an inch in length throughout the entire circumferance of the fleshy soil.

Another very remarable disposition, as it regards hot shoeing, and one which has not that I know of, been pointed out, is that every plait of the laminated tissue, before it terminates in the circumferent border where it unites with the velvety tissue of the sole, sends off numerous papillae in digits or teats of no more than four twenty-fifths to six twenty-sixths of an inch in length.

AGRICULTURE IN FRANCE.

A letter writer for the Republic says:—"A trip of six hundred and fifty miles, from the northern to the southern extremity of France, justifies me in the expression of my opinion that God's sun does not shed its rays on so fair a land, or one so thoroughly cultivated. The whole country is literally a garden. Every square foot, from the mountain-top down to the lowest ravine, is made to produce something, if it be susceptible of it. Their mode of planting or sowing their crops, whether on plain or hill-side, produces the finest effect on the appearance of the landscape; the space allotted for each crop is laid out in squares or parallelograms with mathematical precision, and, whether large or small, the best garden could not be divided with greater accuracy. As there are no fences or hedges, and as the different crops are in various stages of maturity, you can imagine the variety of hues that meets the eye, and the magnificence of the panorama that stretches out in every direction as far as the vision can penetrate. I am sorry to add in this connection, that seven-eights of the agricultural labor is performed by females, while two or three hundred thousand stalwart men in uniform are idling away their time in the barracks of the cities and villages. In the absence of fences, cattle, secured by ropes, are driven about their pasturage by females; and sheep are confined within the required limits by boys, assisted by a shepherd's dog. Speaking of cattle, reminds me that, notwithstanding fresh pork is abundant enough in market, both in England and France, I have not seen a live porker in either country."

THE POTATO ROT—ITS CAUSE.

Mr. Reuben M. Gibbs, a Connecticut farmer, residing at Kent, in the Housatonic Valley, we are inclined to think, has made some progress in the discovery of the cause of the potatoe disease. In the month of June he discovered a black flat bug depositing its eggs on the vines, and leaves, from which minute worms were hatched in considerable numbers. These worms have since eaten their way into the centre of the stocks, concealing their place of entrance under the joints and leaves, and then following have eaten their way out the pith of the vines, in some instances several inches, though to appearance externally sound. It remains to be determined by farther observation, whether the potatoes grown on the perforated vines will manifest the 'rot.'—Albany State Register.

The above corresponds with a statement made to us, a day or two since, by T. B. Dwyer, Esq., of this city. His potatoes, as well as those of sundry of his neighbors, gave indications of the rot last week. Mr. D. instituted a set of examinations, both into the diseased portion of the affected tubers, and also in the vines attached to them In the latter he generally found a small worm, which had apparently made its way from the outside until it reached the heart of the stem and then continued its progress upward until the vine fell over and died.—In every case in which Mr. Dwyer pushed his investigation, both upon his own premises and those of his neighbors, he either found the worm present in the vine, or unmistakeable evidence of its having recently been there. One of his neighbors limed the ground in which he planted his pota-

toes, and while all the surrounding patches are showing more or less of the rot, this one has thus far entirely escaped. This fact is worth remembering.—Chicago Tribune.

We hear complaints of the rot from various portions of the State, and farmers would do well to keep the facts above announced in mind.

From the Am. Farmer.

GREEN CROPS AS CATTLE FOOD.

George Sinclair, the celebrated author of the work on grasses, entitled, "Hortus Gramineus Wobernensis," whose experiments were conducted for a great number of years, under the auspices of the Duke of Bedford, gives the following statement of the produce per acre, and the nutritive matter, respectively contained in the several kinds of green crops enumerated, grown on that quantity of land. From which statement, it will strike the mind of the reflecting reader, that such crops, as cattle fodder, must be of paramount value.

Mangel Wurtzell, produces upon a suitable soil, on a deep rich loam, on an average 25 tons of greed food per acre, every pound of which contains 890 grains of nutritive matter; and therefore, per acre, 56,000 lbs. of green food, and of nutritive matter, 3,-120 lbs.

Carrots, produce on a deep light loam, on an average, 11 tons, every pound of which contains 750 grains of nutritive matter—gross produce, 24,640 lbs.—nutritive matter, 2,640 lbs.

Potatoes, produce upon fresh loam, of intermediate quality as to moisture and dryness, on average, 15 tons per acre, affording of nutritive matter per pound, 1,000 grains —gross produce, 33,600 lbs.–nutritive matter, 4,800 lbs.

The common field or white Turnip, affords from a sandy soil, upon an average, per acre, 16 tons of green food, a pound of which contains 320 grains of nutritive matter—gross produce, 35,840 lbs.—nutritive matter, 1,638 lbs.

The Swedish Turnip, or Ruta-Baga, produces on a favorable soil, on a strong loam, on average 13 tons per acre, a pound weight of which affords of nutritive matter, 440 grains—gross produce, 29,120 lbs.—nutritive matter, 1,830 lbs.

Cabbages, which delight in a rich strong loam afford of green food, on an average per acre, 25 tons, every pound of which contains 530 grains of nutritive matter—gross produce, 56,000 lbs.—nutritive matter, 3,440 lbs.

HOUSTON AND HIS PEACH ORCHARD.

We cut the following from an exchange. We think more highly of this achievement of Houston's, than all his military conquests. Preventing scurvey and yellow fever is more useful and glorious than "nabbing" Santa Anna in a tree top.—Maine Farmer.

Peaches and Fever.—The eating of peaches to fend off yellow fever, and the whipping of negroes for not eating the best fruit they find, is a novel mode of treatment both in medicine and government. The one has the sanction of a physician, the other that of a slaveholder. So says the New Orleans Courier:—

"Gen. Felix Houston, though a military man, has peaceably effected a bloodless revolution by breaking down the peach monopoly in this city. That most delicious of all fruits has been almost under an embargo here for years, owing to the enormous price put upon them, which effectually excludes them from the tables of the poor.—Twenty-five cents have often been paid for a single peach. To put a stop to this, Gen. Houston has planted, on his estate near Port Hudson, on high, clay land, forty thousand trees of the choicest variety, so as to have a succession of fruit from May until November. He is preparing to plant fifty thousand additional trees. This great orchard is within a few hours run of this city, and every day in the week his agents in this city, Scott and Robison, will be furnished with new supplies. They can be had at their great peach depot, 18 Canal street, (New Orleans,) or at the various stands, at very low rates. Peach pie, peach coblers, peach marmalade, and peaches and milk, may now go on the poor man's table, thanks to the enterprise and liberality of Gen. Houston.

That eminent physician, Dr. Stone—in whose blunt sayings there are always deep thought and sound philosophy—yesterday declared that Houston's movement was worth a thousand quarantines for the health of New Orleans. "No more scurvey," said

the Doctor. "Eat stewed peaches, if yo would keep off indigestion. Plenty of fruit for the people, and no yellow fever!"

The statistics of Gen. Houston's plantation verify this remark Before he bought it, great mortality prevailed there. One of its former owners lost fifty negroes. He whipped his negroes whenever they were caught eating a peach, a melon, or an apple. Gen. Houston has one hundred slaves on his place. He plants thirty acres in melons. His negroes live in the peach orchard. He whips them unless they eat the best and choicest—and this they take good care to do! There have been but three deaths on the place—and those were old, obstinate negroes, who wouldn't eat peaches!"

BLUE-STEM WHITE WHEAT.

I suppose you and your readers have heard and know something about the "Blue-Stem White Wheat" which is growing so abundantly in Pensylvania, Ohio, Maine, Maryland and even in the Southern States. It is a very large and beautiful species of grain, and many claim the honor of having discovered it first. But I believe there are very few who actually know the original discoverer, or anything at all relative to its origin. I have seen stated in different papers, the names of persons who were supposed to have discovered it, and spread it over the country; but by no means have they given credit to the right person. My father is personally acquainted with the man who first found it, and he ought to have the credit. For these reasons I have though it not unfair to announce to the public through your columns, the name of the true original discoverer, the time, place and history of its origin.

It was discovered in the winter of 1836, by Henry Glahs, son of George Glahs, whilst at work one day threshing wheat.—(George Glahs lives near Freeburg, Union County, Pa.) He happened to observe one head quite different from the rest. He picked it up and shelled it, and found it to contain much larger and finer grains than the other heads; part of it being already shelled before it was taken up. He only retained sixteen grains. These he put in his desk to preserve, with the intention of sowing them the coming season. When the time arrived, and his grain already green in the fields, he thought of his new seed in the desk. Immediately he planted the sixteen grains, which brought sixteen heads for the next year; the third year brought nearly half a bushel; the fourth year he gathered from the products of the third six bushels, and the fifth year the product was one hundred and ten bushels.—In a few years all the farmers in the neighborhood raised it in abundance. It also soon spread over the State, and, as I before said, is cultivated largely in many of the other States.

At the same time, the Hon. John Sydney, then a member of Congress, addressed a letter to my father, which contained an order for a certain amount of this wheat, to be sent to Baltimore for some Virginia farmers. The amount for which the order called, and some more to the amount of two thousand bushels, were sent down by boats, most of which was sold to the Virginians for seed. Mr. George Glahs, on whose farm it was first cultivated, is still living. He has attained the age of seventy-three.—J. W. G.—Selin's Grove, 1851. Phil. Dollar Newspaper.

THE EDUCATION OF OXEN.

A "Glenburn Farmer," in the Bangor Whig, contends that the practice of testing the merits of working oxen, at cattle shows, by the mere ability to drag the heaviest possible burden, is unsatisfactory and unsafe, as not exhibiting the most valuable qualities of the animals, nor showing their most useful capacities in the performance of their ordinary work. We annex a part of his sensible remarks:

"I would suggest that at the next trial of oxen at the Society's Show, it would be upon a judiciously loaded cart, and that the exercise should consist of drawing, turning, and backing. What the public want in regard to working oxen is, an exhibition of the best trained cattle for farm purposes.—Nor is this all. We want to see the man who trained them, and his manner in doing it. We want an exhibition of good teamsters as well as good teams; for very much of the merit of a yoke or team of cattle belong to the teamsters. And instead of giving all the premiums to good oxen, one-half at least, should go to good drives. No driver, however, should receive a premium for himself or oxen, however good they

may be, who uses profane language during the exhibition. A rule of this kind would have changed the direction of more than one premium at the late trial.

"Good teamsters are worth from five to ten dollars a month more than poor ones; and yet, with this difference in price, it is very easy to find a hundred, and I might say a thousand, poor ones for one good one. No man can be a good teamster who is not a gentleman. He must be gentle, kind and careful. No good teamster will put his oxen to an unnecessary waste of strength, or to unnecessary pain by the use of the goad stick or brad."

THE PURE MERINOS OF FRANCE.

S. W. Jewett, Esq., of Weybridge, Vermont, whose name has lately been mentioned in the papers in connection with the importation of foreign sheep, has sent us samples of the wool taken from the fleeces of six yearling rams, which, since their arrival in Weybridge, about ten days ago, were shorn in the presence of several gentlemen interested in sheep raising. The fleeces were of less than eighteeen month's growth, and the average twenty and a half pounds each, of a fine, even quality of wool, and free from long hairs. The samples may be seen at this office. Mr. Jewet says that this race of large, beautiful animals will compete successfully with the English breeds for mutton-sheep, owing to the great size of their frames, and the fact that their lambs mature much earlier—the ewes being remarkably large milkers. He says that while in France he actually ate of cheese made from the milk of these ewes. He mentions among the qualities of these Merinoes, that they take on fat readily, and are of an exceedingly quiet disposition, a trait which is now hereditary, and is attributed to the fact that, for more than a century, they have been attended by shepherds, and have not been permitted to roam at large. Mr. Jewett says there are now but five flocks in France of the pure Merinos, which descended from the government flocks in Spain, and that a good deal of excitement prevails in France at the present time, among the breeders of these sheep, in consequence of visitors from all parts of the world, led thither by the great exhibition in London. He saw there a Prussian, by the name of Jachin, who owns a flock of 44,000, and two men from Australia, one of whom owned 33,000, and the other 45,000 sheep. These men paid as high as $500 for rams, to be sent 8000 miles over the water. Mr. Jewett's purchase is the largest, as to amount of money, ever made of foreign live stock by an American. Several of the best farmers of Addison county have taken a joint interest with Mr. J. in the flock, and they design to distribute them, as far as they may be wanted, among the wool-growers of Vermont. The whole amount of money expended on this importation is about $30,000.—Burlington Sentinel.

THE BEST KIND OF FOWLS.

Mr. Cole:—As I have for several years been more or less engaged in poultry raising, and have within the time kept nearly all kinds of domestic fowls common to this country, I have often been asked the question, "Which are the most profitable hens to keep?" but have not been able to decide which were the most so, 'till of late. And I now give you my decision,—hoping that some of your readers may be profited by my experience:

If your object is to keep hens for laying, keep the pure Black Spanish Fowls. Even if you pay a large price for them, they will soon pay you back the money with interest. But if your object be to raise chickens for marketing, cross the Black Spanish with the Red Shangahea or Cochin China fowls; as chickens produced by such a cross, will attain a larger size and come to maturity much sooner than the clear Ashatic fowls. And those—if there be—who doubt the above statement, are cordially invited to visit my poultry yard and see for themselves.

As I am free to give you my experience in poultry raising, I hope others will give theirs as freely; and if there are really any better fowls than the above named—and it can be proved so—then I am willing to give up beat. Now, friends do give us a little of your experience in the matter; and when convenient, call and visit my pure stock of imported Spanish Fowls.

Yours, truly, J. DIMMON.

Wakefield, R. I., July 1st, 1851.

—New Eng. Farmer.

☞ The envious love nothing but the dead.

HORTICULTURE.

In answer to many letters of inquiry in regard to budding, we republish the following article from the first Vol. of the Farmer. The directions with illustrations here given, render the subject as simple and as easily understood as any thing new we can write.

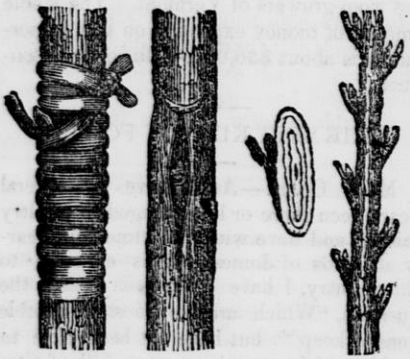


Fig. 4. Fig. 3. Fig. 2. Fig. 1.

BUDDING OR INOCULATING.

This is one of the most important operations pertaining to Horticulture. For the speedy and sure propagation of trees it has some decided advantages over grafting, as it only requires a single bud, and if a bud fail the first time others can be afterwards inserted the same season—or if the operation fail entirely one season the growth of the stalk is not lost as where grafting fails. The two conditions of plants indispensable to success in budding are — 1, *a thrifty growth of the stalk so that the bark will peel easily;* 2, *good, ripe buds*, which may generally be known by the perfect development of the young buds at the bases of the leaves, and by the shield or bark to which the buds are attached, separating easily from the wood—and in short by the general firmness and ripeness of the shoots. Those buds near the middle of the shoots are most esteemed.

Plums and Cherries should be budded early, whilst Peaches do best when set the latter part of August—and in fact are often budded in September.

Apples and Pears can be set from the commencement of the budding season—that is if the buds be ripe—until the last of August; tho' the first half of August is generally the best time. The time for commencing operations in the budding line varies considerably according to the seasons—it answering as well to begin the 15th or 20th of July, in some seasons, as the 1st of August in others

Before commencing operations it will be necessary to have your stalk in readiness, and to provide yourself with a thin-bladed knife, and a supply of strings for tying up the buds.

Bass matting is generally used for this purpose, though yarn will answer, In budding, the first thing is to prepare 'a stick of buds'—that is to take off a thrifty shoot of this year's growth, and after cutting off the upper, unripe portion of it, to clip off the leaves, leaving about half an inch of their footstalks on the shoots, as in Fig. 1. Having selected a smooth place in the stalk, preferring the North or North East side, make a perpendicular incision through the bark an inch or an inch and a half in length, and at the top of this a cross cut, so that the whole shall form a T. With the point of your knife blade, or with the haft of your budding-knife, if you have one, raise or loosen the bark from the stalk each side of the incision—being very careful not to bruise either the bark or sap wood beneath. As speedily as possible, and with a clean smooth cut, take off a bud, as in Fig. 2, from your stick of buds with a thin slice of the wood attached. Having ascertained that it is about the right length, lift up the bark at the top of the cut and insert the bud, which with the aid of the footstalk should then be pushed down to the bottom of the incision. If the top of the bud reach above the cross cut it should be cut off so as to fit exactly, as in Fig. 3. A bandage, as in Fig 4, should now be tied evenly and snugly over the whole (saving the bud and footstalk, which must be left exposed,) extending a little above and below the wound. Care and expedition must be used in the operation to have it succeed well, as if the parts are bruised or suffered to become dry they will not unite. If the footstalk remains fresh and green until it drops, it indicates that the bud has taken, but if it withers up it shows the contrary. In two or three weeks, or as soon as the union between the bud and stalk is perfect, the bandage should be taken off. Early next spring the stalk must be cut down to within two or three inches of the bud, and whatever shoots proceed from the stalk rubbed off, so that the growth go into the bud. After it gets fairly started, or say the latter part of June, the old stalk should be cut quite down to the bud in a sloping direction, towards the opposite side of the stalk from the bud.

Aztalan, July 23, 1851.

Mr. Editor,—Having just been driven in from my budding, I will write and send you some scraps of my experience in Horticultural matters.

Pears. Flemish Beauty is A. No. 1 for our climate, standing the heat of our summers and cold of our winters unscathed so far. A neighbor had it in bearing last year, although the tree was less than 2 inches in diameter.

Virgalieu [Butter or Fall Butter of the South] promises well; pretty hardy; shoots killed down some in winter of '47—8; grows finely, and I think will remain with us.

Dearbon's Seedling—same as above so far.

Bartlett—same, but more tender.

Seckel—hardy so far.

Beune de Aremburg, [perhaps it is Glout Morceau,]—very hardy; promising.

Easter Bergamot of Wisconsin Nursery,—probably the Autumn Bergamot of Downing.—Very hardy; bears young; fruit small.

Gansell's Bergamot—seems hardy so far; trees of one year's growth not injured at all last winter.

Passa Colmar—will get along through our winters if allowed to have its own way. Will not bear the sun on a naked trunk.

Many other varieties are on trial, but have not been proved sufficiently to warrant an opinion.

Winter Mulching I consider essential to successful Pear growing in the Nursery the first and second winter.

Young trees are often supposed to be blighted or winter killed, when the tree remains green in the spring, but does not put forth foliage, finally turning black after an open winter.

Having suspected the cause, I dug up several last spring which would not put forth leaves in May, and found the root entirely dead, while all above ground was green. This was entirely prevented where the ground was covered an inch or more deep around the trees with sawdust.

Young trees stand our winters best, so far as I have tried them, in a rich black, or prairie soil. Such soil being, as I suppose, less liable to freeze deep than more sandy or clay soils.

We are in decidedly for low tops as a preventive to sun blight. And as a matter of economy we would give all fruit trees low heads.—Varieties which will not refuse to grow and bear when trimmed up, will grow better and bear more fruit if allowed to grow low heads.

We are beginning to have now and then a specimen of fine fruit. The Rambo does admirably here so far, bearing full in '49, and again this year. We have growing this year the Baldwin, Rhode island Greening, Red Romanite, Phœnix, Edgar Red Stripe, Early Red, Vances' Harvest, and Peck's Pleasant.

Of Grapes we have the Isabella and Norton's Virginia, or Senior, in full bearing. The latter is very hardy, foliage light green, variable, some leaves without lobes, others tri-lobed, and rarely five-lobed. Young wood is purplish red and green, long jointed and thrifty. Bunches rather small, compact, sometimes open and imperfect Berries medium size, round; skin thin, nearly black, with slight bloom, nearly without pulp, sweet and good, but inferior, to my taste, to Isabella.

This variety may be grown in our climate with less care than any other with which I am acquainted. The Catawba has not yet borne, seems less hardy than Isabella.

Yours truly, J. C. BRAYTON.

Plums and Pavements.—Mr. N. Longworth, in a communication to the Cincinnatti Gazette, ridicules the idea of shaking the plum tree to prevent the depredations of the Curculio, and thus states his own experience on the efficacy of pavements in securing good crops:

"Around my house I have twenty-seven plum trees. I have a brick pavement extending from the house beyond the trees several feet. In twenty-five years I have never failed to have a crop from these trees. I have as many trees in the open ground, and have had them bear but two years, though my gardener faithfully tried salt, hanging a scythe in the tree, and other certain remedies. There may be two causes for the exemption of my trees in the pavement. The one, the instinct of the insect, which leads it not to deposit its eggs over a pavement, where its young must perish, not being able, when the plum falls from the tree, to find winter quarters in the ground. The other, the natural timidity of the insect, which leads it to avoid places where persons are constantly passing. In small plum orchards where hogs are kept, they are said to be free from the curculio. Some have supposed this freedom from the insect is owing to the destruction of the young curculio by the hogs. I infer not, as the curculio has wings, and the hog pen would be supplied with curculio visitors from the neighborhood. This exemption may be owing to the constant running of the hogs among the trees, and frightening the curculio."

PREPARE YOUR WHEAT FOR WINTER.

A vast portion of winter-killed wheat comes in consequence of wanton neglect of the plainest dictates of common sense, while putting in the seed. Thousands of acres are sown every year upon hollow places in the field, which, although the richest spots, are covered with a pool of water whenever a heavy rain falls.

Without offering our own opinions or stopping to discuss the mooted question, whether wheat will produce chess or not, we can safely say that all such spots in the wheat field will be much more likely to produce it than the adjoining ground that is free from standing water; and that spots are often to be seen at harvest, covered with this worthless grain, where a single furrow or fifteen minutes' labor, would have opened a drain and kept the soil dry, and given the owner several bushels of sound wheat for such a very small outlay of labor.

It is a wanton waste of labor and seed to throw it away upon a flat clayey surface with out turning water furrows to carry off the winter rains as they fall. It is only upon such neglected spots that the advocates of transmutation contend the change takes place. And as wheat is so much more valuable than chess, it is perfectly surprising that any people will prepare the ground exactly right to produce the latter. So well do the wheat growers of Lower Virginia understand the benefits of drainage, that they sow almost universally in beds, and in many places, these are only five feet wide; that is, the wheat is sown upon beds of the same width as Indian Corn is planted, and the advocates of narrow beds contend that they can make more wheat than those who sow upon nine or fifteen foot beds.

Until American farmers learn the great value of underdraining, we must constantly remind them of the necessity of keeping the surface dry by open ditches. To every one of our readers, therefore, who has an acre of wheat sown, we say most earnestly go at once and examine whether any little pools of water stand after a shower, and if so, take steps immediately to drain it off as fast as it falls, or you cannot expect to grow wheat, though you may grow chess or weeds.—Agriculturist.

He is my friend who grinds at my mill.

TO PREPARE ASPARAGUS BEDS.

Select a rich spot exposed to the sun; trench it four or five feet deep, and pulverize all the lumps of earth. If the earth were sifted, it would be all the better. Put six inches of good strong manure at the bottom, and on it a layer of thich grass sod; then another layer of manure, and afterwards, six inches of earth. Repeat these layers, and put on top, twelve or eighteen inches of soil and fine manure, well mixed together. Make your beds about five feet wide and set the roots out in the commencement of garden work in the spring, about fifteen inches apart, placing the crown about an inch and a half below the surface with a stick to mark the location of each root.

The plants should be two years old when set, and in placing them, care should be observed to spread out the roots into a natural position. After the bed has settled, give the surface a dressing of white sand, and do not forget to put salt enough upon it every year to kill all the weeds. It will then yield an abundance for many years. —Agricultnrist.

ASHES FOR MANURE.

The following is the kind of information we feel proud of seeing come from farmers; it proves that some, at least, are willing to profit by the light which science is showering on agriculture:

The true value of ashes to the farmer, has long been unknown, and even now is just beginning to be appreciated. The soap-boilers' agents have long been allowed to carry away the most valuable fertilizer produced by the farmer, and leave in return poor brooms and worse tea. Many an anti-book farmer has hauled plaster miles to his farm, and paid a high price for the same, when there was no lack of the element in his soil, and he was but "carrying coal to Newcastle," while at the same time he sold his ashes at 10 cents per bushel nominal price, his soil being exhausted of potash. It is no wonder that his lands should have become "worn out," and himself exceedingly dissatisfied with the seasons and moon.

Every plant contains inorganic elements, which, as all know, indispensable to its growth; these elements are the ashes of

the plants. These resulting from the combination of wood contain many of the most important constituents of both the grains, grasses and roots. Wheat and corn contain a large portion of potash, consequently ashes are a most valuable manure for those crops. Fifty-nine per cent. of the ash of corn is composed of the carbonate of potash (pearlash.) The abundance of this ingredient in wood ashes constitutes their great value as a fertilizer for that important crop, which as a general rule, is double that of plaster. I have used both, separately and mixed, and find that a compound of two bushels of ashes and one of plaster, give a better result than either when applied singly. I take a small shovel, with which I put about one gill upon each hill; I carry the ashes into the field upon a harrow, and use a pail to distribute them from. The best method of application, is to put it on the hills immediately after planting, which precludes the possibility of injuring the young plants, as is sometimes done, by applying the mixture after they have come up. Corn to which this mixture has been applied, will ripen several days earlier and give a much better yield than rows through the same field which are not so treated,

One-half of the earthy matter of potatoes is pure potash. from which fact any person can see their value as a fertilizer for this crop. It is from a lack of potash that farmers loose from 50 to 100 bushels of potatoes per acre every year. If a farmer has in his soil potash enough to form 200 bushels of potatoes, per acre, and other constituents sufficient for 300, it is evident that the result will be a loss of 100, which the application of ashes would have prevented. Such cases often occur. Yet, in a ton of potatoes there is but 12 pounds of potash; thus it will be seen that the cost of the ashes necessary for the production of the other 100 bushels would have been but trifling.

Ashes should never be mixed with barnyard manure, as they contain caustic alkali, and will neutralize the acid which fixes the ammonia in the manure, setting the latter free to the great deprecation of the value of the manure. I will conclude by advising my readers to save your ashes, not for the soap-boiler, but as food for your hungry corps, and if you find any of your neighbors who prefer 12½ cents to a bushel of ashes, you will find it a profitable investment to make the exchange.—Del. Newspaper.

INTERIOR OF THE EARTH.

A fact of great interest has been proved bh the borings for Artesian wells in the suburbs of Paris, namely, that as we go towards the center of the earth, the temperature increases at the rate of about one degree for every fifty feet. That the whole interior portion of the earth, or at least a great part of it, is an ingenious ecuean of melted rock, agitated by violent winds, though I dare not affirm it, is still rendered highly probable by the phenomena of volcanoes. The facts connected with their eruption have been ascertained and placed beyond a doubt. How then are they to be accounted for? The theory prevalent some years since, that they are caused by the combustion of immense coalbeds, is perfectly puerile, and entirely abandoned. All the coal in the world would never afford fuel enough for a single capital exhibition of Vesuvius. We must look higher than this; and I have little doubt that the whole rests on the action of the electric and galvanic principles which are constantly in operation in the earth,

We know that when certain metals are brought togethe, powerful electric action is developed, and a light is produced, superior even to the splendor of the sun. Now if a small arrangement produces such results, what may we not expect from the combinations of those immense beds of materials to be found in the earth? Here we may have the key to all the grand phenomena of volcan c action. An illustration on a small scale may be seen in an instrument called the thermo-electrical battery, made of zinc, bismuth and antimony, packed in a box and varnished. In this, heat is envolved below, while the top is cold; and here we have the very cause of the volcano, when, in the interior a fiery ocean is heaving its surges, while its peak is capped with everlasting snow.—Prof. Silliman.

SMOKY CHIMNEYS AND FIRE-PLACES.

There is only one general theory essential in all chimneys, and that is the appor-

tionment of the throat to the opening or draught of the room; the closer the room the less the throat; always keeping the throat less than the atmosphere admitted into the room. It would be well also to have the fire-place large enough to build a false wall, &c., which will always place the dificulty under controll.

Let the chimney be high enough not to be interfered with by adjoining buildings.

Let the fire-place be large enough to admit filling in.

Let the offset in the back wall be at least one foot above the upper part of the fire-place opening.

Let the throat be contracted, leaving it largest in the center, until the dificulty is remedied.

If these conditions are met, it matters little about the size or shape of the flue above. This is proved in the building of furnaces when heavy draught is required.

EDITOR'S TABLE.

AGRICULTURE IN NEW HAMPSHIRE.—The liberality and devotedness of the Legislature of New Hampshire, to her Agricultural interests, are set forth in a bill passed at their last session, held in June, for the encouragement and promotion of Agriculture. The provisions of the bill are most liberal. The interest manifested by the friends of the bill, and the large mojority by which it passed the lower House, (92,) reflects the highest honor upon the intelligence of that body. Here we have an example worthy of imitation by our own Wisconsin, where we have a soil more fertile, and a climate more genial for the production of all crops suited to a northern latitude.

Among other things the bill provides for an appropriation of $100, for the term of five years to each county in the State, and $500 for the term of two years to aid in the establishment and promotion of the N. H. State Agricultural Society. The former sums are to be paid only after similar amounts have been raised in the several counties.

FALL PLOWING.—If you have leisure before the ground freezes, do not forget that one day of plowing stiff lands is worth two next spring—breaking prairie land always excepted.

CHARCOAL.—The use of charcoal in growing plants is now become general, and it is found to produce the most effect when mixed in large pieces with the soil, in rough rotten. Powdered charcoal sifted so as to have the particles not larger than those of sand, has been used in Germany for stiching cutlings in, and it is found superior to sand, as it supplies them with nourishment after they are rooted, by attracting oxygen from the atmosphere, and thus forming carbonic acid gas round the roots.

FLAX CULTURE.—A committee of the Massachusetts Legislature, appointed to procure information concerning the culture of flax and the probability of its substitution for cotton in the manufacture of cheap fabrics, reported that there is no doubt that the plant can be raised abundantly in every State in the Union under proper tillage, without exhausting the soil; and that it is but reasonable to conclude, from recent developements, that flax may soon be adopted to a considerable extent as a substitute for cotton in the manufacture of the class of fabrics referred to.

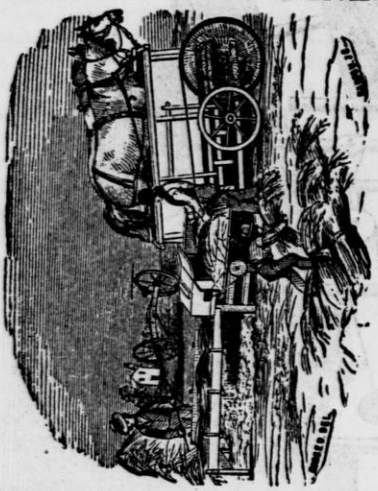
It is affirmed that not less than 49,000 acres of land in the State of New York were sown with flax in 1849.

FLAX DRESSER.—We are informed that Mr. S. A. Clemens of this town, the inventor of the new Cotton press, which received the award of a gold medal at the late Mechanic's Fair, in Boston, has invented a machine for dressing flax, which will dress from the rude material one ton of flax per day; leaving it clean and ready for market. Men who know how much of a day's work it is to swingle twelve pounds, will understand the value of this invention, and western farmers we imagine will be in a hurry to get at it. Mr. Clemens has also invented a machine for dressing Yucatan hemp: and last week shipped three machines for that country. They have been thoroughly tested, and proved to be highly practicable and valuable.—*Springfield Republican.*

NUMBER OF FARMS IN 13 States.—The following census statistics, showing the number of farms in the States enumerated, will be read with interest by the farming community:

New York	174,234
Pennsylvania	127 733
Ohio	146,821
Indiana	111,973
Virginia	76,704
Illinois	71,062
Kentucky	77,290
Maryland	21,950
New Jersey	24,504
Delaware	6,225
Michigan	34,690
Wisconsin	22,062
Iowa	15,500

THRESHING MACHINES.



THE subscriber has received a new supply of *Wheeler's Celebrated Railroad Horse Power and Over-Shot*

THRESHING MACHINES,

Adapted to the use of one or two Horses, made in Albany, New York, which he offers for sale at his shop in Waukesha, at

ALBANY PRICES,

Adding transportation Farmers and Threshers who study Economy, will find it to their interest to examine the above Machines—it having obtained the Premium on Exhibition in New York, Pennsylvania, Ohio, Michigan, and other States, give it such character that further recommendation here is deemed unnecessary; also,

CORN STALK AND STRAW CUTTERS, CORN SHELLERS & WOOD SAWS

To be attached to said Horse Power, may be had of the subscriber. Said Machines will be delivered at any point in the State at reasonable charges.

We, whose names are hereunto annexed, being practical Farmers, and having used Case's and other Threshing Machines now in common use, do not hesitate to say that the above machine far supersedes any we have used or seen used in durability, cheapness, and ability to perform their work perfectly, which can be done with only from one foot to eighteen inches elevation.

John Thomas,	Richard Smart,
Howel Cobb,	Nathaniel Walton,
Adam Shultis,	E. D. Clinton.

Waukesha, June 28th. W. D. BACON.

SEED WHEAT.

WISCONSIN FARMERS, it is your interest to enquire for, and select the best seed wheat, both winter and spring, but especially winter, therefore, by seeing my growing crop you will see that it had stood the severe winter without injury, while other sorts of wheat have much suffered. I have eleven acres sown on spring wheat and oats stubble land, and I invite all farmers wishing to raise good crops, to come and see the superiority of the ETRURIAN WHEAT over many other kinds. It is a white bald wheat, the stalk or straw does not grow very long, and is hard and early, and not liable to be injured by the rust. Twenty cents per bushel over spring wheat is an object, besides the increase in bushels in favor of winter wheat. I have two acres of said wheat sown after a machine of my own invention, and the growing wheat is worth seeing; there is not a square foot of land but what there is a stool of wheat growing, I believe.

N. LE PROVOST.

Oakland Farm, Mount Pleasant, Racine Co. June, 1851.

IMPORTANT TO FARMERS!

J. I. CASE'S

Lever and Tread Power

THRESHING MACHINES,

Manufactured at Racine, Wisconsin.

THE important fact is now ascertained, that there is now manufactured and for sale at Racine, the best Threshing Machines that can be obtained this side of any place!

I would particularly invite the attention of those who would make Threshing their business, to my Improved Two Horse Tread Power, with Separator. Having had more than ten years experience as a practical Thresher, and using all kinds of power both

LEVER AND TREAD,

I am prepared to warrant the Two Horse Tread Power with four good heavy horses, capable of doing as much business during the season of Threshing as any Eight Horse Lever Power that can be produced.

OVER TWELVE HUNDRED DOLLARS

Have been earned with one during the season of Threshing, with less than one dollar repairs on the Machine. I will also keep on hand and for sale, the most improved kinds of

LEVER POWERS.

Barber's Climax I consider the best. They run at least one-sixth lighter than the common power, and I warrant them against breaks for one year, with proper care. My largest size Separators, with three foot cylinder and elevators attached cannot be beat. I will warrant them to clean grain fit for market, without waste, with any Eight Horse Lever Power in use.

RECOMMENDATIONS.

From the Chicago Prairie Farmer.

EDITOR OF PRAIRIE FARMER,—Allow me, through the columns of your paper, to introduce to the favorable notice of your numerous readers, the two horse tread power Threshing Machines with Separator, manufactured by J.

I. Case, Racine, Wisconsin, which Machine I consider far superior to any other kind of Threshing Machine in use.

I employed Messrs. Marcher & Flack to do my threshing with one of them last season, and in justice to the manufacturer, must say that I never before saw so perfect a working Machine, or one that done its work with such neatness and despatch. As a sample of their ability, they threshed for me eight hundred and eleven bushels of oats in eight hours and thirty minutes, and cleaned them fit for market, under the following disadvantageous circumstances: The weather was extremely cold, and the straw was so large that about one-third of it was badly lodged before it was cut. Consequently much of the grain was shelled and wasted before it was got to the Machine. The Machine is compact and simple and I should judge not at all liable to get out of repair as with the common Machine. It is easily set for operation both Horse Power and Separator being and remaining on wagons You only have to drive them on the ground in range with each other, put on the belt, drive one stake, and all is ready for operation, without lifting or unloading as with the common machine. I would advise those wishing to purchase a Threshing Machine or having grain to thresh, to give one of the above named a trial and I think whoever does so will fully concur in the opinion I have expressed, and save about one-third of the usual expense of threshing.

S. BURLISON.

Mequocata, Jackson Co., Iowa.

☞ Any person wishing a good article of any of the above kinds of Machines, can be accommodated by calling on or addressing the subscriber, who will ship them a Machine to any Port they wish, and send Agents to assist in starting them and if they do not fully answer the description given there shall be no sale.—My terms are $50 on delivery of the Machine and on the balance I give a liberal credit. I also deduct ten per cent. off for all moneys over $50 paid down.

Alvah H. Viles Dubuque, is my General Agent fo Iowa. Persons ordering machine shipped to any port on the Mississippi river will, on the receipt of the Machine, inform Mr Viles at Dubuque, who will attend immediately to starting the Machine for them, and make full arrangements as regards the pay.

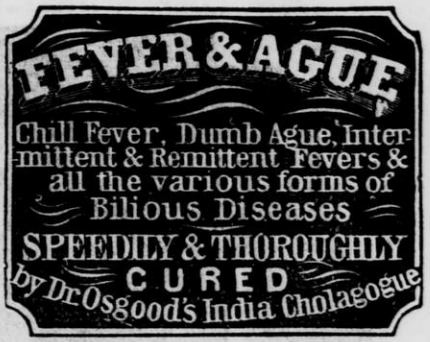
J. I. CASE.

CASH FOR WHEAT.

NORTON & DURAND are prepared to pay the market price, in CASH, for any quantity of Wheat, Pork and Wool; or receive and store the same on the most advantageous terms. Cash advances on Flour and Wheat in store.

Contracts for shipments in Eastern markets made on fair and liberal terms. Farmers, Millers and Country Merchants are invited to give us a call.

1:1y NORTON & DURAND.



The following is a postscript we find in a letter written and dated, Shanghai, Dec 13, 1849, by Bishop Boone, to the Board of Missions of the Protestant Episcopal Church in the United States, and published in the May number of the Spirit of Missions, page 156:

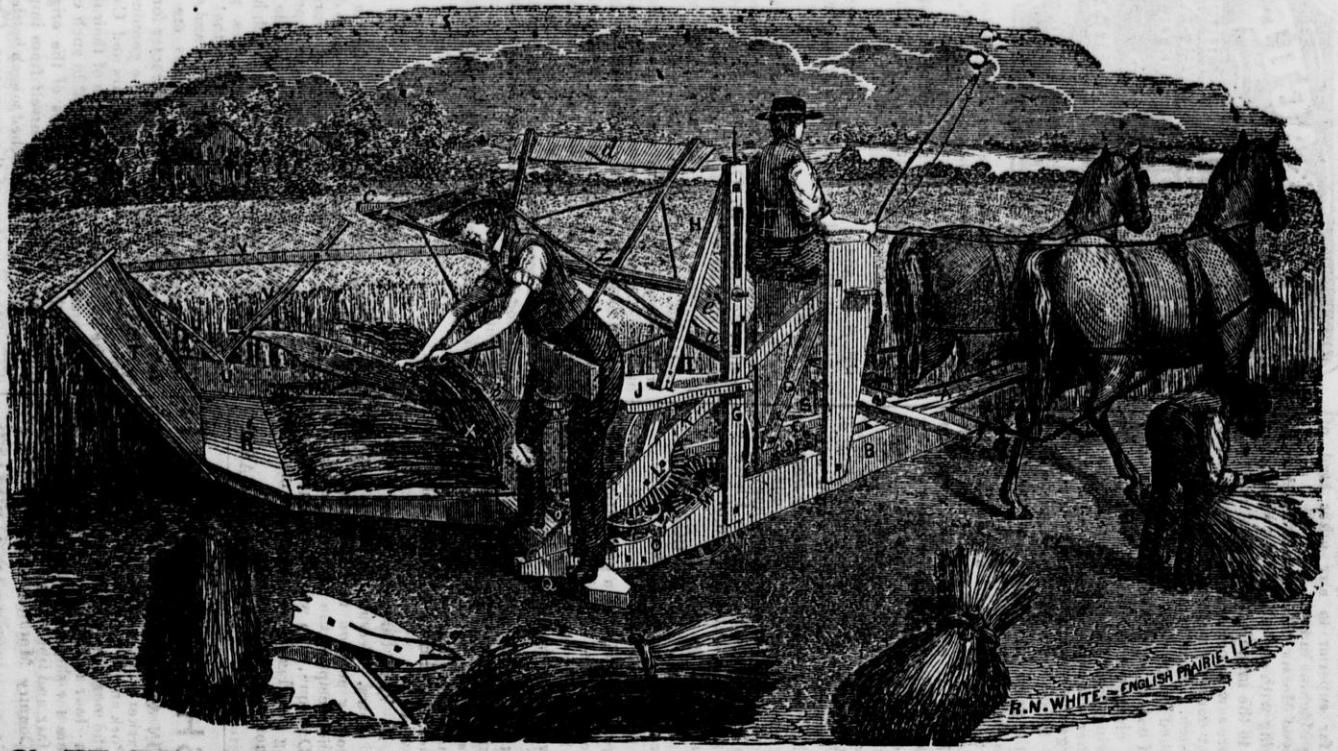
"P. S.—I add a line to my hurried letter to request you to send on some Quinine and some Cholagogue.

"The India Cholagogue is prepared by Doctor Charles Osgood, a friend of our dear deceased brother Spaulding. Dr. Osgood was kind enough to send him six dozen bottles of this excellent medicine, as a present. We have used it very freely and with the greatest success. It has proved successful in many cases where quinine had wholly failed. Some notice should be taken of Dr. O's handsome gift, in the Spirit of Missions, and it was the intention of our dear Spaulding to have addressed you on this subject. I trust the Dr. will find a very extensive sale for his medicines, as I am sure it will do great good in these regions of the country, where intermittents prevail.

"We have recommended its use extensively

CAUTION.

It has been truly said that counterfeiters and imitators of a valuable medicine are more dangerous to society than the dealers in spurious coin. The latter only rob you of your property, while the former endanger your life. Be not deceived by numerous Cholagogues which have of late made their appearance. Every respectable druggist in the country will tell you that Osgood's India Cholagogue is the original and only genuine preparation. The imitations are but imitations in name, to steal a character for the spurious, which belongs only to the genuine.—You may as well look to the Cæsars and Cato's of the present day for the virtues of their illustrious prototypes, as expect to find in such compounds the valuable properties of the original Cholagogue. To protect yourself from imposition see that the label attached to each bottle has the written signature of the proprietor—Charles Osgood, M. D.,—and you are safe.



C. H. McCormick's Improved Virginia Reaper for 1851.

SAND'S
SARSAPARILLA
IN QUART BOTTLES.

For Purifying the Blood, and for the cure of

SCROFULA, RHEUMATISM, STUBBORN ULCERS, DYSPEPSIA, SALT RHEUM, FEVER SORES, ERYSIPELAS, PIMPLES, BILES, MERCURIAL DISEASES, CUTANEOUS ERUPTIONS, LIVER COMPLAINT, BRONCHITIS, CONSUMPTION, FEMALE COMPLAINTS, LOSS OF APPETITE, GENERAL DEBILITY, &c.

IN this Preparation we have all the restorative properties of the root, combined and concentrated in their utmost strength and efficacy. Experiments were made in the manufacture of this medicine until it was found it could not be improved. Accordingly, we find it resorted to almost universally in cases of Scrofula, Liver Diseases, Salt Rheum, General prostration of the vital powers, and all those tormenting diseases of the skin so trying to the patience and injurious to the health. It is a tonic, aperient and disinfectant. It acts simultaneously upon the stomach, the circulation and the bowels, and thus three processes, which are ordinarily the result of three different kinds of medicine, are carried on at the same time through the instrumentality of this one remedial agent. There are many ways of relieving pain for the time being, but there is only one way of removing disease. No palliative, no anodyne, no tropical application will remove it. It must be attacked at its source, in the fluids of the body, which convey the poison to the localities where it is developed in inflammation, sores, ulcers, tumors, abcesses, glandular swellings, &c., as the case may be.

These fluids must be reached, acted upon, purified by some powerful agent. Such an agent is SANDS' Sarsaparilla, which gently stimulates while it disinfects and expels from the stomach and bowels all that is irritating, and at the same time restores their vigor and tone. Its great merit is that it meets and *neutralizes* the active principle of disease itself, and when that is gone, the symptoms necessarily disappear. The rapidity with which the patient recovers health and strength under this triple influence is surprising. Each new case in which it is applied, furnishes in the result a new certificate of its excellence: and we have only to point to the accumulated testimony of multitudes who have experienced its effects to convince incredulity itself of its real value.

Lieut Miller of the Army has kindly sent us the following letter from California:—

MONTEREY, Jan. 18, 1850.

MESSRS. A. B. & D. SANDS:—Gentlemen—I beg leave to add my testimony in favor of your invaluable medicine, hoping it may lead some other unfortunate being to try its effects, and that they may be benefited as I have been.

I arrived here from the United States by the overland route, about the first of October last. A few days after I was attacked with a very disagreeable eruption of the skin, which my physician could not cure. I happened to find your Sarsaparilla in a store in this place, and remembering the popularity of the medicine at home, I purchased three bottles, which had the desired effect of removing my difficulty entirely.

With high regards, yours, &c.

J. H. MILLER, U. S. A.

Prepared and sold, wholesale and retail, by A. B. & D SANDS, Druggists and Chemists, 100 Fulton street, corner of William, New York. Sold by Druggists generally throughout the U. States and Canadas. Price $1 per bottle; six bottles for 5 dollars.

EDWIN HUNT,

BRANCH OF THE WHOLESALE IMPORTING HOUSE

No. 20 Platt Street New York,

WHOLESALE AND RETAIL DEALER IN

ENGLISH, GERMAN AND AMERICAN

HARD-WARE.

Iron, Nails, Glass, etc, etc.

NO. 134 MAIN STREET,

AT THE SIGN OF THE RIM LOCK

RACINE, WISCONSIN.

ALSO AT

No. 79 Lake Street, Chicago, Illinois.

W. D. RUNYON, 134 Main Street. Racine.

EDWIN HUNT 20 Platt Street, New York.

August, 1850.

WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

VOL 3. JANESVILLE, WIS., OCTOBER, 1851. NO. 10

PUBLISHED ON THE FIRST OF EACH MONTH, BY

MARK MILLER,

RACINE, WISCONSIN, NO 137 MAIN STREET.

PUBLISHED ALSO BY

R. SPAULDING, DUBUQUE,

To whom all orders must be addressed from the State of Iowa.

50 Cents a Year in Advance:

Five copies for $2, if directed to one Post Office, and at the same rate for a larger number. All subscriptions to commence with the volume. Back numbers supplied to new subscribers.

Postmasters and all others who feel an interest in the circulation of the FARMER, are invited to lend their aid in procuring subscribers and extending its circulation.

For the Wisconsin & Iowa Farmer.

Wisconsin State Agricultural Society.

Farmers of Wisconsin.—I see you are to have a STATE FAIR at Janesville. Well done—though younger, you are practically leading Illinois in this matter. At this day, the young take the lead in such things, and the old look on at a distance, and hug their old school prejudices, which hang as a dead weight upon the science of the new.

The traditional tiller of the soil will not read, and ignorantly scouts the notion of "book farming," or the idea, that there is a better way than that which his father followed; you have but one way to meet this man; you must *show* him, at your State and County Fairs, that the new race of agriculturists and mechanics are a long ways ahead of his oldtime height of perfection; and what we write of and read of in books and Journals, are positive facts in practice, as well as theory.

You will show him this at your Fairs, and he will believe what he sees. You will show his sons, (and daughters too,) what others have done, and encourage them to attempt something in the same way; and if they attempt one thing, and succeed, they are sure to try another, and become, in due time, members of the new order of reading Farmers and scientific Cultivators.

Success to your Society—may it follow the lead of New York, and rival those of Ohio and Michigan. Yours is a great State in its infancy, and most of its soil is virgin; but permit me to say, that much of it in the South, requires comparatively more science than labor, to preserve its fertility, and increase its productions.

You must, after a little, farm better than the people of Illinois, or you will produce less, for your soil is *not* as well calculated for long continued traditional tillage, as that of your neighbors farther south, though I am by no means certain, that with more science, you may not one day beat the best of us here.

You certainly deserve much credit for your early movement in this State Fair, and you will here meet and learn truth from all classes, especially from those who are really at the bottom of "the spirit of progress," of which politicians talk so much, and know so little. I mean the mechanic—the artizan—the inventor—the men who have taught the elements to labor, and with a little wood and water, have done the work of a thousand hands, and brought the people of the seaboard almost within a day's journey of Lake Michigan.

These are the men who have made this an age of progress, and these are the true friends and benefactors of the agriculturist. You honor and imitate them, for they are worthy of all, and above all, prevail on them to sit down beside you—the manufacturer with his customers—the operative near the materials he is to work upon, and the fields that are to feed him. It is all well enough for us to help feed eastern manufacturers, but it would be better still, to feed our own, and escape the cost of those transportations and profits of shippers both ways. Think of this, it is worthy of thought.

Brother farmer, the mechanic is at this day, far ahead of us, not only in knowledge of his particular busines, but of matters and things in general. There is little or no quackery in the mechanic arts—much in agriculture; more, even, than in "the professions," and there should be none; for as your executive committee well observe—

"Agriculture is a Science, should be taught as a science, and carried out and practiced on scientific principles."

The scientific mechanic has made his mark upon the age in which we live, and is fast taking a stand above us, in public estimation, and the councils of the nation. And who among you, that has lived more than half a century, and does not remember the reverse of this? And why is this so now? Ask the work-shops where mechanics labor *in company*, and share with their fellows their knowledge and their thoughts. Ask their *Institutes* and their *Libraries* and their well employed leisure! you have the answer.

Before the inventions of this century the mechanic labored more hours than the farmer—and now, he has not only reduced his own hours of toil to a reasonable limit, but has given the farmer the means of tilling three acres more easily than he could one, in times past, and to the wife and daughter hours of leisure where they scarcely had minutes, when they spun and wove all the webs that went to furnish the house and clothe the household.

We certainly owe much to the scientific agriculturist—the chemist and others—but more, much more, to the *Inventor* and *Mechanic*. If the geologist has shown us the origin, and the chemist the composition of our soils, it is to these men we owe the absence of the old spinning wheel and hand loom from the farm-house; and from the farm, the old bull plow, the sickle and the flail.

Honor and imitate the mechanic. Use well the leisure he has given you—treasure every known fact in your profession, and seek for more. These Fairs are our only schools at present, and the agricultural Presses our regular lecturers, and both are almost gratuitous. Who, now, is too old to learn? Who too stupid to understand?—Remember if one man, with less expense, has "caused two blades of grass to grow where but one stood before," another may do that and more; but he *must first learn the process.*

J. A. K.

NORTHFIELD, ILL. Sept. 1st.

CLOCKS.—Brass clocks are now manufactured in New Haven, Conn, and sold, warranted to keep good time, for $1, each.

For the Wisconsin & Iowa Farmer.

The Recent Discovery in the Manufacture of Flax.

Its influence upon Agriculture, Manufactures, Commerce &c.

BY SOLOMON LOMBARD.

The recent discovery in the manufacture of flax by the cotton process, is destined to effect a mighty revolution in Agriculture, Manufactures and Commerce. *Change* will characterise all these departments for many years to come. Nations will be set in commotion, and undulate as the billows of the mighty deep; and far distant is the day, when the industrial world will be restored to its perfect equilibrium. And while these changes are taking place in the industrial condition of the world, we may inquire what changes are to take place in the political affairs of the different nations which are to be affected by that important discovery? Whether the crowns of European Sovereigns will receive an additional stability, and the free governments of the earth be razed to their foundations, or, whether the reverse will be the consequence remains for the developement of future time. But, we have said that Agriculture will be affected by that discovery. In demonstrating this point, it will be necessary to take a general view of but two of the most important nations on the Globe. The United States are now the producers of the great staple article of cotton, which enters so largely into the manufactures of Great Britain, whose commerce extends to every portion of the world, and upon whose dominions the sun never sets. Upon the United States she has heretofore been compelled to rely, notwithstanding her unceasing efforts to produce the same material in her possessions in the East, in which she has substantially failed. Therefore it is compulsion—stern necessity—which has given us her trade in an article, in the production of which, so large an amount of the capital of our country is invested.

Why, it may be asked, does she feel it a compulsion to carry on a traffic with the most independent nation of the earth?—And that too, when she is deriving an immense revenue from that traffic, and footing up a balance of trade against us from year to year. It is because she knows the doctrine of "protection" to be true, while her

political economists are preaching "free trade" to those nations with whose citizens she traffics, and with a full knowledge that agricultural and manufacturing protection is the great secret of her present prosperity. She, in some cases, carries the doctrine to its fullest extent, and adopts the principle of prohibition whenever circumstances will permit her to do so, and every possible means to render herself independent of foreign nations, and every nation tributary to her, manifesting her jealousy upon land and sea. A mighty Empire is growing up in the western hemisphere, threatening to outstrip her in her tardy course towards the perfection of Government, the acquisition of Territory, and the glory of the world; and, no stone is left unturned to prevent such a catastrophe. This is the true cause of all her efforts to retard the progress and prosperity of the Union. But, this cause is concealed beneath an assumed garb of horor, for the system of American slavery, and the manufacture of slave productions. It cannot be denied, that a great part of the agricultural capital of our country is invested in human flesh, compelled to labor for unfeeling masters from the earliest dawn of infancy until the severity of the discipline, necessarily connected with such a system, induces premature old age, rendering life a burden, and death a welcome harbinger of peace. Against that system, which every candid mind will condemn, Great Britain has raised her lion-like voice, and avowed her determination against the same to wage an eternal warfare. Her efforts, ostensibly, are all directed to that end. Hence, under that pretext, she labors to prevent the destruction which inevitably awaits her. Could she deprive us of the market which she now affords us, and keep our ports open to the production of her own pauper labor, she would have advanced one huge stride towards the accomplishment of the cherished object of her ambition; and, had she succeeded in her efforts to produce cotton, at a medium cost, in her eastern possessions, we should have lost a market for a large part of the staple production of the south.

To accomplish that object, no effort of the Government has been wanting. Her manufacturers and agriculturists have been taught to look to the crown for aid, when prosperity fails to attend them; for in their prosperity, she finds the stability of her government.

The production of the inferior Surat cotton, and the sale of the same in her markets, have been encouraged, and that material interwoven with the superior article furnished by the United States, and the manufactured product sent to our market. But a way is now open to her to effect a two-fold object—to deal a death blow to American Slavery, (in which may heaven grant her success,) and deprive the Union of her most important cotton trade; and upon that loss of ours to resuscitate the agricultural interests of her own famished and almost forsaken dominions. And such must inevitably be the result.

Deprive the South of a market for the products of slave labor and you set her bondmen free. How can she support them where they are, and where can she invest such capital securely? These facts are true, to wit:

1st. Great Britain is jealous of the progress and prosperity of the United States.

2d. She ever has been, and now is seeking some effectual means to exterminate American slavery, and will embrace the first opportunity to withdraw the support which circumstances have compelled her to extend to that system.

3d. Allowing the recent discovery in the manufacture of flax to meet the expectation of the discoverers, such opportunity is now certainly presented. Some portions of England's dominions are reduced to beggary. Famine often stares them in the face. Ireland, one of the finest flax growing countries the world affords, as past experience teaches; dependant in past years, upon the charities of the new world, has a brighter prospect before her. Her fifty-four thousand acres of flax will soon become millions. She will henceforth supply English looms with the raw material. Peace and plenty will no longer be strangers to her citizens. The agrarian principle adopted there, will save many a poor wretch from the relentless grasp of an avaricious land-lord, and the progress of art will protect them from an untimely grave. Their condition cannot be worse, and a better fate seems to await them. Ireland is to become to England what the Southern States of this Union are to the North—the producers of the raw material for all her manufactories. Her population, now thin, famished and

wretched, will become dense, thriving and happy; while the slave population of the South will move in dark columns among the population of States now free, rendering the condition of both almost intolerable.

But, agriculture is not the only interest to be effected. Manufactures will receive a new impetus, or be ruined, as localities may be favorable or otherwise. Old manufacturing districts may be compelled to seek some other avenue to prosperity, while others will rise to take their places.

Commerce, too, will flow in different channels. Portions of the world heretofore unknown to each other by the interchange of their products, will become bound to each other by the strongest ties which can unite the nations of the earth; the bonds of mutual interests and reciprocal advantages. In the opening of these new channels of commerce, we may expect developements which will astound the world.

We will close this article by asking, what would the fate of England be, were she deprived of her manufacturing facilities? Take from the Northern States their manufacturing, and from the South and West their agricultural facilities, and compel them to change the channel of their capital and labor, and what would be the condition of the Union for a century to come? We can see in the future a dark cloud overspreading the South. We may predict the continued prosperity of the North. The future alone can tell what important consequences may flow from seemingly unimportant events.

Greenbush, Wis. Sept 4th 1851.

For the Wisconsin & Iowa Farmer.

Sketches From Memory—Southern Wisconsin.

BY JOHN A. KENNICOTT.

FRIEND MILLER:—I have promised you as regular a correspondence as my very irregular habit of writing will permit. During July last, I spent 2 weeks very agreeably in moving about, per stage, through Southern Wisconsin. Of course I had no more than a birds-eye view of the country through which I passed, and can give you only bare outline sketches of its appearance and capacities; but I can promise you to be faithful according to my memory of the impressions received, and as I am always looking for the useful and beautiful, and can appreciate what I see, it may chance, that my rough outline views will interest your readers as much as partial pictures more highly finished.

I landed in Milwaukee the 3d of July, and my first thought was, that a disinterested person must at once admit the superior natural advantages of this town over Chicago, in horticultural capacities, and the great elements of the picturesque, which should go to the formation of a "Garden City."

I observe that some of the beautiful forest growth has been spared in the city, and if the good people would now have the forethought to preserve a portion of what remains in its immediate neighborhood, they might one day, soon, have something in the way of leafy embellishments, and comfortable shade, a long ways ahead of Chicago plantings—even though *their* rows of cottonwood should give place to the Elm, the Maple and the Conifer.

I saw much, in my way, worthy of note in Milwaukee, but as I did not see a garden *worthy* of Milwaukee, (though such exist,) I have concluded to defer this sketch, hoping that I may yet have the pleasure of viewing the horticultural gems of this city, under the guidance of a resident, personally unknown to me, but who has a reputation, second to no one in the west as a genuine disciple of Linnæus.

The destiny of Chicago, as the great Commercial City of the Lakes, cannot be called problematical, but the resident thereof, if he would see how his food is produced and look upon diversified rural scenery, must go many miles to gratify his wishes, and even then, feel that though there is beauty and fertility, there is much *sameness* in his surroundings within the scope of a day's journey.

Not so here; the citizen of Milwaukee meets farm and forest—moving water and varying scenery—in an hour's drive from his dusty street; and those who have thought of this, know its importance to health of body and mind.

The dweller among brick and mortar creations, whether he labors to live, or lives for money, is made better and happier by an occasional look upon the face of nature; and the more of it he sees, and in the more

diversified aspects—other things being equal—the more he profits and enjoys.—But there are men who would not step out of their way to see the beauties of the *Hudson*, or the gem like lakes that sparkle around your Capitol, at Madison. And to the actual well being of such and their families, and more especially to those who cannot go abroad to look upon nature, the wooded hill—the ravine with its streamlet, and the highlands in the distance, are of more account than a harbor for a thousand ships. But, though I could easily prove this statement, it is of little account to the readers of your paper; I will therefore moralize no larger.

I spent a day or two in the country 8or10 miles west of Milwaukee,and was really surprised at the variety and strength of the soil, and its adaptation to general crops;and what is particularly fortunate here, to the Garden and Orchard. Most of this soil is right for the Apple, and much of it for the Pear.—I saw both doing well. And there is some stiff clay, [good wheat land by the way,] where the plum must succeed; and the dryest of this, and brows of many little hills will produce the Peach, and perhaps the Cherry, much better than lands in Northern Illinois.

The great mistake in attempting to raise Peaches, may generally be found in the fact, that the planters pay no attention to *soil* and *aspect*, or if they select at all, choose always the worst. Climate, has but comparatively little to do in ruling the possibilities of peach culture, in this region, though it comes in, at last, as the last act in the causes of failure.

To raise peaches in Wisconsin; select your *highest*, *dryest* and *poorest* soil, and let them face the north, or north-west; so that they escape the morning sun in vernal frosts, and that of noon-day in winter. But in reality, vernal frosts seldom destroy the peach promise; the mischief is done in the late fall and early winter. If the bud be in the least excited to untimely action, a temperature of 15° below zero is almost sure to cause death the more especially if rapidly thawed by the glare of a bright sun. And do not,I pray you,kill your peach trees with kindness; let them branch from near the ground;cut out no limbs,but cut off the ends if you choose, and cultivate from April to June,but at no other time, so that they may not make too much wood,and may cease to grow early in autumn.

The lake towns in Wisconsin would pay from one to three dollars per bushel for more peaches than you will ever raise, and yet,if you will follow these hints,I feel assured that you may have on an average,at least, two peach crops in five years, and two or three crops during the life of an orchard, at the very wrost, and *one* crop will pay for the trees and cultivation; and leave as much profit, as the same land five years to any grain crop you please, and that too, while the soil is growing richer for the peaches and poorer for the grain crops.—but we will resume this subject again in good time.

I have seen some of the finest Maple lands here that I have noticed any where in the west, and some beautiful elm groves, along the little streams; and oh,what Timothy! Three tons to the acre, easy, I should think—a good thing again, for stock growing and the *dairy*, afford more profit, with less than half the risk, and hard toil of wheat growing.

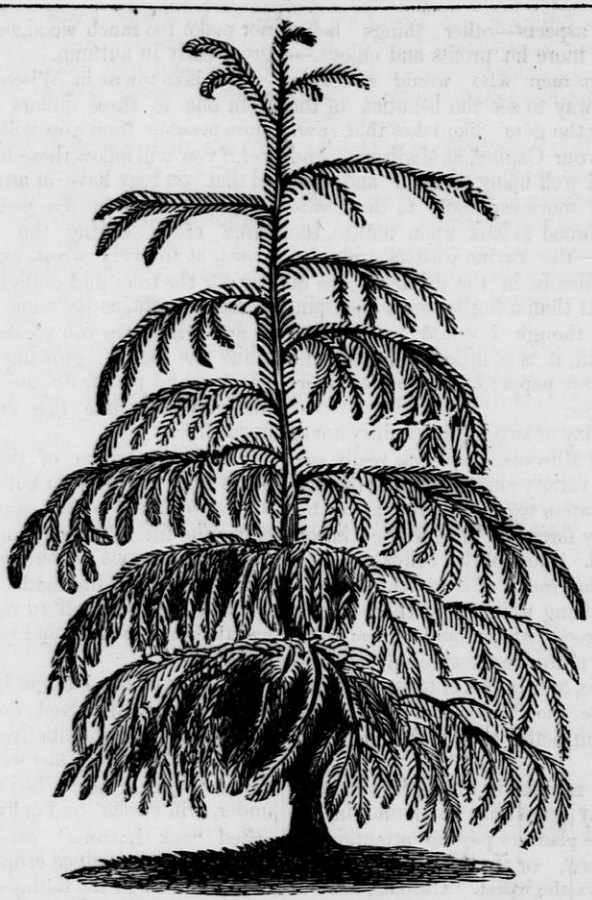
And now, lest I forget it, let me say to the farmers further back, on the sandy and comparatively unproductive oak openings that there is nothing like well plastered clover for them. A heavy bed of clover turned under, will enrich and enliven these miscalled "oak barrens" astonishingly, and cause them to produce crops that will astonish all except the initiated.

[To be Continued.]

EXTENSIVE FARMING.

The most extensive farming operation probably ever entered into in any country, has been successfully carried through in California during the past autumn and winter. We allude to the speculation of Horner & Co.

Day before yesterday the last sack of the potato crop was sold, and the gross proceeds of this crop have amounted to $178,000—yield of 130 acres! There have been eighty hands employed on the Rancho, and the total expenses of carrying it on, during the season has been 80,000 dollars. The sacks (gunny bags) in which the potatoes have been shipped cost about $8,000, while the gross receipts for the total crop of the Rancho have amounted to $223,000.—*Sacramento Transcript.*



The New Japan Cedar.

The above cut represents one of these trees six feet in height. It is an evergreen and a beautiful ornament for pleasure grounds. It was introduced into England in 1844 from China; it has also been introduced into this country.

The Horticulturist gives the following description of this tree:

The Japan Cedar, *Cryptomeria japonica*, which is nearly allied to the Cypress, and as it grows in the north of China, where the thermometer sinks nearly to zero, and forms large forests on the mountains of Japan, at the the height of more than a thousand feet it follows that it is a hardy evergreen in all temperate climates.

"The English accounts of this tree state, that for beauty and rapidity of growth, it has no rivals among hardy evergreen trees. In the garden of the London Horticultural Society, young trees have grown *four feet* in a single season. It is described by some of its admirers as the "Queen of Evergreen Trees." Its peculiar beauty is in the graceful droop of its branches. It is a great favorite in China for avenues, growing up 100 feet high, with a remarkably straight stem and dense and handsome foliage. The wood is said to be very hard and elastic and "withstands the most terrific winds or monsoons which sometimes devastate that country. It is employed in China for the high poles, which are everywhere placed at the dwellings of mandarins, to denote their rank, where it lasts for ages."

"The Japan Cedar is said to be as hardy in England as the Deodar Cedar. As the latter tree, even in young specimens, has in this country, withstood without injury, a

winter temperature of 6° below the zero of Fahrenheit, we may safely say that the Japan Cedar, or Cryptomeria, will endure the winters of the Middle States, and possibly those of the Eastern States in proper situations, i. e. those sheltered from sudden thawings in winter.

"The soil considered most favorable to the growth of this tree, is a sandy loam, mixed with some peat or leaf mould. Those inclined to plant it where there is doubt of its standing the winter, will take care that the subsoil is well drained when preparing to plant it.

"This tree, is of course; yet quite scarce in this country. Plants may, however, be obtained of leading nurserymen. Every amateur will be glad to make the trial of a tree that promises to add so much to the beauty of our lawns and pleasure grounds; and we hope, in another season, the Japan Cedar, if found quite hardy, will be imported, so as to be afforded at a moderate price in our nurseries."

On Planting Potatoes in Autumn.

Amongst the expedients suggested for evading the potatoe disease,—none has been more confidently recommended than planting the sets in autumn; but the suggestion has been but partially adopted.—The planting of such a crop in autumn cannot, in truth, be practiced everywhere, nor extensively in ordinary circumstances; because potatoes being not only a green, but a fallow crop, and a green crop being always taken after one of grain, the stubble of the grain crop is generally not in a fit state to receive the manure, before undergoing the process of cleansing by means of the plough, the harrow and the grubber, as the land for a fallow crop ought to be; and, in Scotland at least, too short time intervenes from the harvest of the grain crops to the occurrence of bad weather in the early part of winter, to permit the land to be cleaned in a satisfactory manner. Hence very few cases can occur in which the stubble may be manured in October, for a crop that is to occupy so important a position as every green crop does. This is one reason, and it is a sufficient one, why so few cases of autumnal planting takes place in the potato; and the obstacle to it is to be regretted, since in the few cases attempted the result has proved advantageous. Out of 64 English and Welsh returns of the crop of 1849 53 were in its favor and only 11 against it; and no bad cases were reported in Scotland while there were 4 good. The conclusion arrived at was, that autumn planting was a greater safeguard from disease than that of early spring. In England, the autumn planted, with that of the months of January and February, was better in the ratio of 13 to 11; and in Scotland, March may be taken, after the autumn, as the best month, the ratio of loss being only 7¼ per cent. The general conclusion over the kingdom, in 1849, was that the earlier the potato planting is performed the better, and the later the worse.

A rather unexpected corroboration has been given, in 1850, of a curious and important fact observed in 1846—that diseased potatoes may be safely and advantageously used for seed. Mr. Benjamin Smith of Wokingham, Berkshire, planted very much diseased sets of ash-leaved kidneys on the 18th of March, in drills 5 inches deep, and the crop was taken up sound and ripe on the 2d of August, without disease; while sound sets of ash-leaved kidneys and others, a mixed lot, were planted in February as before, and on being taken up in August, were found to be much diseased. Very rotten late potatoes were planted in November 1849, 6⅝ inches deep, covered first with two inches of earth, then by a layer of half-decayed weeds, and lastly by earth, and the crop was taken up in the beginning of August without disease. A blacksmith in Wokingham, Abraham Lewis, experienced the same results on the 8th of August 1850.

It is the opinion of Mr. Smith that diseased sets are much better for planting than sound ones. The former soon rot when the live part begin to grow; the latter are apt to remain hard, fleshy, and brittle, even when the new crop is ripe; and he thinks that, in the former case, there is an effort of nature to throw off the disease. On this Professor Lindley remarks, that "it is possible that the morbid matter which causes disease may disappear in the general decay of the tuber in the one case, and may remain unchanged in the other, prepared to seize upon the haulm as soon as it is ready to receive its influence. At least, no better explanation of this curious fact presents it-

self to us at present; but the fact itself is certainly, in practice, very valuable."*

The method of planting potatoes in autumn is precisely the same as in spring, which has been particularly described from (2745) to (2754;) but there will not be time to stir the land so much as is recommended in (2733) and (2734.) The stubble should get one furrow with the plough in the contrary way the ridges are formed. Harrowing along and across the ridges a double time should then be given, and any weeds that may have been brought to the surface by it should be gathered off. If there is time, the grubber, fig. 215, should be used across the ridges to cut into pieces the furrows made by the plough; but should there not be time for this efficient operation, the land must be drilled up in the double way (2397) in preparation for the dung.—The farther operations go on as stated in (2745) and succeeding paragraphs.

I think it advisable to use whole potatoes for seed instead of cut sets, in the autumn; for which the small ones will answer the purpose well, (2739,) and the time will be saved that would have been occupied in the cutting. The whole potatoes must be planted in the drill at wider intervals than cut sets are,—from 10 to 12 inches asunder.

Much attention is required at this season, after committing any crop to the ground, to have surface channels cut with the spade, (779,) wherever there is a hollow in which the least chance of water may stand for a time, as also across the lower headridge into the adjoining ditch, or outfall of the field.

**Gardeners' Chronicle*, 7th August, 1850.

Preparation and Manufacture of Flax.

We moderns think that we have performed wonders, but there is one thing in which scarcely any thing has been accomplished since the days of the Pharaohs, and that is in preparing and manufacturing flax, so that linen cloth shall be a cheap article for common people. This is a desideratum in the arts and commerce of the world at the present. Hence, the idea to which we recently alluded of flax cotton excites so much interest; and if the new art described in England be really successful, it will cause a revolution in many branches of trade; but even on the supposition that it fails, the production and manufacture of flax demands more attention in the United States than it has received. No country is better adapted to the culture of flax than our own, and is there any people more ingenious in the use of machinery? Why, then, should we not make our own linen? In order to show how our industry and ingenuity have, in the case of flax, fallen behind that of Great Britain, we give the following table in relation to the production of flax goods in each country:

Imports of Goods manufactured of flax into the U. S.

1844,	$4,492,826
1845,	4,923,109
1846,	5,098,505
1847	5,154,837
1848,	6,624,648
1849,	5,907,232

We thus find that the United States are importing annually about six millions of dollars in the manufactures of flax! Now let us see what Great Britain Exports.

We have the value of English exports of linen for the following years, viz:

1843,	$11,456,870
1844,	12,813,510
1845,	12,688,010

Thus we see that England exports double as much as we import, and as we import nearly all our linen from Great Britain, it follows that it is our inattention to this subject, chiefly, which enables England to carry on this large trade in the manufacture of flax.

The following facts will illustrate the the change produced in the manufacture of flax at Dundee, by the introduction of machine spinnings:

Year.	Mills.	Tons of flax.	Spindles of Yarn. Produced.
In 1811	4	480	224,600
In 1832	31	15,660	7,480,000
In 1839	47	27,000	12,960,000

The power loom answers for weaving dowlas, sheeting, and some sorts of linen, but is not thought applicable to the finer fabrics, for which the Jacquard loom, introduced in 1824, is now used in the manufacture of damask, diaper, table-covers, &c.

The profit made on this manufacture is very large.

The following is our estimate of the

weekly expenses and profits of a factory, whose capital is $300,000:

Yarns produced per week, 2130 bales, at $2,25,		$4,792 50
Weekly expenses,	$950	
Flax,	2,000	
Interest at 10 per cent,	600	
		$3,550,00
Weekly profit,		$1,242 50

At this rate, this factory makes more than $60,000 per annum (after paying 10 per cent. interest,) and would pay both its capital and interest in five years!

If we suppose such a factory to cost $100,000—and it might be erected for much less—and be as profitable as in England, it would repay the proprietors $10,000 for interest, and $20,000 for profits in one year! In other words, it would pay 30 per cent. per annum. We think it must be want of information on this subject which keeps back the flax manufacture in this country and we have exhibited these facts with the hope of exciting some attention to the subject.

The time must come soon, when America will make every yard of her flax, cotton, and woolen goods. It is absurd for a country, with so much materials and ingenuity necessary to manufactures, to import such goods.—*N. O. Price Current.*

Large and Small Sheep.

I propose to examine some of the different modes of breeding fine wooled sheep; and for this purpose will take 100 Merinos, as uniform as possible; the average grade of which shall be No. 1. These we will divide equally in all respects between A. and B. A. in breeding, will adopt what I term, one of the popular errors of the day—his aim being to produce heavy fleeces. He will of course pay some attention to the quality, but his principal object will be to raise such sheep as will yield the greatest amount of wool per head. And for this purpose he will endeavor to increase their size by high breeding—by selecting his largest and heaviest fleeces for breeding—by not allowing his ewes to raise lambs until they are three years old, and likewise those carrying the greatest amount of oil and gum. If he should adopt the system of numbering his sheep, weighing his fleeces as they were taken off, and keeping a record of the same, his progress would be more rapid in consequence of being able at all times to select those yielding the lightest fleeces for sale.

In conversation with a person from Vermont a few days since, who was here with a flock of sheep for sale, on the subject of gum, he remarked: that if a person brought sheep from Vermont that were gummy, and wished them to remain so they would do well to call for a recipe. I purchased one from one of these flocks some fifteen months since, that was very black and gummy on the surface. To this I raised some objections, but was assured by the owner that it was not altogether unnatural that his sheep by being brought on the cars had got very dirty and black. The sheep has since been shorn; and not having had a ride on the cars since, has become as white as the generality of fine wooled sheep raised in this part of the country.

B. will adopt a different course from A. He will endeavor to improve the quality, and to raise the greatest amount of wool possible, in proportion to the size of his sheep; and for this purpose he will not only select his finest ewes, but such as come fully up to the mark with A's, so far as it respects thickness and length of wool. He will allow his ewes to have lambs at two years old; for he will rather wish to diminish than to increase their size, so far as it can be done without detriment to their constitution. His sires will be equal in all respects to his ewes, and at least one grade finer than his original stock. In addition to numbering his sheep after the manner of A. he should have them classed or graded; so that he can select for sale, such as have the coarsest as well as the lightest fleeces. By this course of management for a few years, B's flock will average one grade finer, or prime, whilst A's will be likely to go back to No. 2.

We will now take, say 200 acres of land; to be equally divided between the two, and stocked with sheep from their respective flocks. A. will of course produce the heaviest fleeces, and perhaps those that will sell for the most per fleece; this, however, will be questioned, as B's being two grades finer, will be worth some five or six cents the most per pound.

On the other hand, B. will not only be able to keep the greatest number of sheep,

but the greatest number of pounds, in consequence of a more thorough assimilation of their food. This is owing doubtless to their stomachs and intestines being larger in proportion to their size, than those of larger sheep; and consequently a more thorough digestion of their food will follow.

I think that butchers will bear me out in the assertion that there is more waste in a small sheep or ox, in proportion, than in a large one in equal condition. B. will not only be able to raise more pounds of wool than A., but more in proportion to the weight of his sheep, from the fact of a small sheep having more surface than a large one. He will likewise in consequence of having more ewes, and allowing them to breed at two years old, raise more lambs, and soon be able to learn their good or bad qualities for breeding. His improvement will also be more rapid, from having a greater number every year to select for sale. If I have not stated this matter correctly, I should like to be corrected by yourself or correspondents, for no one is more anxious to arrive at the facts in this case than myself. It is not however, a matter of mere theory, but the result of careful and well-tried experience.

W. D. Dickinson.

Victor, Ontario Co., June, 1851.

—*Wool Grower.*

Best Grass for Low Lands.

We are frequently asked, "What is the best grass for low lands?" The question, probably, has reference generally, to moist "swales," or to reclaimed bog or peaty soil, which it is desired to keep in permanent meadow. For such situations, we know of no grass that we think equal to a species of the *Agrostis* genus, indigenous to some of the New England states, and known there as "Fowl Meadow." It has several peculiar properities which render it valuable. It makes a better quality of hay than any other grass that would thrive on such soils, and at the same time will yield more to the acre. A distinguishing trait belonging to it is, that its stems will keep green and retain their juices, even after the seed has ripened and fallen off. The stalks or stems are long and slender, and make a soft, sweet hay, which is much relished by cattle and horses. The roots are regarded as perennial, though it is deemed advisable, in order to keep up a good sward, to allow part of the seed to ripen and fall off itself, once in four or five years. New plants will thus be formed which will supply the place of such as die out.

A good time for sowing this grass, is the latter part of summer or first of autumn. The ground should be prepared by the aquatic and inferior plants being eradicated as thoroughly as possible, and the surface smoothed, when half a bushel of good seed may be sown to the acre, and a bush-drag drawn over to cover it slightly. The seed may generally be had at Boston, and is, we presume, kept by the principal seed-dealers there.

An interesting description of the "Fowl Meadow" grass, was written by Rev. Dr. Jared Eliot, of Killingworth, Conn., and published in a work of which he was the author, entitled, "*Essays on Field Husbandry, wrote from a Journal of Thirty Years Experience,*" printed in 1774.—The following is from that work:—*Albany Cultivator,*

There are two sorts of grass which are natives of the country which I would recommend; these are Herd Grass, (known in Pennsylvania by the name of Timothy Grass;) the other is Fowl Meadow, sometimes called Duck grass, and sometimes Swamp-wire grass. It is said that herd grass was first found in a swamp in Piscataqua, by one Herd, who propogated the same; that fowl meadow grass was brought into a poor piece of meadow in Dedham, Mass.,] by ducks and other water fowl, and therefore called by such an odd name.

It is supposed to be brought into the meadows at Hartford, Conn., by the annual floods, and called there Swamp-wire grass. Of these two sorts of natural grass, the fowl grass is much the best; it grows tall and thick, makes a more soft and pliable hay than herd grass, and consequently will be more fit for pressing, in order to ship off with our horses; besides it is a good grass, not abundantly inferior to English grass; it yields a good burthen, three loads to the acre. It must be sowed in low moist land, our drained [bog] land when it is of sufficient age [or has been drained a sufficient length of time,] is very agreeable to this sort of grass. As the seed is very fine, there is danger of sowing it too thick,

as some have done, so as to come up thick, like hair; this is a loss of seed and prejudicial to the grass. When you bring too a swamp by flowing, have killed your brush and ditched your land and got it a little dry, you may sow your seed among the trees and brush; it will come up, establish itself, and prevent other bad grass from taking possession; then you may clear off the wood and brush at your leisure; and then you will have good grass to mow as fast as you can clear the land. I have seen it grow knee high where the dead brush was very thick,

This grass has another good quality, which renders it very valuable in a country where help is so much wanting; it will not spoil or suffer, although it stands beyond the common time for mowing. Clover will be lost in a great measure, if it be not cut in the proper season. Spire grass, commonly called English grass, if it stands too long, will be little better than rye straw; if this outstand the time, it is best to let it stand till there comes up a second growth, and then it will do tolerably well; but this fowl grass may be mowed at any time, from July to October. One of my sons told me, that, at New Fairfield, he saw some stacks of it that the people told him was cut in October; he pulled out some of the hay, it looked green and had a good smell. This is a great convenience in time of sickness, or any other casualty, whereby we may be hindered from mowing in season. This good property renders it a fit sort of grass for a new country, where we often have business crowd too hard upon us.

In reading Mr. Ellis, I find by him that they have got herd-grass [in England] from this country, and set a value upon it; if they like that, they would like this much better; for although herd-grass be a valuable sort, fowl-meadow grass hath quite eclipsed its glory.

HEMP COTTON.—We were yesterday shown by Mr. Geo. C. Davis, a specimen of hemp so prepared as to resemble in every particular the so-called "flax-cotton" and demonstrating conclusively the capabilities of common hemp for the manufacture of the finer kinds of textile fabrics. The process adopted by Mr. Davis differs materially from that proposed by the Chevalier Claussen, inasmuch as it is done entirely without the tedious process of boiling for three hours and the subsequent immersions in alkalies and acids. The whole of his process is accomplished in two operations, when, after being dried, the article is ready for the manufacturer. The sample shown us was made from common unhackled Missouri hemp, and was prepared in a couple of glass tumblers. The cost per hundred for manufacturing the hemp cotton by Mr. Davis's process will, he thinks, not exceed 50 cts per hundred lbs., so that under almost any circumstances the prepared hemp can be furnished to manufacturers about as cheap as cotton, and thus enable them to furnish linen goods for nearly the same cost as cotton goods.

We hope some of our capitalists may be induced to turn their attention to this subject, as we believe it is destined to work a great revolution in the course of trade.—*Lou. Jour.*

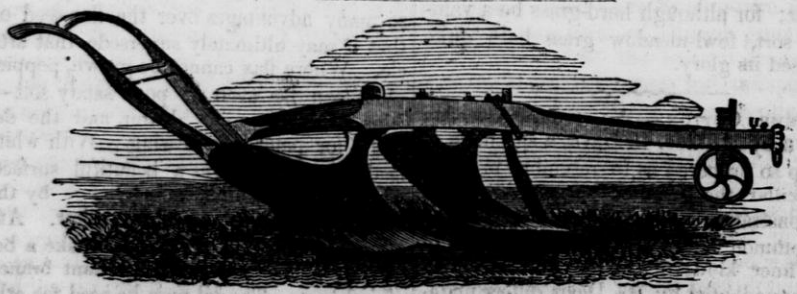
MANUFACTURE OF OIL FROM POPPY SEED.—Dr. J. V. C. Smith, an eminent practical writer, in his editorial correspondence to the *Boston Medical Journal*, in a recent letter from Switzerland, says:

"Immense crops are raised here of articles wholly unknown to American farmers, and perhaps the kinds best fitted to particular localities, where grain and potatoes yield poorly under the best efforts. One of these is *poppies*. Thousands of acres are at this moment ready for harvest—which the traveler takes for granted, as he hurries by, are to be manufactured into opium. They are not, however, intended for medical use at all, but for a widely different purpose—from the poppy seed a beautiful, transparent oil is made, which is extensively used in house painting. It is almost as colorless as water, and possesses so many advantages over the flax-seed oil that it may ultimately supersede that article. Where flax cannot be grown, poppies often can be even in poor sandy soil.—Linseed is becoming dearer, and the demand for paint is increasing. With white lead, poppy oil leaves a beautiful surface, which does not afterwards change by the action of light into a dirty yellow. Another season some one should make a beginning at home in this important branch of industry. The oil may be used for other purposes, and even put in the cruet for salads."

The Babirussa.—The group of animals termed the *Snidæ*, or the hog family, comprehends several distinct genera, one of which is the Babirussa, the animal represented by the above cut. It is the only known species in the genus. Its native country is the Indian Archipelago, from which it has been occasionally taken to various European countries, but has never been fairly reclaimed from its wild state, though specimens have been kept in Menageries and Museums for several years. The animal resembles the hog in its habits, and its flesh is said to be good for food.—*Alb Cul.*

Artificial Leather.

A correspondent, who has recently visited Abington, Mass., informs us that on going into a shop a few days ago, he witnessed another triumph of art aided and guided by science. A steam engine of six or eight horse power is erected for grinding up the chips and shavings of leather which are cut off by the shoe and boot makers, and which have heretofore been burnt or thrown away. These are ground to a powder resembling coarse snuff, and this powder is then mixed with certain gums and other substances, so thoroughly that the whole mass becomes a kind of melted leather. In a short time this dries a little, and is rolled out to the desired thickness—perhaps one twenty-fourth of an inch. It is now quite solid, and is said to be entirely water-proof. On putting the question whether it was strong, the manufacturer cut several strips a foot long and half an inch wide, which our informant endeavored in vain to break. This new-fashioned leather will make good middle soles for shoes, and perhaps inner soles; and would be very durable round the shafts of a carriage, or in any place where mere chafing is all the wear desired. It is supposed it would wear well for some kinds of machinery, and will doubtless be used for many other purposes. A patent has been secured, and the article will soon be in the market and in use.—*Exchange Paper.*



French & Smith's Michigan Sod and Sub-soil Plow:
Which received a special premium for fallows and stiff soils.

Poultry.

There seems to be no branch of domestic economy less understood, than profitably raising poultry. When we say profitably, we do not speak of their value in dollars and cents, for we hold that every dwelling, however humble, or splendid it may be, should have a few chickens around them; for there are times in almost every family, both in sickness and in health, when money cannot buy the little luxuries that chickens give us. What profit is there in keeping fifty or an hundred hens, without a corresponding supply of eggs? Most people think that chickens must pick their own living, and yield a good supply of eggs in the bargain, but we have found that chickens forced to roam for their daily food have little time or inclination to lay; and those who expect a good supply of eggs without generous feed, may as well plant their choice vegetable seeds in a sand bank, and look for tender, delicious vegetables.

We have some little experience in the "henery," and have found a great secret in getting a supply of eggs through the whole season, but not in driving the hens uphill or in feeding them exclusively on gravel, or in supplying them with chalk nest eggs. The whole secret consists in giving them plenty of food, grain and flesh; any of the grains will answer, as the chicken's mill is very convenient. For six or eight months in the year, the chickens will supply themselves with enough of animal food, in the shape of insects, but the rest of the time feed them regularly with flesh as well as corn. Boiled potatoes is an excellent food for fowls, but with it they want grain of some kind, and flesh also. In our long hot summers, poultry are inclined to become lousy; but if clean, good ashes are placed convenient to the hen-house, the hens will dust themselves in them until the vermine disappear. Nature is their teacher, and hers is an unerring guide. A good shelter should be provided for the chickens, to roost under; the manure of chickens, properly saved, will repay all expenses of feeding. It is a great error to crowd too many chickens together.

We know nothing of the patent chicken-hatching machines, but we know that fifty hens will lay more eggs and raise more chickens upon one lot or enlosure, than will one hundred. They do not flourish in a crowded state, neither will hens lay as well when great numbers are together. A hen is a right prudish old lady, and affects great modesty in selecting her nest, and laying her eggs, always taking a quiet sly place, when it can be found. We say then to our readers, keep no more fowls than you can, and will feed well. Provide good shelter for them, save all the manure, and your gardens will pay in their increased productiveness for all your culture of chickens; and when beef resembles sole leather. and bacon becomes stale, young chickens and fresh eggs will prove a luxury indeed.—Soil of the South.

☞ Mr. Grinnell, of Exeter, Maine, in a communication to the editor of the Bangor Whig and Courier, makes the following observations on the use of plaster:

I have been for some time trying experiments with plaster, for purifying the atmosphere about my out-buildings, cellar, &c., and the result of these experiments has amply remunerated me for my trouble; and feeling desirous that the public may be benefitted thereby, I thought proper to lay the subject before your readers.

I first tried the use of plaster as a purifier, in my cellar. In the spring there had been left in my cellar some decayed vegetables, such as turnips, potatoes, &c., and to the olfactory nerves, the scent of the gases arising from them became very offensive. I removed all the rubbish, but still the scent remained. I then dusted the bottom of the cellar with plaster, after the manner of sanding the floor, when the atmosphere was instantaneously rendered perfectly pure. I then tried the experiment about my privy and hog-house, and with equal success. I then tried its use in allaying the stench about my calf-pen, and stable where I was stall-feeding my oxen, and its effects were truly wonderful. I have found that the disagreeable effluvia arising from *carrion*, even, may be instantly allayed by the use of plaster. And the writer would confidently recommend its use about the slaughter houses and meat market, the atmosphere of which may be rendered perfectly pure, and with but a trifling expense. And he has no doubt that the disagreeable scent arising from the bilge-water, &c., in vessels and steamboats may be allayed in the same manner.

HORTICULTURAL.

A Few Thoughts on Horticulture.

BY JOHN A. KENNICOTT.

Readers of the Wisconsin and Iowa Farmer:—My friend and yours, the Editor and Publisher, has paid me the compliment to ask for "a column" of Horticultural matter, to open that department in his forthcoming number. But, though I purpose to have an occasional talk with you, I am at this moment, much engaged; and my words must be few to-day, and in the mail, within an hour, or they will be too late for the paper.

Horticulture has been aptly styled the "fine art of rural life"—the very poetry of rural labor. Gardening is but scientific farming, on a small scale, and as learned men, and good writers study "the Poets," for refinement and beauty of thought, and expression, so should the plain farmer study, and practice Gardening, to perfect a model for his more extensive operations in the field.

But this is not all; the practice of the various branches of Horticulture is attended with most certain and beneficient effects, in ameliorating and purifying the roughest and hardest natures. I have known many men, devoted to one or more branches of this science, and I am free to say, that I have never yet found *one*, who could be called *a bad man*. I do not assert that all who practice our art, are good, but that they are better, and worthier of earth and heaven, than they would have been had they followed some less useful, and humanizing employment.

Study and practice Horticulture then, for it will make you better and happier; and if you want another inducement, find it in the fact that this science is now considered as an essential part of a polite and liberal education. It is more fashionable than "Latin," or even Greek, and "the higher mathematics," and I need not say a word in regard to their comparative necessity, or usefulness.

And yet, I will advance one more argument, in this, my introductory chapter.—HEALTH is a great blessing—greater than all on earth, in my humble estimation—and many years ago, I advanced the notion; that fresh garden vegetables and good fruits are the best of medicines, and the surest and cheapest preventives of disease; and now, you will find this doctrine advocated by "the Faculty," from Boston to New Orleans; and go into any family where good fruit is always plentiful and free, and in daily use, and, bating nature and accident, you will find the physician but little patronized, and the patent pill vender, not at all.

But my page is nearly down, and my time up. This is a theme on which much can be said, and on which every farmer should be informed. Farmers are beginning to read, and the ploughman no longer "whistles for lack of thought," but in the fullness of happy independence, and awakening ideas—the day of his actual ignorance and conventional bondage is passing away—he is thinking better of himself, and teaching others to think better of him, and he will soon be "of some account in the councils of the nation," as he has always been of most in its prosperity.

WAUPUN, July 1st, 1851.

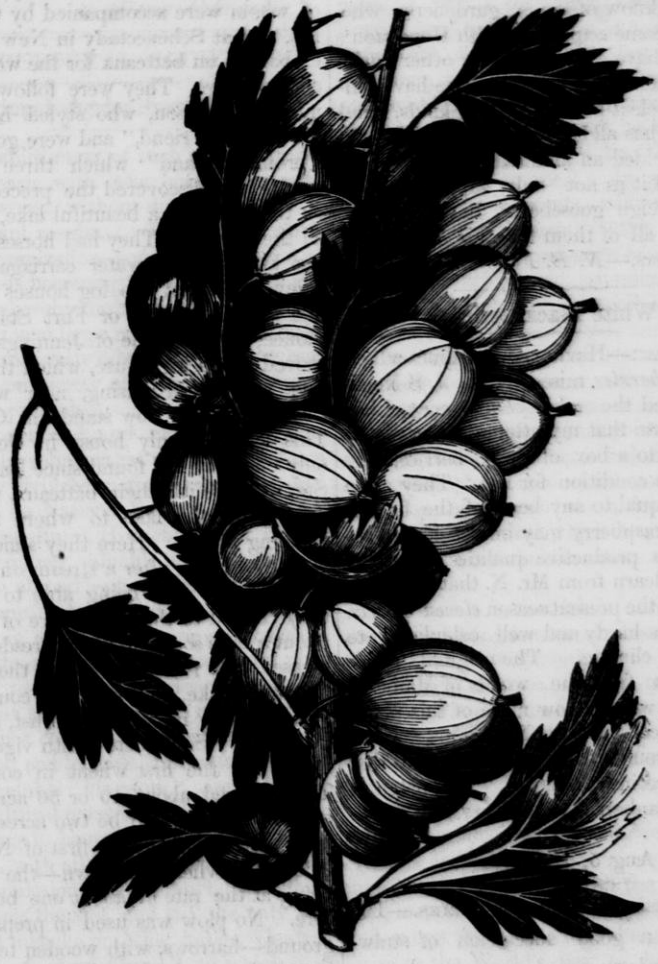
FRIEND MILLER:

On the 26th June, a friend of mine presented me with a stalk and leaf of pie plant, of which the following are the dimensions:

Length of Stalk and Leaf,	43 inches.
" " Stalk,	12 "
Width of Leaf,	42 "
Diameter of Stalk at the base,	5½ "
" " " top,	4½ "

My friend informs me that the plant has had no extra care bestowed on it, and that the lot yields 16 or 18 such as the above annually. If *you* can beat this, or any of your subscribers, I would like to know who they are, for if any one has got "Taller" Rheubarb than this, I want to buy a few of the Plants. Yours respectfully,

CHARLES SMITH.



Houghtons Seedling Gooseberry.

This valuable Gooseberry was raised from seed by Mr. Abel Houghton some years ago, when he resided in Lynn. It is a cross between our native Gooseberry and some foreign kind. It resembles our natives in its growth, hardiness and superior quality of the fruit.

The berry is rather small as may be seen in the engraving; oval; the skin thin, reddish brown; the flesh fine, very tender, sweet and of a fine delicious flavor. It is a very superior Gooseberry for the dessert, it is also excellent for cooking, and it is in good condition for this purpose for about 4 weeks.

As a grower, it excels by far all other kinds that we have cultivated; and as to bearing, every season, nearly all the growth of the previous year is covered with fruit. Last year we had from one to two quarts of fruit, on bushes that had been set the previous year. A plant well set in the spring, in a good soil, will make a large growth the first year, and the next year, it will be loaded with fruit.

This variety not only excels in growth, bearing and quality, but it is free from blight, which is the destruction of almost every foreign kind cultivated in the country. We know of some gardeners, who, having become acquainted with Houghton's Seedling, have excluded every other variety from their grounds. And we have cultivated a select list of foreign kinds, and their fruit has all blasted, while the Houghton has yielded an abundance of fine fruit. We regard it as not only superior to any kind of foreign gooseberry, but worth far more than all of them for this country of hot summers.—*N. E. Farmer.*

White Blackberries.

Mr. Cole:—Having several times adverted to the *berries* raised by Mr. J. S Needham, called the *white blackberry,* I beg leave to state that my attention was yesterday called to a box of these berries, fully ripe, and in condition for use. They are a fine fruit, equal to any berry of the field—unless the raspberry may be considered superior. Its productive qualities surpass all others. I learn from Mr. N. that one bush has yielded the present season *eleven quarts.* The plant is hardy and well calculated to endure our climate. The original of his plants came from the woods of Maine.—Those who would know more of this plant, had better call at Mr. Needhams, where upon his grounds is to be seen much that is instructive in cultivation. His patch of highland cranberries are in very fine condition. —*Ib.*

Danvers, Aug. 5, 1850.

A Succession of Strawberries.—The following is a good succession of strawberries for a long period:

Early Virginia; Hovey's Seedling, and Williey. We had fruit from them for nearly five weeks. These varieties are all great bearers, and the fruit is excellent; excepting the fruit of the Williey, which is pretty good. They are all remarkably vigorous and hardy, excepting Hovey's Seedling; this needs to be planted thick, as it does not form runners or offsets so fast as the other varieties, and it is also rather liable to be winter killed.—*N. E. Farmer.*

Improve your spare moments.

First Wheat Raised in Western N. York.

In the commencement of the summer of the year 1788, about twenty men, some of whom were accompanied by their families, met at Schenectady in New York, and embarked on batteaux for the western part of the State. They were followers of Jemima Wilkinson, who styled herself the "Universal Friend," and were going to the "promised land" which three of their agents had discovered the preceding year on the banks of a beautiful lake, now called the Seneca. They had horses and wagons to use when water carriage failed.—They found but two log houses at Utica, one at Whitestown or Fort Stanwix. A pioneer by the name of Jennings had just moved into a log house, which the Indians had assisted in raising, near where the Franklin House now stands, in Geneva.—This was the only house in Geneva, the only one they had found since leaving Fort Stanwix. With their batteaux, they proceeded up the lake to where the Ovid Landing now is. Here they staid about a week, searching after a stream on which to erect a mill. Not being able to find one, they crossed to the west shore of the lake, about a mile south of West Dresden—were pleased with the mill seats on the outlet of Crooked Lake, and with the country. It was now the month of August, and they began the "Settlement" with vigor, agreeing to sow the first wheat in common.—They cleared about 40 or 50 acres, judging that there would be two acres for each man. It was about the first of November before the wheat was sown—the quantity being at the rate of about one bushel per acre. No plow was used in preparing the ground—harrows, with wooden teeth, mellowed the newly-cleared soil, and covered the seed. It was harvested the succeeding July, and yielded about fifteen bushels per acre.

It may be interesting to add, that the first and second season, some of the settlers cut wild grass on the alluvial deposit at the head of the lake, where Jefferson now is, and conveyed it down the lake on batteaux, 25 miles, to the "Settlement." This, with what the cattle obtained from shrubs and trees, enabled them to live through the winter. I should have stated that the ground first sown, is now under cultivation,

and often produces 30 to 40 bushels of wheat per acre. It belongs to J. Ketchum and R. Norman. S. B. BUCKLEY.

West Dresden, N. Y., Nov. 11, '50.

—*Albany Cultivator.*

AGRICULTURAL SOCIETIES.

A National Agricultural Society.

The establishment of such a Society, on a proper basis, with wise laws for its government, would, without doubt be followed by important results. The need of some Central organization—of a Congress of Agriculture—is becoming more and more apparent; whereby the Agricultural interests of the Nation at large might be more certain ly and permanently advanced, and the real good and prosperity of the whole country essentially promoted.

It has been said, and may now be said much to our shame, "that the United States is the only civilized nation in the world which has no National Society of any kind, either Agricultural, Horticultural or Botanical, to introduce valuable plants, fruits and seeds, from abroad"—to note and bring into use the improvements made in different portions of this, as well as other countries, to combine the elements of Agricultural progress, and to develope in science, whatever might assist in the art of true tillage—"and yet, no other country has a wider range of climate and soil to meet the natural wants of the vegetable kingdom," nor wants in an Agricultural point of view, more various and pressing to be met and satisfied.

France, with all the ignorance of its laboring population, has the enviable distinction of being the first, and still the only nation, if we mistake not, that has its "Central Congress of Agriculture," to which it is largely indebted for that agricultural progress, which with respect to subsistence and the exportation of bread has placed her far in advance of almost every other country on the face of the earth.

"This Congress is composed of six hundred delegates chosen by the various Agricultural Societies of the Republic—is a permanent body, which convenes once a year, and has a President, and Secretary to carry its official acts into effect. Its sessions continue from one to two or three weeks, as the Agricultural interests of the nation seem to require." And here is a specimen of what it does—of its incessant labors in one direction or another. "It has appointed a committee of scientific and practical farmers, to attend the great exhibition in London, and purchase one of each new improvement of obvious value, not now in use in France, as a model from which others can be constructed—make drawings of new machinery which it may not be convenient to buy, and collect useful knowledge from every attainable source." In addition to these extra employments, with a judicious expenditure of its means, "this Congress keeps two or three gentlemen of sound judgment constantly abroad, attending all Agricultural and Horticultural exhibitions, gathering rare and valuable seeds and plants, as well as studying the improvements, made from year to year, in constructing barns, stables, etc., and all contrivances for draining and irrigation.' There is no point in the vast range of Rural Economy—including tillage, husbandry, the breeding of domestic animals, the daily care of stock, fruit and forest culture,—toward which is not directed critical and careful observation and investigation.

And thus it is, that while the people of the United Kingdom send abroad for food to the amount of 85,000,000 of bushels of grain a year, France, with a much larger number of mouths to fill, has a surplus of bread-stuff for exportation.

Why should not we of America copy this example? Why should we not have a Congress of Agriculture, bringing together for social intercourse, mutual counsel, deliberations and action, the sound practical men of our farmers from all the States?—And instead of throwing away $3,000,000, and worse than throwing them away, in visits to the World's fair, to build up foreign manufacturing interests in opposition to our own, expend our money in National Fairs and for the benefit of our own Country? Such a Central National Organization would wield a powerful and most salutary influence—an influence that would tell upon our very fields, in their increased fertility, and productiveness, and upon every enterprise, pursuit and calling. We hope to see a general movement to this end on the part of our Agricultural Societies in the different States. Once started, the work is certain to be speedily accomplished.

Dane County Agricultural Society.

The Farmers of Dane County met at the Court House in Madison, on the 13th of Sept., and formed an Agricultural Society. The following named persons were elected officers.

President.

THOMAS T. WHITTLESEY.

Vice Presidents

LEONARD J. FARWELL, PHILO DOWNING, JOSEPH A. PAYNE, MATTHEW HAUSE, WM. H FOX, GEO. ANDERSON.

Treasurer.

ABRAHAM OGDEN.

Secretary.

ROBERT L. REAM.

FAIRS.

Times and places of holding Agricultural Fairs in October.

State Fair at Janesville, Oct, 1st and 2nd.

Rock County Fair, at Janesville, Oct. 1st and 2nd.

Walworth County Fair at Elkhorn, Oct. 14th and 15th.

Racine County Fair, at Searl's in Yorkville, Oct, 7th.

Wisconsin State Agricultural Society.

List of premiums for the Annual Cattle Show and Fair to be held at Janesville, Wednesday and Thursday, October 1st and 2nd, A. D. 1851.

CLASS A—CATTLE.

No. 1. SHORT HORNS.

BULLS.

Best bull over 3 years old,
" " under 3 " "
" " Calf.

COWS.

Best cow over 3 years old.
" " under 3 " "
" Heifer Calf.

No. 2 DEVONS.

BULLS.

Best bull over 3 years old.
" " under 3 " "
" " Calf.

COWS.

Best cow over 3 years old.
" " under 3 " "
" Heifer Calf.

No. 3. HEREFORDS.

BULLS.

Best bull over 3 years old.
" " under 3 " "
" Calf.

COWS.

Best cow over 3 years old.
" " under 3 " "
" Heifer Calf.

No. 4. AYRSHIRES.

Best bull over 3 years old.
" " under 3 " "
" " Calf.
" Cow over 3 years old.
" " under 3 " "
" Heifer Calf.

No. 5. NATIVES and crosses between Natives and improved cattle.

Best bull over 3 years old.
Best do under 3 do do
Best do Calf
Best Cow over 3 years old.
Best do under 3 do do
Best Heifer Calf.

No. 6. WORKING OXEN.

Best yoke of oxen over 4 years old.
Best do do steers do 2 do do

No. 7. MILCH COWS.

Best milch cow.

No. 8. FAT CATTLE.

Best pair of fat oxen over 4 years old.
do Single ox do 4 do do
do Fat Cow do 4 do do
do do do under 4 do do
do Pair of fat steers do 4 do do
do Single steers do 4 do do
de Heifer

No. 9. FAT SHEEP.

Best fat sheep over 2 years old.
do do do under 2 do do
do Fat lambs.

No. 10. HORSES.

Best stallion over 4 years old.
do Brood mare over 4 years old.
do Stallion 3 years old.
do Mare 3 years old.
do Stallion 2 years old.
do Mare 2 years old.
do Stallion colt one year old.
do Mare do do do do

No. 11. MATCHED HORSES.

Best pair matched horses.
do do Draught do

No. 12. GELDINGS.

Best Gelding 4 years old.
do do 3 do do
do do under 3 years old,

SHEEP.

No. 13. LONG WOOLED.

Best buck over 2 years old.
do do under 2 do do
do Ewe over 2 do do
do do under 2 do do
do Buck lamb.
do Ewe do

No. 14. MIDDLE WOOLED.

Best buck over 2 years old.
do do under 2 do do
do Ewe over 2 do do
do do under 2 do do
do Buck lamb.
do Ewe do

No. 15. Merinoes.

Best buck over 2 years old.

do do under 2 do do
do Ewe over 2 do do
do do under 2 do do
do Buck lamb.
do Ewe lamb:

No. 16. Saxons.

Best buck over 2 years old.
do do under 2 do do
do Ewe over 2 do do
do Buck lamb.
do Ewe do

No. 17. Paular Merinoes.

Best buck over 2 years old.
do do under 2 do do
do Ewe over 2 do do
do do under 2 do do
do Buck lamb.
do Ewe do

SHEPHERD'S DOGS.

Best shepherds' dog.

(Evidence to be furnished of the entire training of the dog—otherwise no premium will be granted.

No. 18. Cross Breed Sheep.

Best buck over 2 years old.
do do under 2 do do
do Ewe over 2 do do
do do under 2 do do
do Buck lamb.
do Ewe do

No. 19. SWINE.

Best boar over 2 years old.
do do under 2 do do
do Sow over 2 do do
do do under 2 do do
do Lot of pigs under 10 months old.

No. 20. Poultry.

Best lot of poultry not less than six of each kind.

CLASS B.

No. 20. Farm Implements.

Best farm wagon, Plow, Harrow, Corn cultivator, Fanning mill, Corn stalk cutter, Horse cart for farm, Ox cart, Horse rake Ox rake, Common harness, Carriage harness, Churn, Cheese press,

☞Milk Pans, Grain Cradles, Hand rakes, Hay forks, Scythes, Manure forks, Grain measures, Brooms and all other farming implements and household utesils—best of each.

Horse Power Thresher, Reaper, Grain Drill, Corn Sheller, Seed planter—best of each.

No. 22. Dairy.

Best lot of butter.
do do do cheese.
do do do butter ferkins and butter tubs.

No. 23. Seeds, Sugar, Honey, and Veg' etables

Best samples of winter wheat, Spring wheat, Rye, Oats, Barley, Buckwheat, Indian Corn, Flax seed, Broom Corn, Timothy and clover, and other grass seeds—best of each.

Best sample of maple sugar.
do do do Honey.

Kitched and table vegetables—best samples of each.

No. 24. Flour &c.

Best barrel of flour.
do Sample of corn meal.

CLASS C.

No. 25, Domestic Manufactures.

Manufactures of silk, woolen, cotton or metals, embracing carpets, blankets, flannels, cloth stockings, gloves, mittens and tread, clothing and articles of wearing apparrel.

No. 26. Ornamental Needle Work.

Ottoman and table covers, worsted work, lamp stand mats, quilts, shawls, collars, silk bonnets, straw bonnets, handkerchiefs, ornamental shell work and waxflowers—best specimen of each.

No. 27. Fruits,

Apples, pears, peaches, plums, quinces, grapes' and melons—best specimen of each.

No. 28. Flowers.

Dahlias, roses phloxes verbenas, German asters, pansies and green house plants—Best of each.

Best hand boquets flat and round, best basket boquets, and best floral exhibition.

No. 28. Paintings:

Best specimens of oil and water color paintings and daguerotypes.

Best specimen of pamphlet printing,
do do do Card do

CLASS D.

No. 30. Stoves.

Best specimen of cooking, box and parlor stoves.

No. 31. Silver and Gold ware.

Cutlery and britania ware. Best exhibitions of jewelry. Gold and silver ware, table cutlery, and britania ware.

No. 32. Miscellaneous and Discretionery Department.

This department comprises all articles manufactured of metals, wood leather, India rubber, cloth, tin &c., not heretofore enumerated.

N. B. For the Second and third best of all articles enumerated in the foregoing list, premiums will be awarded.

The office of the society for the entry of stock, specimens, manufactures &c., and for the enrolment of members will be opened at Janesville on the 25th of September, after which time, all communications intended for the Society should be directed to that place.

Competition for the premiums of the society is open to all persons, whether residents of this State or not, provided they comply with the regulations of the fair.

Exhibitors must become members of the Society and have their article, and animals entered on the secretary's books. The address will be delivered by Hon. John H. Lathrop, Chancellor of the Wisconsin University.

E. W. DRURY, President.

Roswell C. Otis, Henry M. Billings, Wm. F. Tompkins, Albert C. Ingham, Royal Buck, Chauncy Aabbott, Henry Johnson, Adam E. Ray, Jno. H. Rountree, Andrew Palmer, Timothy Burns—Executive Committee.

The Rock Co. Agricultural Society held its quarterly meeting at the Court House in this Village on the 1st of Sept. 1851. The business transacted was the appointment of committees for the examination of articles, and awarding of premiums at the approaching County Fair. to be held at Janesville on the 1st and 2nd days of October.

The Society also "resolved that the Corresponding Secretay be instructed to correspond with such persons as he may deem proper, for the purpose of collecting information in regard to the manufacture of Flax Cotton, Linseed oil, and other subjects he may think proper, and report the same to the society at its next annual meeting."

J. F. Willard read an essay on the Education of Farmers, O. Densmore made some general remarks on the "Elevation of Man to his true position," J. M. Burgess read an essay on the "connection existing between Agriculture and the Mechanic arts."

Prof, S. P. Lathrop of Beloit College, Hon. A. Palmer and F. W. Williams were appointed to read essays at the next meeting of the Society, to be held on the First Monday in December next.

On motion of L. V. Thomas it was resolved that this Society recommend to the Farmers of Rock County to establish markets or Fairs, and said Fairs be held in Beloit on Saturday, and in Janesville on Thursday of each week, and that a committee of three, in each town be appointed to make preliminary arrangements for carrying out the object of this resolution.

Remarks.—We regard this last resolution as an auspicious event for the farmers of Rock Co., and we are right glad to see them manifest so much enterprise and spirit, in taking care of their interest. They will soon find their account in it, or we are much mistaken. The superior facilities it will give them for disposing of their produce to the best advantage, also the opportunity for social intercourse, and the interchange of views upon subjects connected with their occupation, will have a combined tendency to enlarge their views, and make them more skillful workers of the soil. We are glad to record such evidence of progress among the Farmers of Rock County. We expect soon to hear of similar movements in other parts of our State.

State Economy—*Linseed Oil*,—It is said that Wisconsin pays annually 200,000 dollars for linseed oil. Should the cultivation of flax be introduced here, as now seems likely, this amount will be saved.

Early History of Wisconsin—No. 1.

BY A. C. BARRY.

Wisconsin forms a portion of the Great North Western Territory, which formerly embraced within its broad limits, all that vast extent of country comprising the now States of Ohio, Michigan, Indiana, Missouri, Iowa and Wisconsin, and Territories, Minesota and Nebraska.—Its early history, therefore, is the morning history of all these States—the narrative of the discovery, exploration, and first settlement of each enter into, and help form the records of the Great West. Here was one vast world, separated and far removed from civilization in the east, by a chain of Great Lakes; its solitude undisturbed and its silence unbroken by the presence and the falling foot-step of the white man—a land of primeval forests, of boundless prairiess, of broad rivers and inland seas, of sunny dells and sparkling fountains, over which roamed the savage Indian, the proprietor and monarch of it all.

Of its History, we have nothing written beyond the year 1553, and the light furnished us by that early time is faint and dim. It is scarcely less uncertain than that which emanates in flickering and broken fragments from amid old ruins, the crumbling remains of demolished temples and fortifications, the ravished mounds and sepulchres of the dead, the remnants of a civilization and an unknown race long since passed away.

Cartier, the old French Mariner, was indeed told at the village of Hochelaga on the St. Lawrence, more than three centuries ago, of a great country west-north-west,—of a strange people there in that far distant region, "who were clad as the French, and lived in towns, who were very honest, and had "great stores of gold and copper,"—that, between them and the land they described, there were great lakes, and a fresh water sea, the end of which, no man had ever found; and farther on, a mighty river, adown which they might sail a month ere they reached its termination.

This, then, is the date, and this the commencement of the history of the North-West.

This history is blended somewhat with that of the early French settlements in Canada, which as we have seen, extends back as far as 1553.—After the founding of Quebec, in 1608 by Samuel Chaplain, the leader of a French Collonial Expedition, settlements continued to be extended farther and farther into the wilderness;

and during the administration of Count de Frontenac, which began in 1668, the country bordering on lakes Erie, Huron, Michigan and Superior was explored; and military stations appointed at Mackinaw, and at the falls of St. Mary in Michigan.

The first white men, so far as we have any account, to set foot upon the shore of what is now Wisconsin, were Fathers Allouez and Dablou, two Catholic Missionaries, employed by the Society of Jesuits, to carry the cross into the wilderness, and among the wild tribes of savage men. Fired with the zeal and the indomitable courage of the old martyrs, desirous only to serve their Church and their King these stout-hearted apostles of the Romish religion, set out to explore the unknown regions of the far West; and through many privations, hardships and perils, they found their way across the Great Lakes, and established a Missionary Post at Green Bay on the Western shore of Lake Michigan. This was between the years 1665 and 1668.

After thus penetrating many hundred miles into the wilderness, there was yet a vast extent of territory stretching out before them, inhabited by Red Men, and undisturbed by the footsteps or the sounds of approaching civilization. Separated by hundreds of leagues from their brethren in New France, alone and unprotected, they would go on. Others followed and joined them as they went,

They shook the depths of the desert gloom,
With their hymns of lofty cheer;
* * * * * * *

And the sounding aisles or the dim woods rang with the solemn anthems of a Christian Worship.

No danger or hardship moved them, neither counted they their lives dear unto themselves.—"They toiled and suffered—were struck down with the tomahawk—they lived the lives of beggars, and died the death of martyrs—were covered with burning bark, scalded with boiling water, and scarred with hot iron, until the gentle Lallemand cried out amid his tortures, "We are made a spectacle unto the world, and to angels, and to men!" but with the zeal of ancient Martyrdom, the Jesuits pressed on from the strong hold of Quebec, filling the ranks of the dead as one after another fell, advancing to the remote boundaries of the lake shores, the Cross and the lillies of the Bourbons."

When the powers of the Human Soul each exerted, so to speak, on a separate and distinct object, they will usually accomplish but little—the efforts thus made will be barren of great results; but when these powers, their vast and almost creative energies, are all gathered up and combined by a single, strong, ruling passion, and brought to bear on a single object the very world lifts its hands in astonishment at the magnitude of the result wrought out, or the grandeur of the triumph achieved. We can discern how this is. We can see the man whose ruling aim it is to amass riches, his efforts crowned with success. We can see how ambition climbs up to high places, and lays its hands on crowns and dignities. We can see how the thirst of knowledge is quenched—how science is made to yield her treasures—how new worlds are discovered, and the mightiest difficulties and obstacles grappled with, and removed from the path of man. It is by ruling principles of the mind, the concentration of the mighty sweep of the soul's vast energies, subduing to its own purposes, and arousing and nerving the whole being for resolute action—and directing the combined powers of soul and body to the accomplishment of a purposed end.

Apply this to the Catholic Fathers in the New World, and among the savage tribes of the wilderness, and we see how the same passion that aroused and sent forth the Chivalry of Europe, to the rescue of the Holy Sepulchre from the Infidel, also fired the souls of these men and sent them forward in this great religious enterprise—courageous to grapple with the most formidable impediments, endure the severest hardships, and to brave the most appalling dangers, and all for the glory of their CHURCH and KING!

From Green Bay, Allouez and Dablou, explored the country to the south of it along Lake Michigan, forming the acquaintance of the Kickapoos and Miamies, and conciliating their favor. From these and other tribes they learned, what had before been told them, that far to the westward was a broad river, called by them Michisspe, or Great River, flowing thousands of miles into the sea.

In the language of that elegant writer, Monette: "As yet no Frenchman had ever advanced beyond the Fox River of Green Bay. All beyond was a region of Romance, unknown or mistified by Indian tradition. The ardent entertained hopes that the Great River might afford an easy direct route to China, or at least into the South Pacific Ocean. This was one of the bubbles of the age.

EDITOR'S TABLE.

To our Patrons.

It will be noticed that we have changed our location, as indicated in a former number, and that the FARMER, instead of being published at RACINE as formerly, is now published at JANESVILLE. We have long had this change in contemplation, though it is but recently that we determined upon so early and sudden a removal. But having closed our business in Racine and all preparation having been made, and early fall seeming as proper a time as we could select for starting anew in our new locality—off we came without any announcement other than that which we send out now. Hereafter please address us at Janesville, Wis.

Having disposed of our other business, we are now prepared to devote our whole time to the publication of the FARMER, and the cultivation of a small FARM, in a skillful and systematic manner, so far as we know how, or can learn. By thus uniting practice with theory, we hope to make the FARMER more useful and acceptable to our Agricultural brethren. Formerly a practical farmer—after several years of harassing toil in other business, it is with bright anticipations of future peace and quiet, that we now return to our early occupation of tilling the soil. In years past, when mingling in the strife and care always attendant upon life in densely populated towns, we have often been led to contrast the calm tranquility of the farmer's home, with the bustle and anxiety which accompanies most other employments. In our mind, there has ever been charming associations connected with agricultural pursuits, especially when pursued with skill and intelligence. Having travelled extensively throughout the West, and "noticed, marked, and inwardly digested," we claim to know something of its wants—Agriculturally—and mean to labor so as to adapt the FARMER to meet those wants, and make it a medium of important information, and needed knowledge, to western Tillers of the soil.

The citizens of Racine and of the surrounding country, have our thanks for the patronage they have extended to our Journal, and the many favors we have received at their hands. We do not leave them without regret, and hope still to be remembered by them. Deeming our present location more advantageous, because more central, we have chosen it on that account and not out of any disaffection to our former place of business.

The farmers of Rock County, widely known for their enterprise and liberality, will of course lend us a helping hand, as we shall labor right hard to deserve their patronage, and being located in their midst, have we not a right to expect that they will do the fair thing by us and give us their united assistance in our enterprise.

HISTORY OF WISCONSIN.—Our readers will observe that we publish in this number of the Farmer, an article on the early history of our State from the pen of the Rev. A. C, BARRY, whose literary talents a e too widely known to need any notice from us. This series was commenced about two years ago, but after the appearance of two numbers, was suspended on account of ill health and pressure of other business upon the author, We trust nothing will occur to interrupt their regular appearance hereafter. We republish the 1st and 2nd of these articles, for the purpose of having the series appear in consecutive numbers of the farmer, also to furnish those subscribers who have commenced taking the paper since the former ssue.

We trust our readers will appreciate these articles, emanating as they do, from one of the best writers in our State; and comprising all the most interesting events which have occurred since the earliest settlement up to the present time.

TOBACCO.—Messrs Conkey & Kibbe, of Rochester, N. Y., are cultivating this season, 17 acres of Tobacco. The field cont ains 100,000 plants. The yield is estimated at about one ton to the acre, and to be worth 200 dollars per ton. At this rate, it must prove a very profitable crop. We have seen several small patches of tobacco growing in this State the present season, which, in our judgment looked well.

From what we know of the cultivation of this plant, we believe it may be produced on much of our prairie lands with great success. We doubt not, the soil of Rock Prairie will be found well adapted to it. Will some of our Rock Prairie farmers give it a trial on a small scale? We will give the manner of cultivation in a future number of the Farmer.

FOREIGN LETTERS.—There were received at the New York Post office during the month of August, 166,499 sea letters.

POTATOE ROT.—Phanuel Flanders of Lowell, Mass., claims to have discovered the cause of the Potatoe rot and a cure for it. He says the disease is caused by a black bug which preys upon the leaf untill it destroys the vine and causes the root to rot. The insect commences its ravages near sun down. His remedy is lime water applied to the vines with a watering pot as soon as the bug makes its appearance, and to be repeated about once a week.

We dont believe the potatoe rot is caused by an insect no more than the rust, blight or rot in wheat, we believe the cause is deterioration or atmospheric, or both combined. The application may be a good one in counteracting the cause, and stimulating vitality,

A CONSIDERATION FOR FARMERS.-The present high price of cows, and other stock, should cause farmers to pause and estimate the comparative advantages of raising stock and grain. Sheep bear a steady demand. Wool is high, with a good prospect for the future. No State in the Union offers so great inducements to wool growers as Wisconsin, and yet the business is wholly neglected.—*Fond du Lac Journal.*

Our friend of the Journal is a little at fault in saying that wool growing in Wisconsin is wholly neglected. We know of a great many flocks of sheep in the State, numbering from 500 to 1000 head each, nor are such flocks few or far between. As for quality, we have some as good sheep as any State can boast of.

CHARM OF THE EAST.—It is strange, how after a short residence in the East, the love of that region, its habits and its mysticism, grows upon the mind. Many instances have come under my notice of persons, who, from sojourners, have become residents, and feel little disposed to change their plase of abode for a more civilized habitation. It is an instinctive attraction, an inexplicable longing for the early Home of our race: or the influence of early implanted religious feeling, that draws us to spots where God has so frequently made himself visible to man, and the footsteps of prophets and saints have consecrated the very soil.—*Notes from Nineveh.*

EMIGRATION.—On the 5th of Sept. 13,975 emigrants arrived at the port of New York. For the first eight months of 1851, there arrived at this port, 192,836 emigrants, exceeding that for the same period in 1850, 49,134.

FARMS IN TENNESSEE.—The statistics of 1850 shows the number of cultivated farms in Tennessee to be 72,710.

PATTENT OFFICE REPORT.-Through the politeness of the HON. THOS. EWBANK, Commissioner of Patents, we are in receipt of this work of about 1200 pages in two parts. Part First, 473 pages, is devoted to arts and manufactures.

It embraces the business of the Office for 1850, and is a volume highly interesting, especially to all persons interested in patents. It contains a list of patents. which have expired during the year; names of patentees—patents granted and to whom, with an abstract of each patentee's claim; patents granted during the year, extensions and renewals of patents, additional improvements; abstracts relating to early American inventions from State papers &c., &c.

During the year, there were 2193 applications made for patents and 602 caveats filed. The number of patents issued for the same time was 995, and the number which had expired 684. 2033 applications for patents were examined, of which 995 were granted and 1038 rejected. On the 12th of January 1851, there were 169 applications unexamined. Recipts of the Office for the year, $86,927,05. Expenditures—$80,100,95.

Part Second of the report contains 574 pages, and is devoted to a general view of American Agriculture and Commerce. It is made up of statistics, Essays, letters and reports upon the cultivating of various crops, treatment of soils, use of manure, analyzing of grains and soils, observations on insects with illustrations, growing of stock &c. &c.

This part of the report possesses peculiar interest and value, from the fact of its being made up, in a great measure, from letters and communications from men of intelligence and observation, living in all parts of the country.

TO MEASURE HAY IN THE STACK.---More than 20 years since, (says a farmer,) I coppied the following method of measuring hay from some publication, and am satisfied of its general accuracy. I have bought and sold by it, and believe it may be useful to many farmers where the means of weighing are not at hand:—"Multiply the length, breadth and heighth into each other, and if the hay is somewhat settled, ten solid yards will make a ton. Clover will take from ten to twelve yards per ton."

PEACHES,—30,000 baskets of peaches were carried into the New York Market in one day during the peach season, equivalent to 15,000 or 18,000 bushels.

☞Accounts should be kept detailing the expences and produce of each field.

THE DAIRY BUSINESS.—The St. Croix Enquirer says:

"An entry was made at the Land Office, recently for a large dairy farm in Kinnekeinnic township, five miles from this village, and we doubt not this farmer will do well, since the stock and dairy business will pay well in this country."

FLAX RAISING IN MINESOTA.—The St. Paul Pioneer says:—"Here is a specimen of flax, raised upon the farm of Mr. Selby, near St. Paul. It is all more than three feet high, with a beautiful fibre and is beyond all comparison the best flax we ever saw grown. A specimen of it may be seen at the Pioneer office. It will evidently require to be sowed very thick, to prevent a growth too rank in our soil, which is generally a sandy loam.

THE FARMER'S GUIDE.—This valuable work to which we have often called attention, is now completed. It is devoted entirely to agricuture. Every farmer who would consult his own interest should possess himself of a copy. It contains about 1600 pages, some 200 more than the publishers promised in the commencement: the price remaining the same, five dollars. It contains several hundred of engravings, among which are several beautifully executed on steel. Every subject it treats upon, admitting of it, is copiously illustrated with engravings. L. Scott & Co., Publishers N. York.

FREE SCHOOL JOURNAL.—This work devoted to education should be taken by every teacher and family in the State. It is published monthly at Madison, at 50 cents a year, by James L. Enos Esq. Mr. Enos is well known as a zealous advocate of popular education, and an excellent practical teacher. Let his enterprise be well sustained.

THE WESTERN AMERICAN.—This is the title of a new paper just received from KEOSAQUA Van Curen Co'. Iowa. It is above the medium size of country papers, very neat in its typography, and well filled with valuable selected and original matter. L. D. & H. Morris, Publishers and Editors.

A NEWLY DISCOVERED MANURE.—The St. Vincent Royal Indies Gazette, mentions that a gentlemen of that island had sent to England a quantity of pozzolona, to have it tested as cement, and was agreeably surprised to learn that the chemist who tested it had declared it to be the best manure than had yet ever been discovered, and that it was far preferable to Guano.

THE FAMILY CIRCLE.—This monthly has just entered upon its 12th volume. The first number is at hand and gives evidence of increasing interest to its readers. Its pages are filled with choice articles, written in a familiar and attractive style and of a high moral character; well calculated to amuse, elevate and enlarge the mind and 'render the family circle happy and useful."

Each No. contains 42 pages neatly priuted on fine paper and illustrated with fine engravings. The publisher offers Stuart's Portrait of Washington, 14 by 22 inches, or Christ's Blessa premium to all single subscribers—both beautiful steel prints worth the price of the work alone. Published by James G. Reed 140 Fulton St. N. York—at 1 dollar a year.

THE BOOK TRADE.—This is a quarto published monthly, by H. Wilson 49 Ann St. N. York, at 25 cents a year. A prominent feature of this work, is a monthly record of all new works issued from the American press, notices of new publications, &c. It is valuable to all who wish to keep posted up in such matters.

DICTIONARY OF MECHANICS.—We are in receipt of the 38th No. of this valuable work. The publishers announce its completion in two more numbers. This work as its title indicates is especially devoted to the interests of mechanics. It is octavo in size and will contain when completed, about 1200 pages, with a larger number of engravings. No mechanic or man of science who cares to make any proficiency in his art should be without it. Published by Appleton & Co., N. Y. Price 25 cents per number.

POTATOE CROP.—Amidst the general complaint of the failure of this crop the present season, it is gratifying to learn that there are some portions of the country where the scourge has not made its appearance yet,

The Cincinnatti Commercial says: 'The potatoe crop, this year, has never been equalled by any previeus one. In addition to the abundant supply, their flavor is far superior to any that have been introduced in our market for many years.

"TO RAISE EARLY YORK CABBAGE.-Plant the seed in hills, in October, and before the ground freezes turn a furrow up to the plants each side, and then cover them with a hand hoe, and uncover in the same way in the spring."

We do not claim the paternity of this method for raising early cabbages. It will not cost much to try it.

WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

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Postmasters and all others who feel an interest in the circulation of the FARMER, are invited to lend their aid in procuring subscribers and extending its circulation.

For the Wisconsin & Iowa Farmer.

A Sketch of the Fruit-Growers' Convention at Princeton.

BY JOHN A. KENNICOTT, M. D.

Kind Friends and Readers of the Farmer—I had promised some account of the meeting held at Princeton, Bureau Co., Ill., on the first of October. But after three weeks absence from home, I find many engagements, and from illness have but little ability to write. Still you shall have a slight sketch, in advance of the regular proceedings, which the secretary will furnish in due season.

The convention was organized early on Monday—the attendance being quite respectable, and even numerous—all things considered—Wisconsin and Iowa were both represented, though a majority of the members came from central and north-western Illinois.

The show of specimen fruits was decidedly great, much beyond my expectation, though I was prepared to see a grand show of the apples of central Illinois. But the middle of the state was well matched in this race of excellence, by the region bordering on Wisconsin. The fruits of the north being as fair, and as large, (if not larger,) as those grown farther south, tho' not so well matured.

It was the opinion of several members, who were also members of the American Pomological Congress at Cincinnati, last year, that the display of fruits at Princeton might be set down as much the most respectable in appearance and quality, if not in variety, and I think it will be found, when the lists are published, that the varieties presented were at least sufficiently numerous.

There was quite a sprinkling of PEARS, and GRAPES, and even a few PEACHES, on the tables; but, of course, the bulk of the display was made up of APPLES—and, larger, fairer, or more delicious fruits of their kind could not have been found elsewhere, I am well convinced, except in those occasional cases where fruits of rare merit east seem unsuited to this region. Such exceptions were however, few, and of little moment, when compared with the many old fruits that seem at home in Illinois. And yet, after all, perhaps we have paid too little attention to the fact, that all apples known to be good east are not equally desirable for cultivation west. And, further, I am inclined to believe, from the evidence presented at this meeting, that some of our local sorts but little known to eastern Pomologists, are, in reality, the most valuable for our purposes, and as good in quality, on our soil, as eastern fruits of older names, and more certain history, but which scarce pay us in productiveness for the ground they occupy.

You will find that the convention has recommended several of these western sorts,

as worthy of more extensive cultivation.—The sorts referred to are but little known to me, still, the evidence on which they were admitted, was, in most cases, quite satisfactory.

There were a large number of new Illinois Seedlings presented. One of the PEACHES, though past maturity, was of fine flavor and good size and appearance. The apples were all respectable and some five or six quite promising, still the committee, with due caution, refused to recommend any of them, though a part might have passed, in accordance with the pomological rules adopted in New York.

I have one more observation to make on Illinois Seedlings—most of those shown at Princeton were large and fair—many beautiful, and one of monstrous size, and really of as good flavor as some other better known monsters. I have lately heard of an orchard of Seedling trees, in this vicinity, where about 70 in the 100 produced fruit deemed good by city judges. I mention all this as further evidence of the wonderful adaptation of soil and climate to the production of fruits in this region, for in eastern orchards of Seedling apples, if there should be one or two "good trees" in 50 or 100, it is as much as can be expected; while here, I think, it will be found that there are generally ten times as many passable seedlings, equal, or superior, to the eastern "old good trees," in every 100 of our trees of local origin.

But to return to the convention. Suitable committees were appointed, and business went on briskly and with very little interruption, considering the great number of spectators, and the determination of members to have every subject broached, most thoroughly and generally discussed—and such was the case, I assure you—almost every member spoke, on each and every fruit, as it came up, in the hourly reports of committees, and though there was much said, *there were no long speeches*; and all that was said, was more to the purpose, more candid, cordial and sensible than is often heard at such meetings.

There was also great unanimity of opinion on most points discussed with the exception of the one subject that occupied more attention than any other—I mean "Blight"—*the* blight of Illinois and southern Wisconsin. But this subject will make a seperate chapter, by and by; still I will add now, that the weight of evidence and the majority of opinions were in accordance with my own views; viz: That the disease is epidemical—that like cholera, its laws are little understood, and its extent and ravages more alarming, than general, or destructive. In a very few cases orchards have been half ruined, but in general, the damage has not been great, though often serious. In some orchards it has been worse the second year, in others it has not returned, after one threatening visit, of short duration. But I will speak of this singular and fearful disease again. In the mean time, let us hope that it may disapper altogether, or at least during our time, for I am inclined to believe that it has appeared in times past, and may reappear, at some future day—a remote one—let us hope, and believe.

A constitution was adopted at this meeting, and THE NORTH WESTERN ASSOCIATION OF FRUIT GROWERS will assemble at DIXON in this state, on the last Wednesday of September, 1852. This point was unanimously conceded, after some discussion, by our southern friends, to enable Wisconsin and Iowa to send a larger delegation, and be on hand with the fruits of a more northern clime and newer region.

Hastily, but cordially, your friend,

J. A. K.

The Grove, Ill. Oct. 14, 1851.

Pork is selling for $4 per cwt. in Indiana.

For the Wisconsin Farmer.

Ottawa—Gardens—Grapes—Sweet Potatoes—Hedges, &c.

Having given you the outlines of our Fruit-growers' Convention, I propose devoting this sheet to matters and things by the way—and first of that pleasant and somewhat picturesque town—Ottawa.

I ought to regard this place with particular favor, for its citizens have been good friends to the nurserymen, and what is as gratifying to some of us, as the profitable sale of our trees, they have planted with taste, and cultivated with care, and success, the fruits and flowers we have supplied.

At this, and a previous visit, I had the pleasure of examining some fine gardens and fruit grounds, of which I will mention but three. Mr. Cushman, a little out of town has a beautiful place, and his extensive grounds are cultivated carefully, and successfully. He has paid much attention to the smaller fruits, which we are too apt to neglect—I consider his as a pattern place for merchants, who have been so fortunate as to secure a home in the suburbs of a commercial town.

For a city garden, I will name Senator Reddick's. Here are hundreds of varieties of choice fruits, shrubs and plants on the fraction of an acre allotted to a city residence. It is a good sign for us, when senators are horticulturists. I fancy I can see the germ of a state agricultural society in such a garden as this; while some of my timid friends think they see the shadow of coming danger, and doubt, and possible disorganization to these benificent associations, in the recent acts of other senators, who, it may be supposed, have at last learned that farmers are like to be "of some account in the councils of the nation," and that our great agricultural gatherings, are fields, where wise politicians may reap golden opinions, and perhaps secure a majority of the "sweet voices" of "more than three fourths of the people," by joining cordially in our annual jubilees, and recapitulating, with eloquence and force, as well as discretion, the great truths which our press has long and nobly urged, and *not* all in vain.

For, one, I have no fears, but much hope from this new phase in the public acts of men so prominetly before the people of the great agricultural west, and the union. I have lately heard farmers, who are partizans of these great men, say, that they considered them morally, if not politically pledged to advance some measure, in congress, for the specific benefit of the tillers of the soil.

But stop, I am getting off the track, and had better leave this matter alone, any way; yet, it is one of momont, and I trust the friends of scientific agriculture will make the most of it, by reminding our politico-agricultural orators, that we look for som e-thing more than words, as the result of their timely visits at our fairs, and acknowledged appreciation of the great importance of the agricultural interest.

It is well known that the present administration is for us, and it is not very likely, at this day, that our next will be opposed to legislation for the specific advancement of our art and science; and yet, no one knows what course political expediency may take a party in power, and as it ss thought that the next congress will be found favorable to any measure that will benefit the farmer, (*without disturbing the political machinery, or making capital for a party,*) perhaps the next "long session" may settle the question, if we seriously ask its settlement: For, it is well known, that the tho't of its strengthening the hands of the party recommending it, is the principal reason why our interest is the only one represented by a department in the general government.

"Well, but about grapes and sweet po-

tatoes?" Ay, true, I understand you, my friend, and will just assure you that Mr. H. L. Brush of Ottawa is a man worthy of our warmest regards and most substantial encouragement, for his original, and almost unassisted attempt at the vineyard culture of grapes, in northern Illinois, and the field culture of the sweet potatoe; in which latter business, so far as I know, he has had but one considerable competitor, though the hard won success of Mr. Brush, and Jacob smith of Lockport, has brought out many imitators, and it is now clearly shown that we can raise this tuber in quantity, should our old northern potatoe succumb to the rot.

I think Mr. Brush told me, that he estimated his crop at 500 bushels, selling at retail, for one dollar per bushel, and affording a profit, this very unpropitious season.

I had a barrel of Mr. B.'s sweet potatoes last fall, as well as this, and have had a good chance to test them; and by the way, from my long residence in the far south, I may be considered a fair judge, and I have no hesitation in saying that the potatoes grown at Ottawa are equal in flavor and sometimes in size, to those raised in Mississippi, and Louisiana.

And now, mind you, my good friends of southern Wisconsin, you have just the dry warm, sandy soil, calculated to bring this tuber forward rapidly, and perfect it finely before the frosts of autumn. Don't all try to sow seed, but purchase cutlings early in June, and plant one, in each hill of raised earth; keep down the weeds, and as the vines begin to cover the ground, lift them up, now and then, with a fork, to prevent their taking root, and forming small tubers away from the hill. The cutlings of the vine, root as readily as cabbage plants after a rain, and may be brought a thousand miles packed in damp moss, and planted out in the dryest weather, by pouring a cup of water in the center of the hill before you fix the cutling in its place.

And now about Mr. Brush's grapes and catawba wine. The vineyard occupies the steep hill side, or bluff, where I think a plough has never run, and also the base of this bluff, or bottom land of the Fox river valley. The CATAWBA GRAPE is the one principally cultivated — of these I think Mr. Brush has about three acres, cultivated after the Cincinnati fashion, and those *on the face of the bluff* yielding as well as any vineyard I saw on the hills surrounding the Queen City, while the more luxuriant vines on the bottom land held but a poor show of fruit, and most of that, marked with black spots, and only half ripened.

Mr. Brush has gathered, this bad season, about 30 bushels of ripe grapes from 250 vines, retailing the fruit at $4 per bushel. But as there is not a home market for all his crops, Mr. B. intends to manufacture some "sparkling catawba," having already succeeded in producing a good ordinary wine, possessing, in a high degree, the body, flavor and bougnet of the best Ohio wine—a most delicious summer drink—superior in some respects to the best Hock, and made without any addition whatever—the pure, unadulterated juice of the beautiful American grape—and, by the way, Mr. Brush has vines for sale, if any wish to try the Catawba.

Believe me, my friends, that the face of your Rock River bluffs, and the southern slope of many of your Wisconsin hills, and prairie mounds, will produce the vine, and perfect fruit thereon, equal to these Illinois river banks, though YOUR GRAPE, for general culture, may not be the Catawba. Yet try that, I pray you, while some one is growing a native seedling, of earlier habit of ripening, and superior hardiness in cultivation.

And now, a word on HEDGES, and I have done for this time. I should like to know the number of hedge plants that have been

raised this season, in the state of Illinois.—I will guess 20,000,000, and about all disposed of, already. Well, twenty millions of osage orange plants will make some fence, and save some timber, if well treated; but if left to themselves as are most of the newly planted hedges, which I have seen, *it will not make a fence.*

But if you will keep the plants *clean*, for a reasonable time, after setting in hedge rows—and above all, (and the only point that you can not remedy, if you neglect it,) *if you cut them, often and severely, at least three times in the summer*, and give them reasonable protection from cattle, for three years, or perhaps less, you can make a fence that will turn every domestic animal, and even rabits, and that will last more years, than we can tell, and will succeed, it is generally believed, wherever the peach tree survives the winters.

And then, have you the least idea of the beauty of this osage orange plant in a hedge? There is nothing like it; and when neatly and comely clipt, (which may be done with a sythe, while the plants are young,) it forms a rich green and golssy wall, as impervious as mason work, in outward appearance, and as impracticable as a stone wall of equal height, to all unruly animals, and is better than "steel traps and spring guns" to protect fruit from uncivilized vagabonds of our own species.

There are plenty of osage orange plants near the Wisconsin line. Messrs. Foster and Mason of Libertyville, Lake Co., have, it is thought, about 2,000,000, and my good old friend Captain Moore, of the same county, has a hedge that stood the last winter without injury, and is solid enough to turn a rat, and as uniform and regular in outline, as mathematical pencilings.

J. A. K.

Never keep your cattle short; few farmers can afford it. If you starve them, they will starve you.

Mediterranean Wheat.

The damage done to the wheat crop this season, by the weevil, has excited a good deal of apprehension in the minds of our farmers for the future, and attention has been turned to securing some earlier variety which shall ripen sufficiently early to escape the ravages of this insect, which in so many parts of the country has completely destroyed the wheat crop. The Hallowell Agricultural Society held two meetings on the subject, and finally concluded to purchase some Mediterranean wheat for seed, for the use of its members. This wheat has been tested two years in some parts of the adjacent county, and has escaped the ravages of the weevil in localities where the Soules, Rasp, and Flint wheat have been seriously injured. The Mediterranean is not so fine a variety of wheat as some others, but is very hardy, standing the winter well, and very productive. The person from whom the society purchased their seed raised 300 bushels from seven acres. It weighed 61 lbs. to the bushel.—*Picton Gaz.*

Fertility of Minnesota.

The Pioneer says: "We have been looking at the crops of Gen. Wilson, late of Ohio, who is cultivating the M'Cann farm, in sight of St. Paul. He showed us crops of various kinds, raised without manure, that cannot be surpassed anywhere. Several thousand cabbages, standing in solid columns like an army of sturdy Hollanders—enormous rutabagas, white English turnips, as large as brittania tea-pots, (sown on the '25th of July, wet or dry,' and of course *wet*, this season.) Celery of luxuriant growth, and a field of Indian corn, now ripe, (planted on the 25th of May,) of which some of the ears were growing nine feet high, and the whole length of the stalk, to the end af the spindle, measures 13 to 15 feet. Gen. W. is determined to have many more farmers out here next year. He says we can raise anything in Minnesota, that is raised in the United States, except rice and cotton. (We have plenty of wild rice and can raise flax-cotton.) He showed us a very promising peach tree; and says there is no question but that we can raise peaches here, as well as apples, without any sort of difficulty. He says our soil and our winters are as favorable as possible for orchards.—*St. Anthony Express, Min.*

Stewart's Stump Machine.

Some months since we received a circular from the patentee or proprietor of this machine, setting forth its qualities, with a request to give it a favorable notice in the Farmer. We declined a compliance because we doubted the ability of the machine to perform one half what it was recommended to do. It seems however that we were at fault in our conclusions, from the following article which we copy from the NEW ENGLAND Farmer, and which we doubt not is no exaggeration. Its utility can scarcely be estimated to many localities in this state. One of these machines would do the the work for a large range of country:

"The machine consists of a *beam* or *lever*, thirty feet long, a *chain* of twelve rods, and *shears* about sixteen feet in perpendicular height; *scissors* about six feet in height may sometimes be substituted for these. At five feet from the end of the lever a chain is attached, which, being passed round a stump or rock, forms the fulcrum on which the lever turns. The chain is attached to the other side of the lever at distances from one to five feet from the fulcrum. The weight of the chain is about two thousand pounds; but as it is divided into sections of eight or ten feet, it is not difficult of transportation, and the weight is of much advantage in the operation of the machine. By applying a power of one ton at the long arm of the lever, it may be made to exert a force upon the stump equal to

four hundred tons.

The exhibition which we witnessed was in Fitchburg, upon a field owned by Rev. *Mr.* Trask, of that place. This field had been covered with a growth of pines, which were cut off three years ago, and the stumps had begun to show but slight signs of decay. At 9 o'clock, A. *M.*, two or three hundred people were present, and many hundreds more must have witnessed the operation during the day. Among these were many practical farmers and mechanics, who manifested much interest in the exhibition, and perfect satisfaction as to the result.

During the two hours we were present, we saw about thirty stumps pulled, varying from one to two and a half feet in diameter, and having roots extending in some instances over a circle of twenty-five or thirty feet. By using the shears the largest stumps were drawn out in four or five minutes, and simply by means of the lever, five smaller ones were removed in less than ten minutes.—It was not necessary to move the machine to effect this, since nearly three acres can be cleared with it in the same position.—Three or four stumps can be pulled at once when near each other, with nearly as much ease as one ; and to remove one hundred from a field would be no more than a day's work for three men and a pair of horses or oxen.'

These machines are manufactured by *Messrs.* Willis & Kilburn, of Orange, *Mass.*, at a cost of about three hundred dollars, including the right of use in two or three towns.

HORN AIL—POISONED SHEEP.

Mr. Editor:—Having long been a reader of your excellent paper, and finding its columns free to all, and that you are also willing to answer all necessary questions, I am induced to ask one respecting neat cattle.

I wish to know what symptoms generally attend the horn-ail, whether it will affect the urine; if so in what way, and whether it will affect the heart and lungs; where it commences, and a remedy.

By answering this in your next you will oblige.

A Subscriber.

I send an infallible remedy for poisoned sheep, which if you think worthy of a place in your paper is at your disposal. As soon as the symptoms of poison become apparent give good fresh eggs from the shell, generally three at a time, and in a few hours all will be well. This is a known fact from long experience.

Respectfully.
A Subscriber.

It seems yet an unsettled question whether the horn-ail is a local disorder or whether it is only a symptom of general debility. The horn-ail usually appears among poor lean cattle, and whether it is a cause or consequence of leanness we are unable to say. We think it is not supposed that this complaint affects the urine more than other parts. The head is out of order and a hole bored into the horns often gives relief. Spirits of turpentine poured on the skin between the horns has a good effect. Cutting off the end of the tail is a good practice—and it has been confidently asserted that when this is properly attended to the horn-ail never appears.—*Ploughman.*

The Oregon Spectator, in an article upon the resources of that territory, and the advantages it holds out to those who wish to engage in Agricultural pursuits, says:

We overheard a gentleman a few days since remarking that he had just sold stock from his farm to the amount of $7,000.—And the same gentleman said that aside from his remaining stock he also had 150 acres of wheat, which is now being harvested, and which will yield from twenty to thirty bushels per acre. And any one can calculate the thousands of dollars such a crop will secure to its owner. We have heard of two or three gentlemen on the Columbia river who have large fields of potatoes which have been, by disinterested persons, estimated at $1,000 per acre. One individual has ten acres of potatoes, which have and will in all cost him two months of personal labor, and the same amount of labor from two hired hands and if he meets with no adverse fortune, he will realize eight or ten thousand dollars from his potatoes alone. In the upper part of the Williamette and Umqua river there are almost unlimited opportunities for hay raising and dairy business, in the most beautiful country in the world.

Artesian Wells.

The subject of *Artesian Wells* has recently attracted much attention, in consequence of their successful use, not only in furnishing wholesome water for culinary purposes, but in affording a supply adequate to the propulsion of machinery.—The name is derived from Artois, (the ancient Artesium,) in France, where they were used as early as the twelfth century of the christian era. They are usually borings of 3 to 6 inches in diameter, carried to various depths. The nature and position of strata of course determine the feasibility of obtaining a constant supply of water. The rain which falls upon the surface either runs off when the surface is clay or other impermeable substance, or sinking through the pours bodies at and near the surface, accumulates wherever it meets an impermeable stratum. In our figure, *a* is a porous, water-bearing stratum, lying between two rocks, *d* and *e*, which are impervious to water. The rain falling upon the stratum *a*, where it constitutes the surface, as at the elevation on the right hand of the figure, percolates through the porous rock in all its extent, but cannot rise to the surface unless there be an artificial orifice, as at *b*, or a natural crevice, as at *c*. This may be illustrated thus: Let an earthen bowl be placed within another bowl, leaving a space between them; fill the space with water; the water cannot escape nor enter the inner bowl; but let an orifice be made in the inner bowl, and the water will at once rise in it to the heighth which it maintains in the outer bowl.

The inference that a boring to a certain depth in any locality will furnish a constant supply of water, because such has been the result in some localities, is as groundless as the inference that coal or salt may be obtained by mining at certain depths, in any locality, because these substances have been thus found in abundance in some places. The deepest Artesian well yet bored is at Grenelle, in France. The boring of this well was commenced on the 24th of December, 1833, and was seven years in progress, the water first spouting up through it on the 26th of February, 1841. The depth of the well is 1794½ feet, and it throws up about 1,000,000 gallons of wholesome water in 24 hours. The breaking of the boring instruments added materially to the delay and expense of the enterprise, in May, 1837, when at the depth of 1246 feet, the chisel and 252 feet of rods fell to the bottom. The weight of these was five tons, and it required the labor of fifteen months to bring them to the surface. M. Mulot, the engineer, under whose superintendence the work was executed, perceived that his work was completed by the rods suddenly falling several yards.—The waters gushing out formed a complete river in the street, shooting up at first to a great height. In order to control the violence of the stream to some extent, the tube by which it rose to the surface was extended a little more than 100 feet above the surface of the ground; still the water rose several feet above the orifice and descended in a jet several feet in diameter, into a large reservoir, from which it is distributed by means of iron pipes. The boring is lined with iron tubes about six inches in diameter. In our next we propose to give the results of other boring, and the causes of failures in certain cases.—*Family Visitor.*

A Hoosier's Opinion of Wisconsin.

From the Galena Jeffersonian, of the 15th inst., we extract the following remarks on a portion of our state:

"During a recent trip through the eastern and northern portions of this state, on horseback, we had ample time and opportunity to examine the country, and form our opinion of the inducements offered to settlers. From Mineral Point to Madison the country is pretty thickly settled with farmers, who appear to be making money as fast as reasonable men could desire. The

land is of good quality and nearly all entered.

"Madison has a location, the prettiest in Wisconsin. It is situated on the 43 par'l of N. lat.; its longitude is 89° 20 minutes west of Greenwich. The town is built on the isthmus between Third and Fourth lakes, the site rising an altitude to some sixty feet above the lakes. It is almost surrounded by lakes, commanding a view over a vast sheet of water. Third lake is six and and a half miles long, by two broad.—Fourth lake is nine miles long, by six broad.

"After leaving Madison, on the road to Fort Winnebago, the country is as fine as any in Wisconsin; well timbered and watered, and adapted to raising all kinds of grains and roots.

"Portage City has been built up within two or three years, and now numbers one thousand inhabitants. Located as it is at its junction with the Wisconsin, is bound to be the most important place in northern Wisconsin.

"On the ridge between the 'Cold Springs' and Silver Creek, grows the finest young oak timber we ever saw. It is not uncommon to get five rail cuts off one tree, before reaching the limbs; and it stands on the ground about as thick as corn hills in a good field of corn. The pitch pine in the swamps between Silver Creek and the La Crosse valley, is of little value, except for fuel. The land in the valley of the La Crosse and Lemonweir is as fertile as any in Wisconsin. The soil is deep and rich, with just enough sand among it to retain the moisture and force forward vegetation. The valleys are settling up fast, with an industrious and enterpri ing class of citizens. On the first of March last, there was no settlement between Maughs' mills, on the Lemonweir, and the prairie two miles west of the town of La Crosse, a distance of eighty miles. Now there are some fifteen improvements; the longest stretch between houses is thirty-five miles, the next fifteen miles, and so on down to four.

"The town of La Crosse is situated on the eastern bank of the Mississippi river, at the junction of the La Crosse. Its location is a good one, being on a beautiful prairie, some five miles long and two wide, surrounded by an ampitheatre of hills, some four hundred feet above the level of the Mississippi. The country on both sides of the Mississippi abounds in game of all kinds—particularly bear and deer, which are unusually numerous this fall—and the streams full of fine speckled trout.

"The country is rich in minerals. Several discoveries of lead and copper have been made, near the La Crosse, on the head waters of which are a number of iron mountains. We brought with us some specimens of the ore, which are pronounced by competent judges as being of as good a quality as any found in the iron regions of Pennsylvania. An Ohio company, we learn, have purchased one of these iron fields, and are about erecting furnaces for smelting it.

"On the 1st of May last, there were but about thirty inhabitants in the town of La Crosse, now they number about three hundred and fifty, and the tide of emigration rushing in from the east, by the new state road, is truly astonishing. By the close of navigation, La Crosse will number 500 inhabitants. It will be *the* city in Wisconsin on the Mississippi river."

Chemistry Applied to Agriculture.

The true principles of farming are just beginning to be understood. It is but a few years, at least in this country, since the farmer sought assistance in his important vocation from the safe and sure guide of science. The processes of the culture of the soil have been handed down from father to son, for a long period of time, without any attempt at improvement. The time has already passed when the tiller of the soil was content to produce just a sufficiency for the support of animal life, and that too of an indifferent kind. He has already begun to reap the advantages of calling in scientific principles to his assistance.

Within a few years much has been done to improve in a high degree the choice and delicious fruits of our climate. Our markets are now loaded with fruits of the most tempting kind, which by their abundance are brought within the reach of all classes of society. Who can estimate the amount of happiness and substantial comfort thus bestowed upon mankind?

For the last fifty years the energies of science have been in an unparalelled degree bestowed upon inventions and discoveries

in the principles of mechanics and the multifarious modifications in machinery, growing out of the motive power of steam. Let the same amount of scientific energy be applied to the investigation of the laws which govern organized bodies, both vegetable and animal, and the result of such investigation will no doubt be the knowledge of organized matter astounding as those remarkable physical laws which we are daily witnessing.

The whole community are beginning to be waked up to the importance of this matter. Our schools, especially in this state, are introducing the study of the principles of chemistry, as applied to agriculture.—The guardians of the State Normal School are doing very much towards disseminating a knowledge of these principles, by preparing its pupils for teaching the same in the schools which they may hereafter be called to take charge of. When the teachers of our schools can be made to feel the importance of this new branch of education, we may expect rapid and permanent improvement in farming. It is in our common schools alone that a large portion of our farming population are educated, and for this reason it would seem very proper that considerable attention should be given to this branch of education in these schools. Let all who are entrusted with the supervision of schools see that encouragement is given to this study.—*Albany Jour.*

Posts Inverted.

It is now generally believed that posts will endure much longer if inverted, than if set in their natural position. The fact, it is said, "has not been satisfactorily explained."

Now it appears to me that the difficulty in explaining this, is the same with that of explaining the circulatinn of the sap. The mechanism, if any there be, in the green tree, remains the same in the dry. In the green tree the sap ascends through the pores, or tubes, in the wood, and descends between the wood and bark. Hence, if a post be set in its natural position, the moisture from the ground will ascend in the same way, if not on the same principle that the sap ascends in the living tree. Hence such a post will be found wet, or moist, internally at some distance *above* the surface of the ground. If set in an inverted position, this will not often be the case (as the circulation would be downward instead of upward.) Hence such a post will be generally dry within, even *below* the surface of the ground. As moisture hastens decay, the former must perish sooner than the latter.—*Rural New Yorker.*

Water may be forced through the capil lary tubes of a tree only toward its top.—On this principle the finer woods are sometimes changed in color for the use of the cabinet maker. A hole is bored in the side of a tree, and a bent hollow tube has one of its ends driven into the hole, while the other end of the tube is carried up nearly the whole height of the tree. Any solution may then be poured into this tube from the top, and from the pressure arising from the height of column, it will be forced into the tree in an upward direction only. In this way woods have been colored in France while growing, and by the introduction of solution or metallic salts, they may be rendered nearly imperishable by rot.

Posts should be placed in the ground with the butts up ; then bore a hole in the butt, throw in a small quantity of corrosive sublimate or common copperas, (sulphate of iron) and drive in a plug of wood. If the former be used, the centre tubes of the wood will become *kyanized*, and be thus rendered indestructible by rot and less liable to crack or wind—if the latter, the posts will last much longer than when left without such addition.

If posts be first placed with the ends in a tube containing a solution of common copperas for a few days, and then in clear lime water, the lime will be changed into sulphate of lime as received into the wood, thus leaving the capillary tubes of the wood filled with plaster of paris, (sulphate of lime) and their surface coated with oxide of iron, precipitated from the copperas. Wood so prepared will last many years longer than if used in an unprepared state.—*The Working Farmer.*

A New Agricultural Product.—Among the curiosities at the late New York State Fair, was a quantity of brook trout, *raised* by Mr. Goodhue, of Wheatland. He presented them as an "agricultural product," whose cultivation is no more difficult, and much more profitable than wheat or fat cattle.

MECHANICS AND LAWYERS.

The New York Mirror has the following, which shows that enlightened constructiveness is rising to its true place in public esteem:

"The bar is no longer the resort of the ambitious youths of our country. The mechanical departments are being preferred; there are now thirty young gentlemen in this city that have received liberal educations, who are serving their apprenticeships as shipwrights, architects, carpenters &c.—In a few years, the United States will have the most accomplished mechanics in the world. A new class is springing up who will put the present race of mechanics in the shade. The union of a substantial education with mechanical skill, will effect this. Indeed, already, we could name some mechanics, who are excellent mathematicians, and acquainted with French and German, and able to study the books in those languages connected with their vocations. Heretofore fond fathers were wont to educate their sons as doctors or lawyers, to insure their respectability and success. That day is past. Mechanics now take the lead, and in a few years will supply a large portion of the State and Federal Legislature.

We hope that parents and guardians will put aside this almost obsolete idea, that none but professional men, such as physicians, divines, and lawyers can ever arrive in this country to great distinction. Look any day and witness the self taught, the once illiterate boy, now a superior mechanic, filled with the ardent thirst of becoming a valuable member of society. Look at our community—how many are there now, filling offices of honor and profit, who but a few years ago were apprentices to very respectable trades—and take the portion of mechanics to your very learned and distinguished men, and compare the ratio of their future eminence. Look at our debating societies, lyceums, &c., from whence emanates the ebulition of marked natural talent?—From those who never had any other stimulant but their own ambition to become useful as well as ornamental; whose days are devoted to hard work, and every vacant hour passed in the proper study to render them respectable and well informed.

MICE AND TREES.—A writer in the New England Farmer, says: in protecting trees from mice, I take sheet lead or tea chest lead (which can be bought for a nominal price) and cut it into strips eight inches wide and sufficient length the other way to go around the tree once and a half or twice, then wrap it around the tree lightly and it will stay without any further trouble. It can be taken off in the spring and laid away for subsequent years. I have tried the above method with entire success.

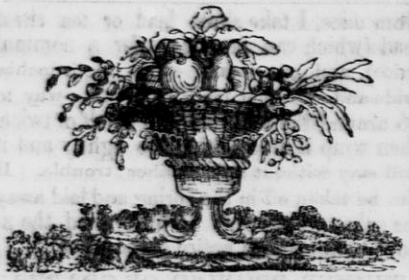
SUMMER PRUNING OF GRAPES.

As very eroneous notions generally prevail as to the summer management of grapes, frequent hints to cultivators are necessary. We have noticed that in many cases already the main shoots have been cut back to the fruit, thus depriving the fruit of the nourishment and support which without this mutilation would be given by a vigorous shoot, in the foliage, of which the sap, with other matter taken up from the atmosphere, would be elaborated into suitable food for the growth and maturation of the fruit. By cutting off these shoots the fruit is robbed of its support which nature has provided.

We have noticed in a garden, kept by a professional gardener, where there were a large quanuity of grapes, that all the new shoots had been cut back to the fruit, so as to leave it exposed to the sun, excepting on one trellis, where they, fortunately had been neglected, the grapes on that trellis were well grown, and ripening well, while all the others were imperfectly grown, and remained green.

When grapes are improperly pruned as we have named in July, they will often send out new shoots, and recover, in some measure, from the evil, but when this pruning is done rather late, it often destroys the crop.

There is generally a great error in not pruning grapes thoroughly in the fall, or in the spring, so that there is a great mass of vines, which often lead to the eroneous mode of pruning which we have named.—When the vines become too thick from a very luxuriant growth, and previous scanty pruning, the best remedy is to cut off lateral branches, and all feeble shoots, and cut out whole small vines on which there is little or no fruit, and allow the main shoots to run twenty or thirty feet if they will.—N. E, Farmer.



HORTICULTURAL.

FRIEND MILLER:

Having heretofore communicated some information given me of the experiments made of inoculating the peach into the black walnut, and thereby effectually overcoming the difficulties which the peach in its natural state is forced to undergo in this climate.

The peach is one of the most delicious and delicate fruits that can be raised in any country; and it is almost an insurmountable objection to a country if the peach cannot be cultivated to perfection. And if the cultivation of so valuable a fruit can be made perfectly easy and sure, it is a discovery more valuable to our state than most of the discoveries patented at the present day.

The difficulty which the peach encounters in this climate seems to be be two fold: The wood does not fully harden during the season, and the buds, are, by means of the early start of the blossom in the spring, brought forward so soon in the spring, that they are blasted by the chilling winds of the season.

Now it is well known that the black walnut is a hardy timber and flourishes throughout most parts of this state and its vicinity; that this timber, by nature, is late in putting forth its leaves and blossoms; that its sap is kept back from its trunk, till the season is so far advanced as to insure its foliage and blossoms safe from the blightning winds of our climate.

The operation of delaying the vegitation it seems is performed by the natural habit of the stock or stuff of the black walnut, which prevents the scion from starting too early as effectually as it could be done, as is often practiced by placing about the roots of the peach ice and snow, and by mulch and manure covered up so as to prevent early fructification. Again it will be observed that the black walnut grows rapidly and then the sap is witheld in season to allow the wood to harden before the fall frost comes, so that it is prepared and fitted by nature without the aid of the knife, to abide the frosts of the cold winters of our climate, and so made able to start with vigor in the succeeding season.

The process of inoculating the peach on the walnut, as related to me is this: The nut is planted in the fall, and in the proper time of the second years growth, the bud is set.

I have lately been informed that the experiment has been made of setting the peach bud on the butternut with success. I believe, too, this is true, and desire our farmers to try the experiment, which is easy and cheap, and they will be fully compensated by the fruits of their labor.

Some have, without so much as trying whether the peach will grow on the wallnut, or not, scouted the the proposition. This is not the way to make improvements in any art or science. Let the suggestions be thoroughly tried, and then give us the result through your own valuable paper and let the people know what is the result.

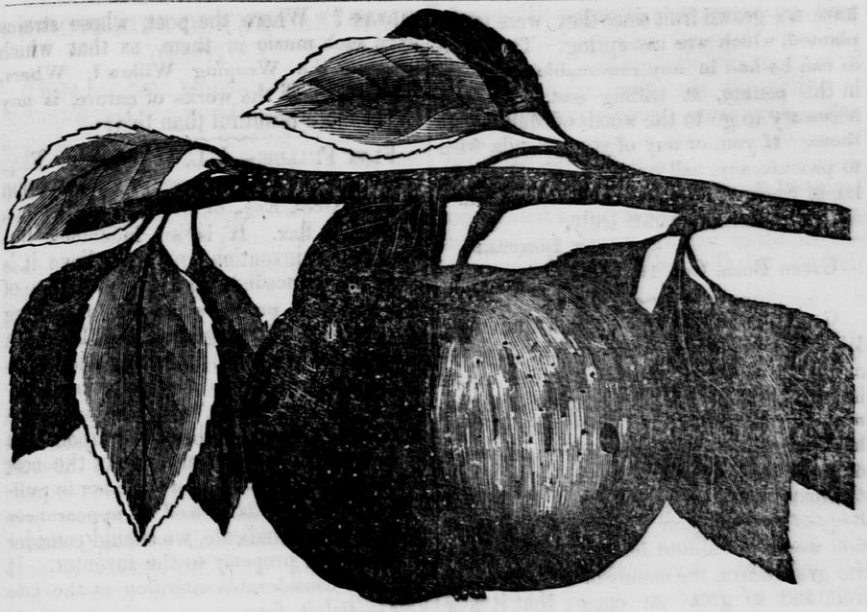
M. B. B.

TO PRESERVE PEACH TREES.—A correspondent of the National Intelligencer furnishes the following receipe:

"Clear the earth away immediately next to the trunk of the tree, down to near the root, and then place two or three lumps of unslacked lime, each about the size of a goose egg next to the tree, and cover it over with a little earth. It will eradicate the worms, and in a short time give much vigor to the tree. The lime should be applied when the trees are young, but will answer as well for old trees, by increasing the quantity of lime about one third. From my experience, once in three or four years, is all that is necessary to insure a viorous, healthy tree.

W. T."

All plants have a season to rest; discover what season is peculiar to each, and choose that season for transplanting.



Garden Royal.

This apple originated on the farm of Mr. Daniel Bowker, Sudbury, Mass. The tree is rather slow or modera.e grower, and a good bearer. The fruit is of the highest quality for the desert, being remarkably tender and of a fine spicy flavor, resembling a good pear in its fine qualities. It is a very good looking, but not beautiful fruit. We consider the Garden Royal one of the best apples of its season, for the garden, or for orchard culture for one's own use, and it sells well in the market; but some varieties of more rapid growth, and of larger and more beautiful fruit, though not of so high a quality, may be more profitable for the market.

The Garden Royal is small; roundish flat; of a dull greenish and russetty yellow ground, but mostly covered with dull, deep red in the sun, with numerous large light specks; stem short, slender, in a medial sized cavity; calyx medial, open, in a broad, shallow basin; flesh very fine, tender, almost melting, crisp, jucy, and of a delicious, highly aromatic flavor. In use during September.—*N. E. Farmer.*

The total receipts of the late State Fair at Manchester, N. H., are given at $4,100. There were 2,300 new members added to the Society.

For the Wisconsin & Iowa Farmer.

White Blackberries.

Friend Miller—In the October number of your paper I noticed an extract from the New England Farmer in relation to the above named fruit. The name presents a contradiction of terms, as does that of *white blackbird:* yet they both exist, and each is said to partake of the nature of the species to which it belongs in everything excepting color. They are, therefore, exceptions to the general rule—freaks of nature. The white blackberry is seldom found in a wild state; and I have never known of its being found wild, excepting in some portions of New England, and the northern portion of Wisconsin. In the south; where the common blackberry is found, in abundance, and sometimes shooting up to the height of ten or twelve feet, loaded with delicious fruit, I have never known the white fruit to be discovered. In this, and an adjoining town, in which have probably been gathered, during the present season, more than one thousand bushels of blackberries, I have heard of but one single bush of the white berry being found. I have some in my garden, which I produced upon the lake shore in the eastern part of this county. They

have not grown fruit since they were transplanted, which was last spring. The bushes can be had in any reasonable quantity, in this county, at trifling cost. It is not necessary to go to the woods of Maine after them. If you, or any of your friends, wish to procure any, call upon Mr. N. G. Stichles, of Sheboygan, who will furnish them.

Yours truly,

SOLOMON LOMBARD.

Green Bush, Oct. 16, 1851.

GOOD NEWS FOR THE PEACH GROWERS. We have seen peach trees in the District of Columbus, this summer, having much larger and more delicious peaches than our more northern fruit, and the trees in the highest state of perfection, in consequence of being painted near the root by a cheap chemical paint, prepared by J. C. Lewis, Esq., of Washington city. This preparation works the almost instant destruction of the grub worm, the enemy of both tree and fruit, and so great an enemy that it is a common thing for them to destroy the fruit entirely in from three to five years. Having seen the perfection of the remedy and the vigor of tree and fruit in consequence of its application, we can recommend it to our friends in New York, New Jersey, Delaware, and everywhere where peach orchards are in cultivation.—*Selected.*

Do trees talk? Have they leafy lungs—do they not at sunrise, when the wind blows, and the birds are caroling their songs, play to sweet music? Who has ever heard the soft whisper of the green leaves in spring time, on a sunny morning? Who did not feel as though rainbow gleams of gladness were running through his heart? And when the peach blossoms hang like rubies from the stem of the parent tree—when the morning glory like a nun before the shrine of God, unfolds her beautiful face, and the moss roses open their crimson lips, sparkling with nectar that falls from Heaven, who does not bless his Maker?

If you ask me to point out one tree more graceful than all others, I would point you the Weeping Willow. Its long silk like boughs droop no less pensively than the eye-lids of some sleeping beauty. And when the air stirs them, what a delicious motion moves among them—where is the painter who can impart the motion to his canvass? Where the poet, whose strains have such music in them, as that which lives in the Weeping Willow? Where, throughout all the works of nature, is any object more beautiful than this?

FLAX PULLER.—J. L. V. Thomas, Esq., exhibited to us last week the invention of S. B. Goss, Esq., of Newark, in this co., for pulling flax. It is an ingenious, but very simple invention, and we believe it is generally conceded that the principle of operation will prove successful in pulling the plant out of the ground and laying it out in a smooth sheet for raking and binding. This will prove a very fortunate invention to the farmer, with the increased attention likely to be bestowed upon that crop hereafter, as a great share of the cost of the staple is made up of the labor in pulling. If it succeeds as well as appearances would seem to indicate, we should consider it a valuable property to the inventor. It attracted considerable attention at the late Fair.—*Beloit Jour.*

PARSNIPS.—This root has long been an inmate of the garden, and was formerly much used. In the times of Popery, it was the farmer's Lent root, being eaten with salted fish, to which it is still an excellent accompaniment. "In the north of Scotland," Dr. Neil observes, "parsnips are often beat up with potatoes and a little butter; of this excellent mess the children of the peasantry are very fond, and they do not fail to thrive upon it. In the north of Ireland, a pleasant table beverage is prepared from the roots brewed along with hops. Parsnip wine is also made in some places; and they afford an excellent ardent spirit, when distilled after a similar preparatory process to that bestowed on potatoes destined for that purpose." It is an excellent food for cows, and its fattening qualities I have already noticed.—*Farmer's Guide.*

ENORMOUS YIELD.—Mr. John Q. Hewlett, residing about three miles from Baltimore on the Fredrick Turnpike road raised this season seven hundred and eighty bushels of prime white wheat on a field containing eighteen acres, two roods and six perches—being a very small fraction under forty-two bushels per acre. The grain was sold for ninety-five cents per bushel.—*Baltimore American.*

DISCOVERIES OF THE LAST HALF CENTURY.

There has been no period since the commencement of the world in which so many important discoveries, tending to the benefit of mankind, were made as in the last half century. Some of the most wonderful results of human intellect have been witnessed in the last fifty years. Some of the grandest conceptions of genius have been perfected. It is remarkable how the mind of the world has run into scientific investigation, and what achievements it has effected in that short period.

Before the year 1800 there was not a single steamboat in existence, and the application of steam to machinery was unknown. Fulton launched the first steamboat in 1807. Now there are three thousand steamboats traversing the waters of America, and the time saved in travel is equal to seventy per cent. The rivers of every country in the world, nearly, are traversed by steamboats.

In 1800 there was not a single rail road in the world. In the United States alone there are now 8,797 miles of railroad, costing $286,000,000 to build, and about 22,000 miles of railroad in England and America. The locomotive will now travel in as many hours a distance which in 1800 required as many days to accomplish. In 1800 it took weeks to convey intelligence between Philadelphia and New Orleans; now it can be accomplished in minutes thro' the electric telegraph, which only had its beginning in 1843. Valtaism was discovered in March, 1800. The electro magnet in 1821. Electrotyping was discovered only a few years ago—Hoe's printing press, capable of printing 10,000 copies an hour is a very recent discovery, but of a most important character. Gas light was unknown in 1800; now every city and town of any pretensions are lighted with it, and we have the announcement of a still greater discovery, by which light, heat and motive power may be all produced from water, with scarcely any cost.

Daguerre communicated to the world his beautiful invention, in 1839. Gun Cotton and chloroform are discoveries of but few years old. Astronomy has added a number of new planets to the solar system. Agricultural chemistry has enlarged the domain of knowledge in that important branch of scientific research, and mechanics have increased the facilities for production, and the means of accomplishing an amount of labor which far transcends the ability of united manual effort to accomplish. The triumphs achieved in this last branch of discovery and invention are enough to mark the last half century as that which has most contributed to augment personal comforts, enlarged the enjoyment, and added to the blessings of man. What will the next half century accomplish?

—*Phil. Ledger.*

CANADIAN METHOD OF HUNTING WILD BEES.

The Canadians adopt an ingenious plan for discovering the trees that are stored with honey. They collect a number of bees off the flowers in the forest and confine them in a small box, at the bottom of which is a piece of honeycomb, and on the lid is a square of glass large enough to admit the light into every part. When the bees seem satiated with honey, two or three are allowed to escape, and the direction in which they fly is attentively watched, until they become lost in the distance. The hunter then proceeds towards the spot where they disappeared, and liberating one or two more of the little captives, he also marks their course.

This process is repeated, until the other bees, instead of following the same direction as their predecessors, take the direct opposite course, by which the hunter is convinced that he has over-shot the object of his pursuit; for it is a well known fact, that if you take a bee from a flower situated at any given distance south of the tree to which the bee belongs, and carry it in the closest confinement to an equal distance on the north side of the tree, he will, when liberated, fly in a circle for a moment, and then make his course direct to his sweet home, without deviating in the least to the right hand or left. The hunter is now very soon able to detect the tree which contains the honey, by placing on a heated brick a piece of honeycomb, the odor of which when melting is so strong and alluring, as to entice the whole colony to come down from their citadel. When the tree is cut down the quantity of honey found in its excavated trunk seldom fails to compensate the hunter very amply for his perseverance.

Early History of Wisconsin—No. 2.

BY A. C. BARRY.

Every nation of Western Europe had been enthusiastic with the hope of discovering a direct route by water to China, and all had searched for it in vain. It was believed by some that the pioneers of New France would have all the glory of the great discovery, and be the first to reap the advantages of a direct trade. To the disappointment of the commercial world, this route still remains as much unknown as it was two hundred years ago; and such it will remain until it is opened by way of the Oregon river or the Bay of California.

The honor of having first projected the movement for the discovery of the Mississippi, belongs to Marquette, a Catholic Missionary, and most energetic, devoted, self-sacrificing man. He readily won over to his side and converted to his views, the first intendant of New France; who, about to relinquish a station he had long filled with distinguished ability and success, would "close his career with the brilliant discovery of the great storied river of the West." Could he but succeed in this, the height of his ambition would be attained.

We digress for a space to speak of Father Marquette—he is worthy of honorable mention in this history. We are no man-worshiper, and do not greatly venerate either state or church dignitaries merely as such, but respect merit, and yield homage to goodnes: and when we behold a man leaving his country, home, friends—the refinements, comforts, companionship of them all—for the hardships and dangers of a life in a "howling wilderness," thousands of miles away from civilization, and devoting himself meekly and with an immutability of benevolent purpose to labors of love among wild tribes of savage men, we accord to him more than praise. His creed—that is nothing to us; a loving heart and a loving life, these speak the Christain; and he is Christ's disciple who humbly and reverently follows him in the blessed work of doing good and whose triumphs are wrought out amid the dark and benighted places of this revolted world. We do not speak of father Marquette as a priest, a recollet Monk, a Jesuit, but as a *man*, whose achievements were infinitely nobler than those of Napoleon, his countryman, whose victories were won on the red battle-field. He planted the cross amid the uncivilized wilds of the North West, caused churches to be builded for the purposes of a Christain worship, taught his red brethren patiently, faithfully, as a father would his children, and through kindness, devotion to their interest, and a meek and inoffensive life, won their confidence and love. It is a worthy tribute to his memory, that he "endeared himself to the savages in a remarkable manner, not only by his apostolical piety, but by his tender affection for them, and his kind offices in all their distresses. Such was the veneration of the savages for this good man, that for years after his death, when overtaken in their frail bark canoes by the storms on Lake Michigan, it it is said they "called upon the name of Marquette, and the winds ceased and the waves were still."

This man by his travels through the wilderness, and the acquaintance he had formed with Indian tribes remote from Lake Michigan, and along the great rivers of the now Wisconsin, had prepared the way for the voyage of discovery he proposed. In this Fathers Allouez and Dablon had assisted not a little, having made their way across from Green Bay to a point on the Fox river, at which a remnant of the Foxes had gathered. But beyond this the foot of a white man had never trod, and away thousands of miles still westward, were vast regions yet unexplored by a pale face.

Associated with Marquette, and the appointed leader of the expedition, was M. Joilet, a trader at Quebec, every way qualified for the responsible post to which he was chosen. With five other Frenchmen, the two resolute, energetic spirits set out from Mackinaw, on their difficult and perilous journey, on the 12th of May, 1673. Their route lay along the western shore of Lake Michgan, across Green Bay into Fox river, which they would ascend.

Among the wild tribes of the wilderness there obtained generally the belief, that the Michisepa or Great River, could not be explored—that the very undertaking of such an enterprise was fraught with much danger, and to proceed in it would be at the cost of life. There were fierce, blood-thirsty savages, whose ferocity no kindness could tame, and who could not be turned from their sanguinary and murderous purposes by the sight of the cross, or the uplifted and weaponless hand of the Christian Missionary. Beside, there were "monsters who would swallow up them and their canoes—a demon who would engulf all who ventured near his watery and boiling domain, and heats that would parch them."—When, therefore, Marquette and his companions made known their plan, at an Indian village on

the shore of Lake Michigan, they were besought not to go forward in an enterprise which could result only in their destruction. The superstition of course was not credited, and whatever of peril was before them, they were prepared to encounter it with stout hearts, and in an humble devout trust in the superintending care of Divine providence. Says Marquette, "I thanked them for their good advice, (speaking of his Indian friends,) but informed them that I could not follow it, since the salvation of my soul was at stake, for which I should be overjoyed to give my life."

Reaching the rapids on Fox river, where now is the thriving and enterprising little village of Neenah, and dragging their canoes through them with great labor, this adventurous band passed on to the Portage, under conduct of two Indian guides. Here these turned back, and the explorers, now hundreds of miles away from their brethren in the east, were "alone amid that unknown country in the hand of God."

They had arrived at a point where the waters of the Gulf of Mexico and those of the St. Lawrence divide, or, as has been incorrectly stated, the waters of the Atlantic and Pacific. Here were two great rivers, less than a mile distant from each other—the Fox, running north and emptying into Green Bay, the Wisconsin, sweeping majestically on in a southern direction, and paying tribute to the Father of Waters. Carrying their canoes across the narrow slip of intervening land, the voyagers embarked in them on a river whose waters had never before mirrored the face of a white man, down which they floated amid green and beautiful islands, until, on the 17th of June, they entered the Mississippi.

For one hundred and thirty years, no white man had looked upon the Great River, or paddled a canoe upon its waters. It had indeed been previously discovered. In 1543, De Soto, the leader of a Spanish expedition, and conqueror of Florida, fighting his way through the savages that swarmed to oppose him, at length found himself on the banks of this river, which he called "Rio Grande." Says Monette, whom we have before quoted, "De Soto may be said to have been the first European who beheld the magnificent river that rolled its waters through the unbroken forest, and splendid vegetation of a wide and deep alluvial soil. The lapse of three centuries has not changed the charcter of the stream. It was then deescribed, as it now is, as more than a mile in width, flowing with a strong current, and by the weight of its waters forcing a channel of great depth. The water was described as being always muddy, and trees and timber were continually floating down the stream."

Marquette and his companions passed down the Mississippi, making the acquaintance of several tribes along its shores, and collecting much valuable information. Having employed four weeks in this manner, they began to think of returning to Canada, to friends at home. They had accomplished the great object of their mission, and it was not demanded of them in the discharge of further duty, that they expose themselves to disaster, and peril their lives in an attempt to penetrate farther into the wilderness, or to extend beyond their explorations of the Great River. They had obtained the information that was sought, and like prudent, reasonable men, were satisfied.

They were now eleven hundred miles below the mouth of the Wisconsin river. They turned back, and commenced a toilsome und weary ascent of the river, urging their canoes against its strong current, exposed to many and severe hardships and privations. Yet their souls shrank not nor were appalled. After several weeks severe toil on their return journey, they reached the mouth of the Illinois river. Ascertaining from the Indians that this was easier of ascent, and that it afforded the most direct route to the Great Lakes, they decided to make trial of it.—Passing up this "gentle stream," a few days sufficed for the performance of their journey to Lake Michigan, which they entered through Chicago creek. Here Marquette parted from Joilet and other companions in this great tour, and sought his way alone to his missionary post among the Hurons. The others took up their line of march across to Lake Erie, on their return to Quebec.

Great was the joy and rejoicing in N. France, at the discoveries of he two distinguished leaders of the mighty enterprise. The Cathedral resounded with *Te Deum*, and the people kept jubilee. So vastly important were the results of the mission deemed. The long-dreamed of and talked of route to China, had without doubt been discovered, and in the discovery France had covered herself with glory M. Joilet received as his fitting reward a grant of the Island of Anticosti, in the St. Lawrence—Father Marquette had secured his reward in the performance of his duty, and the pleasing consciousness that he had been doing good.

State Fair.

List of awards made by the executive committee of the Wisconsin State Agricultural society, for the first annual cattle show and fair, held at Janesville, on Wednesday and Thursday Oct. 1st and 2d, 1851.

No. 1. Short Horns. Best Bull over 2 years old, Ephram Perkins, Dodge Center, Diploma.

Under 2 years, D. B. Tears, Alden, Ill., Diploma.

Best Bull Calf, S. A. Thurston, Burlington, Dip.

Cow over 3 years old, D. B. Tears Alden, Ill., Dip.

No. 2. Devons. Best Bull over 3 years old, D. B. Tears, Alden, Ill., Dip.

Under 3 years, B. Furguson, Waushara, Dip.

Best Bull Calf, D. B. Tears, Alden, Ill., Dip.

Cow over 3 years old, D. B. Tears, Alden, Ill., Dip.

Under 3 years, D. B. Tears, Dip.

Heifer Calf, Martin Webster, Waushara, Dip.

Third Best Bull Calf, Warden Madison Delevan, $1.

No, 5. Natives and Crosses. Best Bull over 3 years old, A. W. Powers, Palmyra, Dip.

Under 3 years old, T. C. Demary, Beloit, Dip.

Bull Calf, D. F. Melendy, Palmyra Dip.

Cow over 3 years old, E. K. Bingham, Koskonong, Dip.

Under 3 years, F & J Hitchkock, La Prairie, Dip.

Second best Bull under 3 years, D F Melendy, Palmyra, $1.

Bull Calf, D F Melendy, Palmyra, $1.

Cow over 3 years old, E K Bingham, Koskonong, $1.

Under 3 years, B Furguson, Fox Lake, $1.

No 6. Working Oxen. Best Yoke over 4 years old, H A Simons, Janesville, dip.

Second best F & J Hitchkock, La Prarie, $3.

Yoke of Steers 3 years old, Hitcheock,

" " 2 " F & J Hitchcock, La Prairie, dip.

Second best Yoke of steers 3 years old Zenes Bigelow, Magnolia, $2.

No. 7. Milch Cows, Second best cow F & J Hitchcock La Prairie, $1.

No. 8. Fat Cattle. Best Yoke of Oxen, J M Keep Beloit, Dip.

No. 10. Horses. Stallion over 4 years old, R. M. Wheeler, Janesville, Dip.

Second, Andrew Aitkin, Waukesha, dip.

Third, Simon Rublee, Beloit, $5.

Stallion 3 years old, C. L. Annis, Summit, dip.

2 years old Simon Rublee, Beloit, dip.

Second, James Craig, Milton, $5.

Third N. Fryer, Whitewater dip.

Brood mare, E F Mabie, Delevan, dip.

Third, E W Cornes Whitewater $4.

Mare 3 years old, S Mills, Madison, dip.

Second, G W Balser, Palmyra, $4.

Mare 2 years old, T Williams, Emerald Grove 4.

No. 11. Matched Horses. Best Pair, (Dapple Greys) A Baker, Racine, Dip.

Mare 1 year old, T P Davis, Janeville $3.

Second (Light Greys) E Bain, Kenosha, dip.

Third, Black mare, J Kent, Janesville, $5 00.

Drought horses. Best pair, grey stallions, Wm. Douglass, New York, dip.

Second, bay geldings, B. Moon, Janesville, dip.

Third, sorrel mares, E Fuller, Waukesha, $5 00.

No. 12. Geldings. Best Gelding over 4 years old, T Stevens Racine, dip.

Second, D B Tears, Alden, Ill., dip.

Third, P W Dickey, Janesville, $5.

3 yeare old, E B Fargo, Lake Mills, dip.

Second A Henderson Beloit, $5.

No. 13. Long Wooled Sheep. Best Ewe over 2 years old. Charles Wardle, Union, Dip.

Second $2 00

Best Buck Lamb and Ewe Lamb, Charles Wordle, Uuion, Dip.

No. 14. Middle Wooled Sheep. Ewe, under 2 years old, N. B. Clapp, Kenosha, dip.

No. 15. Merinoes. Buck over 3 years old, W P Benson, Fort Atkinson, dip.

Second, T W Williams, Emerald Grove, $2.

Buck under 2 years old T. W Williams, Emerald Grove, $2.

Second, E Bain Kenosha, $2.

Ewe over two years old, T W Williams, Emerald Grove, dip.

Buck Lamb, W. P. Benson, Fort Atkinson, $2.

Second, W P Benson, Fort Atkinson, $2 00.

Third, T W Williams Emerald Grove, $1 00.

Ewe under 2 years old, W. P. Benson, Fort Atkinson, $2 00.

No. 16. Saxons, Buck over 2 years old, N B Clapp, Kenosha, dip.

Second, T W Williams, Emerald Grove, $2 00.

Buck under 2 years old N. B. Clapp, Kenosha.

Ewe over 2 years old, N. B. Clapp, Kenosha.

Ewe under 2 years old, N B Clapp, Kenosha.

Buck Lamb, N. B. Clapp, Kenosha.

Ewe Lamb, N. B. Clapp, Kenosha,

No. 17. Paular Merinoes. Buck over 2 years old, E W Drury, Fond du Lac, dip.

Second, F. A Fletcher, Johnstown $2.

Buck Lamb, E W Drury, Fond du Lac, di p.

No. 18. Cross Breed Sheep. Buck under 2 years old, J Roberts, Janesville dip.

Ewe over 2 years old, J Roberts, dip.

" under " " " "

Ewe Lamb, J Roberts, dip.

Buck Lamb, J Roberts dip.

No. 19. Swine. Sow pig under 10 months, J W Dickey, Janesville, dip.

Lot of Pigs, A Hoskins, Janesville, dip.

Boar under 2 years old, A A Gifford.

Second, A J Luckey, Bradford, 1 00.

Sow over two years old, J Spalding, Harmony, dip.

No. 21. Farming Implements. Plow, J. M. May, Janesville, dip.

Harrow. T Little, Milwaukee, dip.

Cultivator. " " "

Common Harness. G. Dyer, Milwaukee, dip.

Fine. " " " "

Draught Collar. N S Woodruff, Janesville, dip.

Buggy. A Baker, Racine, dip.

Carriage Springs. S. H. Herd, Watertown, dip.

Grain Cradle. H Hammond, Clinton ;

Hand Rake, S Rublee, Beloit, dip.

Garden Rake. Parker and Love, dip.

Hay Forks. A E Keys, Watertown, dip.

Manure Forks. A E Ray, Troy, dip.

Grain Scythe. A E Keys, Watertown, dip.

Grass " " " "

Hay Knife, " " " "

Sausage Cutter. S Rublee, Beloit, dip.

Butcher Knives and Grain Sickle. Parker & Stone, Beloit, dip.

Brooms ; W. Mulks, Whitewater, dip.

3 Horse Evener. S Ruble, Beloit.

Reaper. A P Dickey, Racine.

Fanning Mill. " "

Threshing Machine Jack. J Davis, Kenosha.

Corn Sheller. J Davis, Kenosha.

Corn Grinder. A P Dickey, Racine.

Churn and Corn Drill. S D Baldwin, Adrion, Mich.

Smut Macnine. S B Newcomb, Milwaukee.

Threshing Machine. M Hughes, Kenosha.

Tread Power Threshing Machine. J I Case, Racine.

Hay Cutter. A Henderson, Johnstown.

Portable Mill. M Willard.

Soap. E D Ladd, Milwaukee.

Class B. No. 22. Dairy. Butter ; J Cory, Bachelors Grove, dip.

Second; Hugh Jehu, Harmony, $2.

Cheese; S A Thurston, Burlington, dip.

Second; Stephen Farwell, Milford, $2.

Specimens Broom Corn; Jonathan Pond, Fulton, dip.

No. 23. Grains, Sugar, Honey and Vegetables. Winter wheat; N P Bump, Janesville, dip.

Second; A O T Breed, Milwaukee, $2.

Squash; E C Hull, Madison, $1.

Bee Hive; T McElhany, Beloit, dip.

Hops; S Antisdale. Beloit, dip.

No. 24. Flour &c. Barrel of Flour, Strasberger & Co., Janesville, dip.

Hominy; Williams & Noland, Madison, dip.

Silk Hose; W Madison, Delavan, dip.

Woolen Yarn; " " " .

Woolen Stockings; H M Allen, Union, dip.

Blanket; W Madison, Delavan, dip.

Piece Flannel; H M Allen, Union, dip.

Linen Thread; W Madison, Delavan, dip.

No. 26. Oornamental Needle Work.—

Pair Ottoman and foot stool covers; Mrs E H Langdon, Milwaukee, dip.

Lamp Mats ; Mrs E B Dean, Madison, dip.

Display of Odd Fellows' Regalia, S. Gardner, Milwaukee.

Worsted table cover, Mrs Warden, Mil., dip.

Ornamented table spreat ; J D Brown, Janesville, $3.

Pair of stockings; Mrs Henderson, Beloit, dip.

Rug, Mrs A H Morse, Richmond, dip.

Quilt, Mrs W Hughes, Janesville, dip.

No. 27. Fruit. Best variety of Apples; F K Phœnix, Delevan. dip.

2d; S P Beecher, Mil., $2.

Best specimen Pears, P M Perkins, Burlington, dip.

2d; S P Beecher, Mil., 2.

3d; F K Phœnix, Delavan, $1.

Best Peaches; G O Tiffany, Milwaukee, dip.

Best Plumbs; J C Howard, Milwaukee, dip.

2d; P M Perkins, Burlington, 2 00.

Best Grapes; W Talcott, Rocton, Ill,,dip.

2d; H Ludington, Milwaukee, 2 00.

No. 28. Flowers. General display, and floral ornaments, C Gifford, Mil., dip.

2d; S P Beecher, Mil., 2 00.

Display of Dahlias and Phloxes, F. K. Phœnix, dip.

No. 29. Paintings. Printings and Dagurreotypes. Exhibitions of Card Printing. Rufus King, Charles S Hurley, B B Carey, and E Star, diplomas. Books and Pamphlets. Rufus King, dip.

Exhibitions of Daguerreotypes, Stamm & Upman, Mil., dip.

Class D, No. 30. Stoves. Cook stoves, James Saville, Mil., dip.

No. 31. Silver and Gold Ware. Best exhibition of Jewelry, A B Van Cott, Racine, dip.

Exhibition of Jewelry and Fancy ware, S Gardner, Mil., dip.

No. 32. Miscellaneous and discretionary, Pure saleratus, E Holton, Mil., dip.

Assortment of Books, J Morrison, Racine, dip.

Shoulder braces and supporters, Dr. White Chicago, dip.

Platform balance scales, N B Graston, Belott, dip.

Clocks, J W Stillman, Mil., dip.

Fancy Binding, (Harpers' Bible,) S L Rood, Mil., dip.

Blank Books, Charles Weed Madison, dip.

Circular saw and arbor, Barker & Love, Beloit.

Dressed flax, J. Galbraith, Mukwonago, dip.

Assortment of hardware, H D Noyes, Mil., dip.

Copper Coffee Urn, H K Edgerton, Mil., dip.

Plow making machine, J M May, Janesville, dip.

Sawed and cut stone, G W Tailor, Rock dip.

Apparatus for raising water from wells, J S Lindman, Manchester, Ill., dip.

Engraving and die sinking, P S Mossin, Mil.

Painting in water colors, (Flowers,) Miss H. Brace, Janesville, 2 00.

*M*iss Jane Goodrich, *M*ilton, 1 00.

Landscape Crayons, *M*iss Olive Ketchell, Janesville, dip.

Oils, Olive Clayton, Beloit, dip.

PLOWING MATCH.

With horses. First premium, Alexander & Ainslee, Milton, dip.

Second premium, J *M*ilton *M*ay, Janesville. $3.

Third premium, Robert Taylor, Spring Valley, $2.

With oxen. First premium, Lorenzo Thompson, Janesville, dip.

Second, Timothy Jackman, Janesville, $3.

Best plow, J *M* May, Janesville, dip.

Persons entitled to premiums, can have them by calling on the secretary at *M*adison. Premiums which are not called for before the first of November, will be forwarded by mail to the post office address of the recipient.

"Resolved, That the first premium of the society, be its Diploma."

The address of the sec'y is *M*adison, Wis.

ERASTUS W. DRURY,
President.

ALBERT C. INGHAM, *Sec'y.*

Management of Soils.

A soil would never get exhausted, if managed with skill, but would continue to improve in depth and fertility in proportion to the industry bestowed upon it. The food of plants, it is true, may be exhausted from the soil by a repetition of cropping with any one family of plants, if we neglect the application of such fertilizers as may have been taken from the soil by that family; but no part of the growing season is required for the soil to rest, or be fallow, if judiciously managed by a successive varying of the crops, or by supplying to them such food as may be a compensation for what has been taken off by the previous crop. The first object to be attained for securing a certain and profitable return of produce from the soil must be *the rough drainage;* the next object is, *breaking into the subsoil* to the desired depth—not without first considering whether it is proper and profitable to shift or turn up the subsoil at once to the influence of the atmosphere, or whether it be best to break into it well first, by shifting the surface soil and allowing the subsoil to remain and receive—first the beneficial influence of the atmosphere, and then—at the trenching, a portion of the subsoil may be safely stirred up and mixed with the surface soil; this practice continued for every succeeding crop, will establish a healthy fertilizing surface soil to any desired depth.

If repeated stirrings of the surface are adopted, according to the nature of the soil and weather, every growing crop will continue in healthy luxuriance, without ever suffering by receiving injury from too much moisture, drought or frost. In addition, by constantly scarifying, hoeing and forking the surface soil, not only obnoxious insects and their larvæ are expelled, but weeds would never make their appearance, much less have a chance of committing their accustomed robbery of the soil and crops.—Besides, by such repeated stirring, the soil is always prepared, sweet and healthy, for succeeding crops—no mean consideration, either, when we observe the loss of time and produce occurring to such a ruinous extent in some localities, by allowing weeds to rob and choke the growing crops, and to shed their seeds, productive of a progeny similarly injurious to the crops next in rotation.

The application of manure is most essential, and may be applied most beneficially when the soil is established in a healthy condition, and maintained thus by a constant attention to surface stirring. Yet the application of manure is a secondary consideration; for though it may be very liberally applied, and with considerable expense, yet without first insuring the healthyness of the soil, much property and labor will be sacrificed.—*Cottage Gardener.*

Southern Iowa.—A correspondent of the St. Louis Republican in speaking of this section of country says:

I have traveled along the Mississippi river and the rich valleys which have furnished the agricultural greatness of New York and Ohio; and I have come to the conclusion, Mr. Editor, that no section of the union is now, or has ever been, so promising a home for the emigrant, as that, north of you—more particularly, I mean the Des Moines Valley and the southern part of Iowa. That valley extends nearly 400 miles, diagonally through Iowa, with hardly the aggregate of twenty miles of unserviceable land throughout its entire extent—a rich and level prairie, well interspersed with timber. Besides the Des Moines river, which is better than the Illinois, there extends nearly from the source to the mouth of the river, an elevated parallel ridge of table land called the "Divide"—a natural highway, one of the best roads, naturally, I believe in any section of the Union. A plank road is now being built from Keokuk, up this "Divide," and a contract I see, has lately been concluded, by which the Des Moines river is to be made navigable for steamboats to Keosauqua, by February next. Who can calculate, sir, the effect of that work in developing the resources of this vast and fertile country?

Honey.—A. D. Wright of Ceresco, has taken, in three years, 160 pounds of honey in drawers, from one swarm of bees. In 1849 he got 48 pounds; in 1850, 40 pounds, and this year he has taken off 72 pounds, and the swarm is still in good condition for wintering. The value of 160 pounds of honey at one shilling a pound is $20. The original price of the swarm was five dollars. Every farmer should have at least one hive of bees.—*Oshkosh Democrat.*

EDITOR'S TABLE.

AGRICULTURAL MEETING.—The Rock County Agricultural society will meet at the Court House in Janesville on the first Monday in December, at 10 o'clock, A. M., for the election of officers for the year 1852. Essays will be read before the society by Messrs. Williams of Emerald Grove, Andrew Palmer of Janesville and Prof. Lathrop of Beloit.

TALLOW MAKING IN AUSTRALIA.—It is reported on reliable authority that no fewer than 743,513 sheep, and 45,050 horned cattle were boiled down for tallow in 1849, in the two colonies of New South Wales and Port Phillip. This business is rapidly on the increase. What vast means of sustaining an indefinitely increasing popu'ation does mother earth yet possess!

LARGE CATTLE IN IOWA CO.—A pair of working oxen were exhibited at the fair, on Saturday last, by Mr. George Goldthrop, of Lost Grove, that weighed upon the scales in this village, 4,210 pounds!

Mr. J. H. Vanmeter, of the town of Waldwick, placed his Durham Bull on the scales, and his weight was found to be 1,860 pounds! We presume that but few better cattle are raised in the mining district.—*Mineral Point Trib.*

EXTRAORDINARY CROP OF WHEAT.—Mr. James Davidson, Keg-Lane, near Paris, cut a field of wheat, which contained about six acres, producing the immense quantity of 480 shocks, which may be calculated to yield about 50 bushels to the acre. This gives us 300 bushels of wheat from six acres of land. The quality of the grain is most excellent. There would be little reason to complain of the poor return from the wheat crop, if every acre in Dumfries were as liberal and prolific as those owned by Mr. Davidson, even if every bushel brought only 4s or 5s york to the farmer's pocket.—*Galt Reporter.*

BIG TOMATO.—Our fellow townsman, Thos McMullen, left on our table the other day, a mammoth tomatto, measuring 18 inches in circumference, and weighing one pound and thirteen ounces, which he raised in his garden this season without extra cultivat.on. — *Fort Des Moines Journal.*

GREAT FARM.—The United States Patent Office Report says:—"One of the greatest dairies in our country is that of Col. Meacham of Pulaski, N. Y. His farm consists of one thousand acres, three hundred are devoted to grass; and he keeps one hundred head of cattle and ninety-seven cows. In one year he made thirty thousand pounds of cheese, twenty thousand of which sold at one time in New York for from six and a half to seven cents per pound. He feeds his cows mostly on hay and carrots; and he gives each cow half a bushel each day. And besides the benefit derived from the grass for his stock, he gathers not less than three hundred bushels of grass seed.

CROPS, SEEDING, &c —We have visited several parts of the county recently, and farmers everywhere tell us that the yield of their crops is much greater than was anticipated. We observed, too, that a great breadth of ground is sowed to wheat already this fall; and its appearance is seldom better.—*Oshkosh Dem.*

TOBACCO IN ILLINOIS.—The Shawneetown Advocate in a long article, urges upan the farmers of southern Illinois the importance of tobacco culture. The Advocate says, that "Illinois, in point of soil and climate, for the successful cultivation of this plant, cannot be surpassed by any state in the union." At present prices, tobacco is the most remunerative crop raised in the country.

Poultry-dung, if saved properly, will be found nearly as good as guano. The evacuations should be gathered weekly, put away in a barrel, and sprinkled over with pulverized charcoal or plaster.

A MONSTER CABBAGE.—We have heard of bipeds and quadrupeds with two heads and one body, but who ever heard of a cabbage with fifteen distinct and well formed heads on one stalk? Such a garden monster was however brought to our office on Thursday last by Mr. John Phillips, of Yongee, in whose garden this vegetable (*not intellectual*) giant was raised.—*Brockville Recorder.*

HORSES SLABBERING.—Mr. Editor: I noticed in your paper of September 11th, that the question was asked, "Why don't the horses slabber this year?" The reason is that the spiders' webs have not been on the grass this season, as usual. I have not noticed them excepting one or two mornings this season, and then but very few. Just say to that "wag at our elbow," that lobelia and the eclipse have nothing to do in the matter.—*Cor. Maine Farmer.*

☞ A tax of $800 has been voted in Berlin, Marquette co., for the purpose of building a school house.

☞ The Chicago and Galena railroad has been opened to Marengo, 68 miles from Chicago.

☞ It is said that there are 721 railroad depots and stations in New England; and it is but about a quarter of a century since the *first* railroad was commenced in America! Now, how stands the account? Why, we have something over 11,000 miles of track, and 10,000 more in the way of construction.—*Mil. Advertiser.*

Power with four good heavy horses, capable of doing as much business during the season of Threshing, as any Eight Horse Lever Power that can be produced.

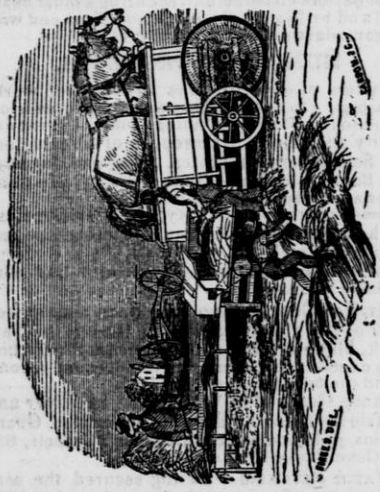
OVER TWELVE HUNDRED DOLLARS

Have been earned with one during the season of Threshing, with less than one dollar repairs on the Machine. I will also keep on hand and for sale, the most improved kinds of

LEVER POWERS.

Barber's Climax I consider the best. They run at least one-sixth lighter than the common power, and I warrant them against breaks for one year, with proper care. My largest size Separators, with three foot cylinder and elevators attached, cannot be beat. I will warrant them to clean grain fit for market, without waste, with any Eight Horse Lever Power in use.

THRESHING MACHINES.



THE subscriber has received a new supply of

Wheeler's Celebrated Railroad Horse Power and Over-Shot

THRESHING MACHINES,

Adapted to the use of one or two Horses, made in Albany, New York, which he offers for sale at his shop in Waukesha, at

ALBANY PRICES,

Adding transportation. Farmers and Threshers who study Economy, will find it to their interest to examine the above Machines—it having obtained the Premium on Exhibition in New York, Pennsylvania, Ohio, Michigan, and other States, give it such character that further recommendation here is deemed unnecessary; also,

CORN STALK AND STRAW CUTTERS, CORN SHELLERS & WOOD SAWS

To be attached to said Horse Power, may be had of the subscriber. Said Machines will be delivered at any point in the State at reasonable charges.

We, whose names are hereunto annexed, being practical Farmers, and having used Case's and other Threshing Machines now in common use, do not hesitate to say that the above machine far supersedes any we have used or seen used in durability, cheapness, and ability to perform their work perfectly, which can be done with only from one foot to eighteen inches elevation.

John Thomas,	Richard Smart,
Howel Cobb,	Nathaniel Walton,
Adam Shultis,	E. D. Clinton.

Waukesha, June 28th. W. D. BACON.

SEED WHEAT.

WISCONSIN FARMERS, it is your interest to enquire for, and select the best seed heat, both winter and spring, but especially winter, therefore, by seeing my growing crop you will see that it had stood the severe winter without injury, while other sorts of wheat have much suffered. I have eleven acres sown on spring wheat and oats stubble land, and I invite all farmers wishing to raise good crops, to come and see the superiority of the ETRURIAN WHEAT over many other kinds. It is a white bald wheat, the stalk or straw does not grow very long, and is hard and early, and not liable to be injured by the rust. Twenty cents per bushel over spring wheat is an object, besides the increase in bushels in favor of winter wheat. I have two acres of said wheat sown after a machine of my own invention, and the growing wheat is worth seeing; there is not a square foot of land but what there is a stool of wheat growing, I believe.

N. LE PROVOST.

Oakland Farm, Mount Pleasant, Racine Co. June, 1851.

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VALENTINE KOHLMANN
CHARLES KOHLMANN.

Racine, Jan. 1, 1851.

THE FRUIT GARDEN.

A treatise intended to illustrate and explain the physiology of Fruit Trees, the theory and practice of all opperations connected with the propagation, transplanting, pruning and training of Orchard and Garden Trees, as Standards, Dwarfs, Pyramids, Espalliers &c., the laying out and arranging different kinds of Orchards and Gardens, the selection of suitable varieties for different purposes and localities, gathering and preserving Fruits, treatment of disease, destruction of insects, descriptions and use of implements, etc. Illustrated with upwards of One Hundred and Fifty Figures, representing different parts of trees, all practical operations, forms of trees, Designs for plantations and implements

&c, By P. Barry, of the Mount Hope Nurseries, Rochester New York. 1 vol. 12 mo 2nd edition.

"This book *supplies* a place in fruit culture, and that is saying a great deal, while we have the popular works of Downing, Thomas and Cole. Mr. Barry has then, a field to himself, which he occupies with decided skill and ability. —Prairie Farmer.

"It is full of directions, as to the management of trees, buds and fruit, and is a valuable and pleasant book.—Alb. Eve, Jour.

"This book ought to be in every family in the U. States.—Ashtabula Sentinel.

"The work is prefaced with great judgment, and founded on the practical experience of the author, is of far greater value to the cultivator than most of the popular compilations on the subject.—N. Y. Tribune.

"It is one of the most thorough works of the kind we have ever seen, dealing in particulars as well as generalities, and imparting many valuable hints relative to soil, manures, pruning and transplanting.—Boston Gazette.

"A mass of useful information is collected, which will give the work a value even to those who possess the best works on the cultivation of fruit yet published.—Evening Post.

"His work is one of the most complete, and, as we have reason to think, most accurate to be obtained on the subject.—N. Y. Evangelist

"A concise manual of the kind here presented has long been wanted, and we will venture to say, that should this volume be carefully studied and acted upon by our industrious farmers, the quantity of fruit in the State would be doubled in five years and the quality too, greatly improved. Here may be found advice suited to all emergencies, and the gentleman farmer may find directions for the simplest matters, as well as those which trouble older heads--the book will be found invaluable.--Newark Daily Advertiser.

"Coppies of this book can be sent by mail to any part of the U, States.

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WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

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To whom all orders must be addressed from the State of Iowa.

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For the Wisconsin & Iowa Farmer.

Abstract of the Proceedings of the North-Western Convention of Fruit Growers for 1851.

REPORTED BY JOHN A. KENNICOTT, M. D.

Through the courtesy of our very efficient secretary, Samuel Edwards of La Moille, I have received his original minutes of the sayings and doings of our very interesting meeting at Princetown, from which I propose to make up an informal, though I trust a reasonably full account of our proceedings.

The convention met, agreeably to adjournment, at the court house, Princeton, Bureau co., Illinois, on Monday, Oct. 1st, 1851.—John H. Bryant was called to the chair, and Samuel Edwards appointed secretary. On motion, a list of names of members of the convention was reported as follows:

Dr. John A. Kennicott, The Grove, Northfield, Coak co., Ill.
Dr. L. S. Pennington, Sterling, Whiteside co., Ill.
Edson Harkness, Fruit Farm, Trivoli, Peoria co., Ill.
C. R. Overman, Canton, Fulton co., Ill.
R. Avery, near Burlington, Iowa.
N. Whitney, Franklin Grove, Lee co., Ill.
A. R. Whitney, do do do
Smiley Shephard, Hennepin, Ill.
J. C. Brayton, Aztalan, Wisconsin.
L. S. Parmalee, Putnam co., Ill.
W. Darley, Hennepin, Ill.
Adnah Williams, Pomme Ray Nursery, Mercer co., Ill.
Tyler McWhorter, Pomme Ray Nursery, Mercer co., Ill.
Arthur Bryant, Princeton, Ill.
Oaks Turner, Hennepin Ill.
John Bellangee, Dover, Ill.
Cyrus Bryant, Princeton, Ill.
Levi Robinson, Sparta, Knox co., Ill.
J. H. Bryant, Princeton, Ill.
J. F. Willard, Wethersfield, Henry co., Ill.
Henry Shaw, Tremont, Tazewell co., Ill.
S. M. Coe, Sterling, Whiteside co., Ill.
J. H. Overman, Canton, Fulton co., Ill.
J. T. Little, Dixon. Lee co., Ill.
Samuel Edwards, La Moille, Ill.
Henry Lyman, Sterling, Whiteside co., Ill.
A. B. Church, Princeton, Ill.
Sidney Pulsifer, Hennepin, Ill.
C. R. Clark, Granville, Ill.

[These are all the names on the reported list, but I remember several others in attendance, two in particular, *Mr.* Loomis, nurseryman and gardner, of La Salle Ill., Wm. *M.* Wylie, nurseryman, north Kent *Mich*igan.—K.]

A committee was appointed to make a draft of a constitution, for a permanent association—Edson Harkness chairman.

A committee on synonymous and momencature—Tyler *Mc*Wohrter chairman.

A committee to recommend fruirs worthy of cultivation—C. R. Overman ch'n.

A committee on Seedlings—Dr. L. S. Pennington chairman.

On motion, adjourned for dinner.

AFTER NOON SESSION.—On motion of the chairman of the committee for recommending fruits for cultivation, two more members were added thereto, viz: J. C. Brayton of Wisconsin, and R. Avery of Iowa. Mr. Shephard of this committee asked for instructions from the convention, and on motion of Edson Harkness the committee was instructed to report a list *in parts* of fruits for cultivation and also for rejection. The following commencement of a list of fruits recommended for cultiva-

tion was then handed in by the chairman, viz:

Yellow June, Early Harvest, Red June, (or Carolina Red June,) Bough, Sweet June, American Summer Pearmain.

C. R. Overman considers the Yellow June the *earliest* apple—no other particular merit. It came from North Carolia, where it is known as the May Apple.

Dr. Kennicott finds the Early Harvest rather a shy bearer, but all things considered it is one of the *best* in the west, as well as in the east. Should be taken from the tree when fully ripe, as it is one of those delicate fruits that are only truly delicious, when naturally and fully matured.

Mr. Harkness considers it first-rate, and well worthy of general cultivation.

Red June.—C. R. Overman. It is very productive, bears well every year and is decidedly the most profitable apple of its season, for the family or for market. It is furthermore very beautiful.

Adnah Williams; It is a very early bearer —rather acid for eating but for a market or kitchen apple it is unexcelled.

Mr. Avery ; Has known this apple ten years, and it is the most profitable sort known—it keeps ten or twelve days longer than any other early apple of his acquaintance—a great merit.

C. R. Overman ; Was present at a convention (in Indiana) some 12 years since, where this apple was named Blush June. The variety was here introduced from both Tennessee and North Carolina—those bro't through Tennessee were the finest in appearance.

Dr. Kennicott ; Was the apple brought through Tennessee really better than the same fruit coming directly from North Carolina?

Mr. Overman ; From some cause, the fruit on trees coming through Tennessee was certainly finer in appearance—no better in quality.

Dr. Kennicott ; The fact is worth noting however, I have observed a difference in the same fruit, from different localities.

Mr. Avery ; If any one wants an ornamental tree for the garden or lawn, the Red June cannot be excelled—more beautiful, when loaded with fruit, than the finest rose tree in full flower. It is a regular bearer—an immense bearer—and if suffered to carry its constant weight of fruit, it will wear itself out in nine or ten years. This fruit was brought into Illinois from North Carolina by Mr. H——.

Dr. K ; was glad to hear so good an account of this apple. We are in great want of a variety as early as Yellow Harvest, with better bearing propensities. This is also very beautiful, and, notwithstanding the opinion of my old friend Lewis F. Allen, I begin to think the beauty of the skin is of some account to the fruit grower—a high color is often the best recommendation in market.

Bough. [Early Sweet Bough.] Dr. K; This apple has really borne well with me—has exceeded my expectations, for I was aware of its questionable character in the west, as to productiveness.

Mr. Harkness ; With, me this apple has proved miserably unproductive—I deem it unworthy of cultivation.

Mr. Avery ; I would ask Mr. Harkness on what character of soil he has planted this apple?

Mr. H ; The soil is not the richest prairie, but better than what is termed "barrens."

John and Arthur Bryants ; Both agree with Mr. H.

C. R. Overman ; It is variable—in some localities I have known it bear well.

Mr. Shepherd ; I think it bears as well as most other fruits of large size. My soil is sandy, high and rolling.

Dr. Pennington ; I have fruited it several years, it bears well on high lands.

Dr. K; I have long thought that varieties succeeding well in Northern Illinois, may often prove worthless in the southern and central portions of the state.

On motion of Mr. Harkness the Sweet Bough was passed by.

Sweet June.—Mr. Brayton ; The tree has overborne with me—a fine, upright grower—fruit fair.

Mr. McWhorter ; It is the only early sweet apple, of particular merit that has as yet come into bearing in our vicinity.

C. R. Overman; The tree is one of the hardiest—a fine grower, an early and constant bearer. It should remain on the tree until fully ripe, otherwise, its flavor will not be perfected.

Mr. Williams; A very productive variety, so far as I have observed—much more so than the Bough. Is it not the "High top

Sweeting" of Massachusetts.

[I understood Mr. W. to raise this question. In the *notes* he is made to declare them synonymous, and the notes of the secretary are better evidence than my memory.—K.]

American Summer Pearmain.—Mr. McWhortor; This is one of the most productive early apples in my vicinity. I have but one objection to it ; the tree is a very slow grower.

Mr. Williams ; In quality and productiveness of fruit, this variety is unrivaled—the slow growing habit is objectionable in the nursery only.

C. R. Overman; Its dwarfish appearance is certainly a great objection in the nursery, but if worked at standard height,on healthy seedling stocks, this serious fault is in a measure obviated.

Mr. Harkness ; A valuable fruit, and should be recommended for general cultivation.

Mr. Shephard ; I should be most highly recommended.

Cyrus Bryant ; All agree in recommending the *fruit*, but appear to condemn the *tree*. Let us act accordingly. Agreed.

The Maiden's Blush was called up.

Dr. Kennicott ; I observe many of this variety in the Chicago market, where it appears to be in demand, for the beauty of its skin, and its name, doubtless.

Mr. McWharten ; In quality it is not more than second rate.

Mr. Harkness ; We must not confine ourselves to quality alone. We must have regard to productiveness also, and this variety produces well, besides being very beautiful.

Arthur Bryant ; I will mention one property which may soon be of consequence to us—this apple is excellent for drying.

Dr. Kennicott here observed that our final recommendation of fruits was rather vague and unsatisfactory, he therefore moved that we adopt the rules and phraseology of the American Pomological Congress, in our future recommendations, and that the committee be instructed to report accordingly, in future using the terms "good," "very good," and "best"

Carried—and the Maiden's Blush passed as *good*, and one of the *best* for cooking.

Hocking [Local name,] was then called up.

Mr. Harkness ; The fruit came to me from Ohio, as the "Hocking Greening"—a winter apple—but as it proved to be a summer fruit, and anything but a Greening, I retained the name of Hocking ; knowing no other. I consider it my best August apple. The tree is very vigorous, and hardy, and an early and excellent bearer.

Mr. Bryant ; We should be cautious in recommending fruits of native name and origin, unless well known to us.

Dr. Kennicott ; I am somewhat curious with respect to this apple. I took specimens of it to the New York State Fair for Mr. Harkness, where it excited the attention of well known pomologsts—no one knew it—but it was thought that it might be some old variety altered by our soil and climate, so as to prevent a certain recognition.

Mr. Harkness ; I have thought, from description, that my Hocking might be the Rambour Franc.

Dr. Kennicott ; No, it resembles that variety, but is later—at least the specimens I have seen—and my Rambour Franc was shown along side of your Hocking in New York, and was recognized by both Charles Downing and F. R. Elliott as true, while the latter was unknown.

Dr. Kennicott now introduced the Keswick Codlin for consideration. It should be in every kitchen garden, and is worthy of limited cultivation in every orchard in Northern Illinois, at least. It grows beautifully in the nursery, and is one of the first to bear in the orchard—generally fruiting in 2 or 3 years after transplanting. With me, the crop has been large and certain—ripening in succession from August to October. It is recommended for cooking only; and must be used as soon as ripe, as it will not keep a week, becoming dry and mealy; though very fine and juicy when first taken from the tree.

Mr. Whitney ; It is a *very* early bearer in our region and worthy of a place in new orchards, on that account.

Mr. McWhorter ; I do not consider it worthy of extensive orchard cultivation, but it should be in every village garden.

Dr. Kennicott; I do not believe the Keswick Codlin will prove of any value south—it is recommended for the north only.

The Dutches of Oldenburg was mentioned ; Dr. Kennicott has fruited it, but thinks his a misnomer ; a profuse bearer,

and a large and most beautiful apple—it may he Rambour Franc—resembles it nearly in shape and color, is large, but this may be on account of the more thrifty habit of the tree, under the name of Dutches of Oldenburg. Be it what it may, it is most valuable as a market fruit, in the immediate neighborhood of large towns, where beautiful early fruits are of rapid sale—quality only good.

[This rambling irregular conversation continued for some time, and got back upon the "Hocking" which seemed to be confounded with Early Pennock.—K.]

C. R. Overman ; I deem the Hocking a valuable market sort—productive and profitable.

Mr. Whitney ; Took the Hocking to Cincinnati last fall—had it before the Horticultural Society, the fruit was not recognized.

Early Pennock; Mr. Bellange introduced it from Ohio, and finds it very productive.

Mr. Harkness ; Received the Hocking through Mr. Selby, from Fairfield county, Ohio.

[It was here observed, by some one, that we were confounding the two apples—both being on the tables, it was clearly shown that the Early Pennock was decidedly conical in form, and a better flavored fruit.–K.]

It was agreed that Early Pennock and Hocking were well worthy of cultivation.

Here the committee again reported as follows:

Fall Wine—Good for moderate cultivation.

Sweet Swaar—Good.

Rambo—Good ; the best for general cultivation.

On motion of Mr. Harkness the Fall Wine was passed as *very good for general cultivation.*

Sweet Swaar—On motion of Mr. Harkness, passed by without recommendation.

Rambo—Recommended unanimously.

Committee on synonymes recommended the translation of foreign names, when easy, the adoption of the English synonym. For example : Famense or Pomme de Neige, should be Snow Apple—Pomme Gris, Grey Apple, &c.

Mr. Harkness took occasion to speak of the Pomme Gris. He considers it the finest flavored apple of its class, and a profuse bearer.

Committee for recommending fruits now reported.

Bullocks Pippin—One of the best early winter, for moderate cultivation.

Vanderoere—Good.

White Bell Flower—Good.

Fulton—Very good.

C. R. Overman ; The Bullocks Pippin, [American Golden Russet,] is an early bearer, but not uniformly a *good bearer*—it blasts to some extent ; and yet its flavor is so excellent, so very superior, that we are bound to recommend it for a limited cultivation. No dissent.

Mr. McWhorter ; Is well acquainted with the Vanderoere ; has generally found it equal to *best* ; knows few, if any, superior; a good bearer, too.

Mr. Avery ; considers the Vanderoere rather subject to blight.

On motion, Recommended for general cultivation.

White Bell Flower—Passed without comment.

Yellow Bell Flower—Doctor Pennington moved that we recommend it as *very good,* instead of "good"—Carried.

Fulton.—Mr. McWhorter is familiar with this new Illinois apple. In December and January, when in full perfection, he regards it as *best.*

Mr. Harkness ; would also call it best—passed as recommended by the committee.

[All may not know that it is a seedling of Fulton co. The original tree, in the orchard of Mr. Copps, is a great bearer.—K.]

The committee now reported as follows:

Wine Sap—Good.

Swaar—Good.

White Winter Pearmain—Very good.

Dominie—Good.

Rowles Jannette—Good.

The Wine Sap passed without particular comment.

Mr. McWhorter moved that the Swaar be classed as *best.* This tree is apt to overgrow the stock, and when "root grafted" there is a deficiency of roots in the nursery tree. Passed, as *beet.*

"White Winter Permain"—supposed to be Michail Henry Pippin.

C. R. Overman was understood to say, that the description of the one in the books answered very well for the other.

Dr. Pennington considers them two distinct fruits. He has been acquainted with

the M. H. Pippin from childhood.

Mr. McWhorter moved that this apple be adopted as recommended—carried.

Dominie—Passed, without observation.

Rowles Janette.—On motion of Mr. Harkness this apple was passed, as *very good*, instead of "good."

Convention adjourned to 7 o'clock.

EVENING SESSION.

Mr Avery desired an expression of opinion on some of our *shy bearers*. He would commence with Newton Pippin and Prior's Red.

Dr. Kennicott ; We have fruited the Newton Pippin, and have found it a very shy bearer, and a most miserable grower, in both nursery and orchard. I am inclined to believe that it will not succeed in the west, unless possibly, on some particular soils—at first, we thought better of it—but now, we propagate it very sparingly, and do not recommend it at all.

Mr Harkness asked if *any one* could report favorably of it, in any particular region.

Dr Pennington ; Mr Dudley, near Lyndon, Whitesides co, raises good specimens of Newton Pippin. The trees which are of both varieties, ("Green" and "Yellow") bear well—soil light, and somewhat sandy.

Mr Shepherd ; Good specimens are obtained in my vicinity, on hazle barrens—Rich, sandy loam—subsoil, clay.

Mr Harkness ; Mr Copps has two bearing trees, producing better than any I have seen in the country. These stand on thin soil, somewhat sandy.

Pryor's Red—Doctor Pennington planted trees of Pryor's Red nine years ago ; did not consider them worth the ground they occupied.

C R Overman ; I have seen a few trees, of 20 years standing, rather thin soil, bearing tolerably well: It does well in Indiana.

Mr. Harkness called up Rhode Island Greening.

Dr Kennicott ; It always bears *some* fruit with us, and that, both large and fair. Still, we rank it among the rather shy bearers. Our soil is rich, black muck—over impervious clay—some sand, but little—Alumina in the surface soil.

Mr H ; My experience, with this apple, agrees with Dr K's.

Dr P ; I have fruited the Rhode Island Greening a few years. I consider it as but second rate at best. It does badly root grafted—I cannot recommend it for general cultivation.

Mr Williams; I have seen this old favorite in bearing, in a great many orchards, throughout this region. Fruit, uniformly fine, large and fair ; and yet, a very shy bearer.

Mr. Avery called for Esapus Spitzenburg.

Mr. Shaw ; I know a fine, large tree, about 20 years old on the farm of Mr. Kingman, near Tremont, Tazewell co. It bears fine crops of good and very fair fruit. The tree is growing in a good rich prairie soil.

Mr. Williams ; I have seen some trees near Galesburg, about 13 years old, bearing good crops.

Dr. Kennicott introduced the Red Ostrichan, and said, that it proved to be a good bearer, and certainly was the most beautiful apple of its season. It had been sold in Chicago for $2 per bushel—it is one of the very best for cooking purposes, especially for stewing. The tree is a hardy, upright, and very fine grower.

Mr. Williams ; In our nursery, budded trees have yellowish, sickly foliage.

Dr. K ; With us the foliage is nearly as rich as the fruit.

Dr. P ; My trees are young, and but very moderate bearers. The fruit is very showy, but much too acid for the desert. I would sooner raise the Keswick Codlin, as a market fruit, for profit.

Dr. P. then observed that he did not think the Rambo had been sufficiently lauded as an apple of the west. It has no superior—but this variety should always be *budded*.

Mr. Harkness ; I believe it was unanimously conceded, that this *is the apple* of the west, and needed no praise from us.—I have *root grafted* trees bearing ten bushels each, this season.

Dr. P ; I have never yet found a root grafted Rambo in bearing in my vicinity—north of Rock river.

Dr. K. introduced the Poughkeepsie or Winter Russet — thinks its bearing and keeping properties should recommend it to notice—an enormous bearer, and will keep a year.

Mr. H ; Thinks it may do well in the north, but our hot summers do not suit it.

Mr. Avery again called up Esapus Spitsenburg. He deemed it very liable to blight, and would like to hear the experience of others on this subject.

Mr. H. agrees with Mr. Avery—it is subject to blight.

Cyrus Bryant ; I planted a number of Esapus Spitsenburg some ten years since, but they have *winterkilled* until I have but part of one tree left, and *that* is nearly dead with blight.

John Bryant ; I had about 40 scions set in the top of a Pennock last season, and about all are dead with blight.

Mr. Harkness called up Roxbury Russet.

Mr. Avery says ; that, from ten year's experience he concludes, [except on thin, dry soil] the tree is too tender, and too shy a bearer for us.

Mr. Williams; The fruit is large and fair, a shy bearer.

Dr. Pennington ; I must vindicate the character of the Roxbury Russet—with me it bears well, and keeps well through the winter ; though not into spring.

On proper soil, it bears as much as we ought to ask from any tree. It does badly root grafted.

Mr. Shepherd ; When *budded* it does well, and is an abundant bearer ; it does not keep well in the spring.

Mr. H ; it should never be root grafted. When of sufficient age, the trees bear well; but the fruit is a bad keeper.

Mr. Avery called up the Baldwin.

C. R. Overman ; We have trees seven years in the orchard—bore this year for the first time. A neighbor had a liberal crop last year. The spots on the skin are suspicious of bitter rot.

Mr. Shepherd ; I have had the Baldwin four years in bearing—I have seen it affected with bitter rot,but not for the last two years, My soil is high, dry and sandy.

Mr. Williams ; I know a tree of the Baldwin 13 years in the orchard, which has borne but one crop—prairie soil—scions cut from this tree, however, bear three years earlier than that from which they were taken.

Mr Avery; I should like to know if any one can speak against the Winesap?

C R Overman; The Winesap has always borne well with us, but on old trees, the fruit is too small sometimes—the tree is very hardy, and the branches tough and resisting—a regular bearer too, as well as a good bearer.

Mr Avery ; Does any one know a tree, bearing *large and constant crops*, where the size of the fruit does not become smaller, in time, unless the tree is headed down?

Mr H ; I know none such.

Mr. Williams; We must have one "made to order" before we get such a tree, I fear.

Dr. P; I would call up Smith's Cider.—With me it has proved first rate. (No remarks recorded.)

Mr. Avery ; Does any one know of a locality in the west unfavorable to the White and Yellow Bell Flowers?

Mr. Shaw; With me they do well—none better.

[In the remarks which follow, I think the Yellow Bell Flower only, is referred to.—K.]

Cyrus Bryant ; I have had good crops from my trees. They do not bear young however.

Mr. H ; With me the tree becomes large before it bears ; but when not much cultivated, it comes into bearing earlier.

Dr. P; There is no better apple for the west—I think if justice were done it we should rank it as "best"—with me it bears better budded.

Mr. Williams ; I saw a small orchard of this apple planted in 1836—trees but one year old when set—bore 25 bushels last year. The only objection to it is this tardiness in producing fruit ; and perhaps it blossoms too early in the season, also.

Mr. Shepherd ; With me it is more productive—fruit fine when root grafted.

Mr. Shaw ; I would add one fact in its favor, of much account at this time; I consider it remarkably *exempt from blight.*—[I understood others to concur in this.—K.]

Mr. Williams ; The Michail Henry Pippin is one of the worst to blight.

Mr. Avery ; I consider the Belmont very liable to this affection.

Mr. H. called up Ribston Pippin and said that he had high hopes of it.

Dr. K. said that one of his English neighbors had fruited what he called Ribston Pippin, and pronounced it "better than at home ;" But Dr. K. thinks the apple in question is not true to name.

Mr. H ; My apple has been examined by

an English Pomologist and pronounced genuine. And it is certainly an excellent fruit, and I have reason to hope it will succeed here.

[This may be *the* pippin—the real Simon Pure—Still I am inclined to doubt it. A late keeping English apple, like the Ribston Pippin, will hardly keep up its character in Central Illinois, when it fails in Upper Canada, and only succeeds in the lower province, and in Maine and New Hampshire.—K.]

[To be Continued.]

A Farmer's Life.

The Hon. Joseph R. Williams recently delivered an address before the Michigan State Agricultural Society, at Ann Arbor, which is distinguished by the soundness of its views, no less than by the perspicuity with which they are advanced. We present to our readers the following extract from it, devoted to a consideration of the farmer's calling, to which we invite their careful attention:

"A farmer should not consider it presumption, but a duty, to gladen his home with all true, and genial, and intrinsically valuable comforts, that shed a glow and attractiveness around the private home of the citizen. He can make it more inviting. There are few comforts and appliances about the home of a townsman which a countryman cannot enjoy. There is a thousand pleasures around a country residence which all the capital of a city cannot buy. A farmer surveys from his window with unalloyed delight the field now groaning by superior cultivation, under twice the crop of previous years. While he gains it, the world gains it. It is so much added to the production. But multiplied and dubious are the ways in which a townsman makes his gains; sometimes 'tis extortion. Sometimes a double value is given to the raw material, but oftener his gain is loss to another. To say the least, the townsman is sometimes exposed to inevitable necessity and expediency and dishonor. From such necessities the farmer can, if he will, always be free.

"'God made the country, man made the city!' Just so superior as God's works are to man's works just so far superior are the studies of the country to the studies of the own. If you look upon the rich and gorgeous development of nature from spring to fall, from the tinny green to the abundant crop, with no more delight than on piles of stone, and brick and mortar, then your life anywhere will be desultory, hard and dull. When he gazed upon the miracle of his own fame in awe and admiration, David exclaimed: 'I am fearfully and wonderfully made.' Yet each plant and spire of grass, each tree and fruit, each creature, every form of vegetable and animal life, is a growing and living miracle, no less wonderful than the frame of man. If he studies them all as living illustrations of scientific truths, and he delights at each new discovery of the capacity and properties of a plant or an animal, and each new insight into the laws of regulating its propagation and perfect growth, then, indeed, will a farmer become a philosopher and a man of science, and his life will be a ceaseless round of triumph, experiment and success. From the most trifling act, to the performance of the highest duty of a noble calling, his life will be full of satisfaction. The favorite domestic animal, which he has watched and fed from a nurstling seems to lick his hand in gratitude, and almost eager to contribute to his support. Look along that avenue of stately trees, groaning beneath an abundance of delicious fruit or throwing a refreshing shade over a weary traveler. But yesterday it was a bundle of mere twigs; providently brought home, grasped perhaps in a single hand. It may be that wide fields around him have been transfered from the wilderness by energy, and now blossom like the rose. No groans nor tears, no sinks of misery and of crime, or squalid poverty are witnessed in his daily walks, and in the performance of his daily duty. His mind need not be tortured with intense anxiety because struggling on the verge of commercial ruin. He runs less hazard of having his body racked with every disease to which muscle and nerve, and head and stomach are liable. But I fear I am straying wide of my subject. I wished to show that the pursuits of a farmer may be rendered the most intensely interesting, the most noble and most engrossing to all the faculties, of both body and mind, of human occupations. As soon as it is made so, it will become the most profitable and thrifty also. What a farmer wills his life and profession to be, that it will prove."

For the Wisconsin & Iowa Farmer.

BUFFALO, Marquette Co., September, 1851.

DEAR SIR—I should like the Wisconsin Farmer better if you could procure more correspondents from our sandy county of Marquette, as a considerable portion of the land about here is quite sandy and requires some kind of manure to grow crops successfully. We cannot make stable manure sufficient to manure a large farm; and I hardly think clover can be grown successfully. What is the best time to sow clover? I sowed some last spring on spring wheat—some on oats—and some on clean land, and it all come up, but that on the wheat and oats is about all dead; so I think it will not do. What I sowed by itself looks pretty well. My land is the red sandy loam—timber mostly black oak. Can some of your correspondents tell us whether oats will answer instead of clover for manure, and if so, what time they ought to be sowed and plowed under? I should like to have you inform me what the process of mulching trees is. Yours,

HENRY W. HULL.

REMARKS.—The following article, which we copy from the June number of the ALBANY CULTIVATOR for 1850 upon the management of sandy soils we would recommend to our Marquette friends. It is the best treaties upon the improvement of sandy soils that has ever come under our notice.

Mulching trees consists in covering the ground around them, with straw, coarse manure, chip dung or leaves, according to the quality of the soil where the trees stand.—The amount of either to be used about a tree, must be determined by circumstances. *Ed. Farmer.*

Management of Sandy Lands.

Some soils are too light, and others too heavy for profitable cultivation; and it was long ago held to be one of the cardinal principles in farming, to "make light land heavier and heavy land lighter."

The difficulties attending the successful cultivation of a sandy soil, arise chiefly from the want of coherence in its particles at the surface. From this cause it parts too easily with moisture, and with the gaseous portion of manures. Seeds placed in such soils may fail to germinate, or may be blown from their beds by winds, and the young plants are liable to be destroyed from the same cause. It is true, that when plants are once fairly started in sandy soil, they will often sustain themselves during drouth, better than in a soil of compact texture; because the mechanical relations of the soil in the former case, favor the ascent of moisture from below, and also allow the ready extension of roots to a great depth. Hence, as before indicated, the principal defect to be corrected in a sandy soil, is the looseness of its surface. To insure the germination of seeds, and to secure the young plants in their places, the soil must be made firm enough to resist the action of winds.

One of the best substances to apply to a sandy soil, is clay. Common clay, although composed chiefly of sand or silex, owes its adhesiveness to another substance it contains, called alumina; and hence by the application of clay, we increase the adhesive principle. It is fortunate that most sandy tracts are underlaid with clay, at a greater or less depth, and in many instances it may be obtained and applied at a cost which would render it a profitable means of improvement. A coating of stiff clay, two or three inches thick, will convert almost any sandy soil into a good loam.

Prof. Norton, in his address at Northampton, (1849,) observes: "The want of alumina is not easily supplied, except in situations where clay can be procured. When it can be had, a load of it is frequently of more value than a load of manure, because it has not only an immediate effect, but also permanently improves the land. I know of one farmer near Hartford, who has carted clay by his return teams from that city, a distance of nearly nine miles. He assured me that it paid him well, and that a full load of stiff clay was worth, on his soil, two loads of manure. * * * This addition of clay is not alone useful as bringing new and valuable ingredients to the soil; perhaps its principal value consists in the power it gives the soil to retain moisture, and the manures which are applied to it.—Thus it is the means of lasting improvement."

W. C. Goldthwait, Esq., in an address delivered at Springfield, Mass., last fall, observed: If land is too porus for want of clay, then supply what is wanting. Nature has fortunately so disposed the different kinds of earth, that no part of our territory is very remote from a deposite of the best clay. This costs nothing but the labor of removal, and though in most cases it will not act as a manure, yet it will render the soil more fit for future cultivation. * * * I have tried some experiments of this kind, putting on about eighty cords to the acre, or say three inches in depth. * * *— Some may prefer a lighter dressing, but in farming as well as elsewhere, 'work once well done is twice done.' The effects of this course of treatment are exceedingly durable. Fields within my knowledge that were so treated a long time ago, have exhibited the beneficial effects after a lapse of twety-five years. It should be remarked that much care is necessary to see that the clay is thoroughly mixed with the soil, or much of it will prove little better than blocks of stone. Exposure to the frost before plowing in, is one of the most efficient means of accomplishing this. Water expands in freezing; hence moist earth expands under the influence of frost, and becomes disintergated. The use of the harrow, after the clay has frozen and dried, will be exceedingly efficient."

It is, no doubt, true that the beneficial action of clay on sanday soils, consists chiefly in its rendering them more tenacious; but some clays abound in the elements which produce fertility and supply the food of plants. They become, under the effects of drainage, and proper exposure to air and frost, very productive, especially in grass.— This is strikingly the case with clays in the Connecticut Valley; and the stiff blue clay of Albany, when its tenacity is sufficiently overcome, forms a rich soil. Prof. Emmons analysed this clay, and gives the following as its composition:

Water of absorption,	4.25
Organic matter,	1.17
Sulphate of lime,	1.00
Silicates.	69.02
Peroxide of iron and alumina,	17.24
Potash,	0.14
Carbonate of lime,	4.00
Magnesia,	3.00
	98.82

Prof. E. remarks—"It appears from numerous examinations which we have made, that clays contain more or less vegetable matter; they all blacken previous to ignition, and give off the odor of burning vegetables." The above analysis shows a fair proportion of lime in the states of carbonate and sulphate—as well as potash and magnesia. It shows in fact, a richer soil, except in vegetable matter, than most of those ordinarily called good. So that we not only increase the tenacity of sandy soil by adding such clay to it, but we, at the same time furnish elements which are directly useful in the growth and perfection of plants.

Wood-ashes are also an excellent manure for sandy soils. The potash dissolves a portion of the silex or flint, and the soil becomes more close in its texture. It is probable that all alkalies have a similar tendency. Hence urine and guano, which contain much ammonia, are particularly valuable for sands—they furnish the nitrogen of plants, and improve the physical character of the soil by making it more compact.— Unfermented animal manures, mixed with straw or other vegetable matter, are not proper for sandy soils. They increase the defect which it is wished to remedy; that is, render the soil more open, which according, to the weather, causes the manure either to dry up and its strength to evaporate, or to be leached into the earth by rains. It is found best in all cases, so far as we have been acquainted with the improvement of this kind of soil, to apply animal manure in the form of well rotted compost. The objection which has been made, that this mode of managing manure causes a waste of its valuable properties, is not well founded. The absorbent substances, peat or litter, which should be mixed with the manure, will prevent the escape of the saline and gaseous portions; the ammonia will combine with the carbon, and remain sufficiently fixed till the manure is applied to crops. Manure in this state does not make the soil more dry, but rather attracts moisture to it, and consolidates its particles.

[To be Continued.]

VOLUME 4, 1852.

A MONTHLY JOURNAL DEVOTED TO

AGRICULTURE & HORTICULTURE.

EACH NUMBER will contain 24 octavo pages; and by the enlargement we propose to make about one fourth more reading matter than heretofore, without any increase of price. The volume shall contain at least 100 ENGRAVINGS of Animals, Machines, Buildings, Implements, Fruits Flowers, Grains, Plants, Vegetables, &c.

Having nearly completed the 3d Volume of the Wisconsin Farmer, we present to the public a Prospectus for the 4th,—to be commenced on the 1st of January, 1852, under the title of the NORTHWESTERN CULTIVATOR.

On Entering upon the 4th Volume of the Cultivator, we deem it necessary to say but little of the design of the work. It has been before the public three years, and the object of its publication must be familiar to all within the range of its circulation. Although it has not been, thus far, all we could wish, or intended ; yet, we believe it will bear a favorable comparison with other Agricultural journals of the day. We are now fairly *planted* upon our farm in the ROCK RIVER VALLEY, with no business to occupy our attention, aside from its cultivation, and the management of the CULTIVATOR.

We now possess superior advantages for making the Cultivator the best and cheapest agricultural journal in the country ; and shall be unremitting in our efforts to make it a medium of useful information, specially adapted to the agricultural, and kindred interests of the Northwest.

It Has been truly said, that, "in all farming there are local causes appearing in one section of our vast country, that do not appear in another. Each section has its different wants, and each ought to have its different paper to explain those wants." The rising importance of the NORTHWEST imperatively demands a publication, specially devoted to its Agricultural interest ; that may be an incentive to a thorought and efficient system of farming.

It is to the FARMERS, MECHANICS and MANUFACTURERS, of the Northwest, that we look for support, in carrying forward our enterprise. We are located in your midst—our interests are identified with yours—we will labor hard to *deserve* your patronage—SHALL WE HAVE IT ?

TERMS:

Fifty cents a year in advance.—Five copies for $2 00, if sent to one post office, and any larger number at the same rate.

PREMIUMS:

With a view to compensate the friends of Agricultural improvement beyond the commission offered in the above terms, (who may exert themselves in our behalf), we offer the following PREMIUMS:

To the person who shall send us the largest number of Subscribers, not less that 50, by the 1st day of March next, the 1, 2 and 3 volumes of the Farmer, bound, and..... $10 00

For the 2d largest list of not less than 40 subscribers,..... 7 00

" 3d " " " 35 " 5 00

" 4th " " " 30 " 3 00

Every person sending us a list of 24 subscribers, shall receive free of postage, Barry's Fruit Book ; a new

and popular work on the cultivation and management of fruit trees: also, an extra copy of the Cultivator.

To every person sending us 20 subscribers a copy of Cole's Fruit Book, or any other agricultural work, free of postage, worth 75 cents.

To every person sending us 15 subscribers, two extra copies of the Cultivator; and for 10 subscribers one extra copy.

County and Town Premiums:

To the Agricultural Society, of the County, from which we may receive the largest number of subscribers, not less than 500, we will give TWENTY-FIVE DOLLARS, in Agricultural books to be distributed as premiums at the next annual fair of the society.

For the second largest number of subscribers, not less than 400, TWENTY DOLLARS worth of agricultural books.

And to the third largest list, without regard to number, twenty copies of either volume of the Farmer, to be disposed of as above.

To Each SCHOOL DISTRICT LIBRARY in the TOWN, from which we may receive the largest number of subscribers, we will give the three back volumes of the Farmer neatly bound.

Should this premium be taken by any town in the County of Rock, the same will be given to any town out of this county from which we may receive the next largerst number of subscribers.

The list of premiums will be published in the April number of the Cultivator, and immediately paid over to whom they are awarded, on demand.

MAKE UP CLUBS EARLY.

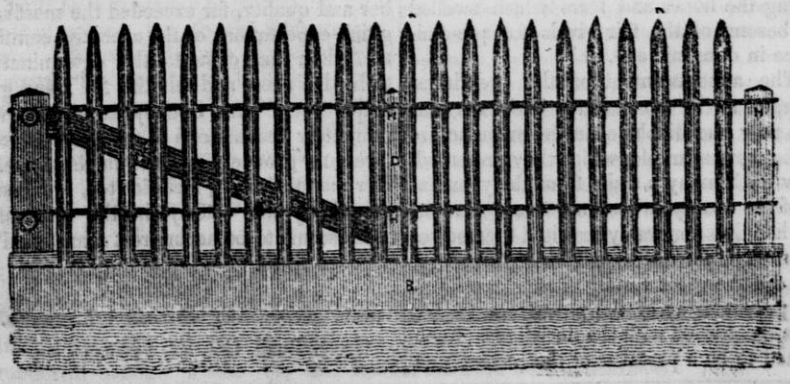
We wish all agents holding subscription papers, to send in what names they may have received, the last of December or first of January, that we may be the better able to know how large an edition to commence the volume with.

FRANKING PRIVILEGE.—All Post Masters, the receipts of whose offices do not exceed $200, per annum are allowed to send money to publishers free.

On commencing this volume of the Farmer, we have a word to say, in particular, to our old agents and subscribers. It is a fact which we freely admit, that the Farmer has been, for the last year, issued very irregular; hence, doubts may still be entertained of our punctuality hereafter. Now, as an earnest of confidence in our ability to be prompt in our future issues; we say to our old agents, who will be responsible for the number of papers ordered by them, that we will wait six months for payments; and more—if the Farmer is not published and mailed in as good time as any other paper received at your several post offices, we will forfeit the years subscription. This proposition is certainly a fair one, and we hope satisfactory enough to induce every one of our old subscribers to try us one year more at least. The first six months of our paper shall be worth to any man, who will read it, double the price of a years subscription.

MARK MILLER, Publisher.

JANESVILLE, Nov. 25, 1851.



For the Wisconsin & Iowa Farmer.

Sheboygan County Cattle Show and Fair.

FRIEND MILLER—The crisis is over !—Sheboygan county has held her first fair, and resolved to awaken to her own true interests ; and, judging from the manifestations of zeal, by her farmers and other citizens, on the 24th and 25th ultimo, she will not long remain behind her sister counties in the different departments of industry. Everything moved smoothly and pleasantly onward.

The citizens of Sheboygan Falls, where the show was held, with their accustomed liberality, had made ample preparations for the reception and accommodation of the different animals which might be entered, and suitable rooms for the proper arrangement of all the articles presented.

At an early hour on the 24th farmers from different parts of the country, with their wagons laden with the products of their farms, and their dairies, were seen wending their way to the show ground, while the boys were left behind to "lead in the animals," which seemed to possess an instinctive knowledge that they were to be the chief objects of interest on that day ; and, that there could be "no fun until they arrived."

The streets of the village were teeming with life. Old men and matrons, young men and maidens were on the *qui vive* to witness the laying of the corner stone of agriculture in the county of Sheboygan.—The old farmers seemed satisfied with the result of their past efforts, and elated with the prospects which seemed to await their future exertions. And when the products of the ladies' industry were presented many a hasty glance was exchanged, manifesting the hopes and fears which swelled the bosoms of the fair rivals for pre-eminence in domestic arts.

The announcement of the premiums, awarded to the fair sex, for the taste and skill they had displayed in the manufacture of the various articles which they presented, drew forth many a smile from the yeomanry of the county, whose wives and daughters had thus honorably acquited themselves in the strife for the acqusition of *fair* glory. Nor did the great variety of articles presented, permit many of the presentees to become dissatisfied with the decissions. Each seemed to be a partaker of the honors and rewards. Then came the young men, who seemed to vie with each other in their earnest and frequent inquiries for the name and residence of the fair maiden whose hands had made a particular firkin of butter or a bedquilt, a carpet or a cheese, a bonnet or a boquet ; although the manufacture of the last mentioned article would not be considered indispensably requisite in keeping house or conducting a farm. Then came the mechanics, the industrious workers in wood, iron, leather and various other materials, to contend for the honors to be awarded to their respective crafts. Plows and wagons, fanning mills and straw cutters, boots and shoes, and various other articles, too numerous to mention, were presented for the inspection of the judges, and those whose curiosity was excited by the brilliant display of mechanism.

At 2 o'clock a large concourse of people, including the officers and members of the society, assembled at the Baptist church and listened to a very able and excellent address by the president of the society, Dr. Seely, of which the obliging editor of the "Mercury" will probably furnish you with a copy, as the society have ordered its publication.

On the 2d day the principal business was the plowing match, which created an unusual degree of interest, especially among the owners of the "crack" teams, which had been entered upon the list to contend for the prizes to be awarded for a practical illustration of the skill and despatch of the drivers and teams in cultivating the soil.—They all acquitted themselves with much honor.

I might tell you much of the quality of the different animals and articles presented; but suffice it to say, that they, both in number and quality, far exceeded the most sanguine expectations of the executive committee, when they came to the determination to hold a show and fair this fall ; and give ample proof that Sheboygan county will ultimately become one of the finest agricultural and growing counties in the state.—Her manufacturing facilities too, are unsurpassed by any county in the state, and, there seems to be an interest manifested to improve them.

Yours truly,

SOLOMON LOMBARD.

Green Bush, Oct. 22, 1851.

AMERICA AT THE WORLD'S FAIR.—A correspondent of the Boston Journal gives an account of the trial of plows on exhibition at the World's Fair, which took place at Hounslow, about the close of July. The competing plows were from Beligium, Bohemia, Canada, Holland, United States and England. The writer says:

Great anxiety was manifested to see the American plow tried, and when the first one was put into the ground the exclamation I heard from many was, "Those plows [the American] will break ; they can't do the work !" but when the plow went thro', with great ease to the teams, and the plowman, an Englishman who had never before held an American plow said, "It holds easy," the tide began to ebb, and soon it completely turned about.

A light two horse plow was tried in the ground with one horse, and plowed with great ease. They were astonished at this as it is well known that the prize English plows are so heavy that they are a load for one horse to draw without being put into the ground at all.

The jurors decided to award the prize medal to the Center Draught plow, manuactured by Prouty & Mears of Boston.

THE FIRST STEAMSHIP THAT CROSSED THE ATLANTIC.—The American steamship Savannah, built by Croker & Ficket, at Corlear's Hook, in the city of New York, is universally conceded to be the first steam-propelled vessel that ever crossed the Atlantic ocean. From the memory of one who formed her crew, (Mr. A.Thomas, then fireman,) and believed to be, with one exception, the only survivor, we are able to give a succinct narrative of her voyage. According to his understanding of the facts, she was built by a company of gentlemen, with a view of selling her to the Emperor of Russia. The company was organized thro' the agency of Capt. Moses Rodgers, afterwards her commander. The Savannah was a vessel of 380 tons, ship-rigged, and was furnished with a horizontal engine. This was placed between decks—boilers in the lower hold. She arrived at Liverpool in 18 days, 1819. [Selected.

What they Say of us Abroad.

The tune of the English press, in its comments upon this country, has undergone a wonderful change within the last few weeks. We have already quoted some specimens of this change from the London Times. The London Shipping and Merchantile Gazette in a late number, has this paragraph in the course of an article upon the future of America:

"We have no desire at present, to enter upon the question of disputed policy ; but we wish to record our opinion, that the empire of the seas must, before long, be ceded to America ; its perseverirg enterprise, its great commerce, and its accruing wealth, are certain to secure this prize ; nor will England be in a situation to dispute it with her. Without this crowning capital to its power the onward march of the United States to what we believe will be overwhelming, greatness, might not be so speedily accomp'ished ; but America as mistress of the ocean, must overstride the civilized world."

"'Forty years ago,' says a cotemporary, Europe sat in astonisment and terror under the shadow of Napoleon's gigantic empire. At that time, in a debate in the British parliament, something was said of the American navy, when a member remarked that 'the American navy consisted of six vessels,' 'whereupon,' says the newspaper account, 'the house burst into a fit of laughter.' It would be interesting to know how many of those laughing legislators are now living. The gigantic empire of Napoleon has crumbled to dust, and the despised nation of six vessels has now within her grasp the empire of the seas and the dominion of the whole of the civilized world !'"

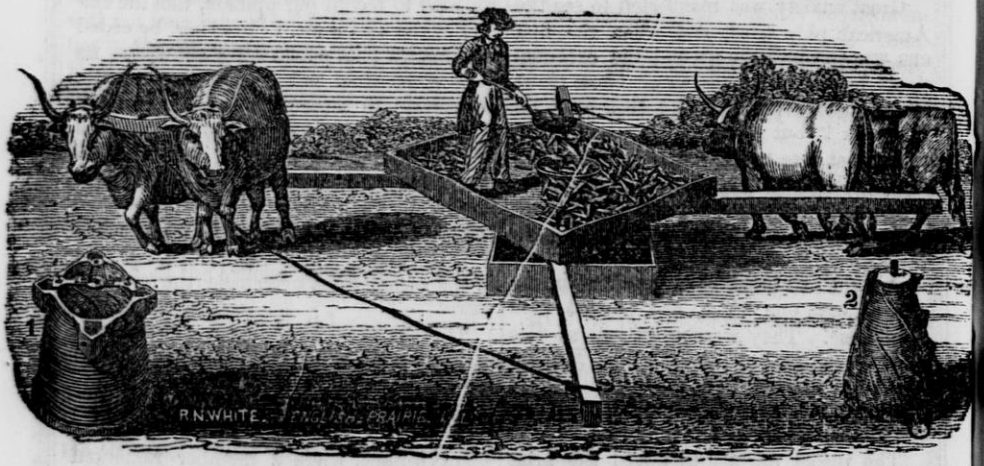
THE MARYLAND STATE FAIR.—The Agricultural Fair and Cattle Show, and Mary'and Institute Fair, in Baltimore, we learn from the Tribune filled the city so full of strangers that the hotels and boarding-house keepers were scarcely able to accommodate them all. It is computed that full $500,000 was left in that city by the host of visitors. The Agricultural Fair was the largest ever held south of Philadelphia, there being about 800 head of cattle, 300 head of horses, 150 sheep, 180 hogs, 500 of live poultry, &c., besides the agricultural implements, flowers, fruits, vegetables, household manufactures, &c., on exhibition. The receipts of the society for admission alone were near $5,000—the fees from annual members being quite large in addition. The Institute Fair embraced about 2,000 exhibitors' contributions, and the receipts of the week were near $7,000.

E. G. WHITING'S
PATENT CORN AND COB GRINDER,

MANUFACTURED BY

DICKEY & SINCLAIR.

RACINE, • • WISCONSIN.



The Subscribers having contracted for the exclusive right of Manufacturing and selling *Whitings Corn and Cob Grinder*, are now prepared to furnish any number which may be ordered, on the following terms and conditons. The mill all ready to run, (except Levers to attach teams to, and Box and frame to set the Mill upon and receive the ground Corn,) for fifty-five dollars, twenty-five dollars on delivery, and the ballance in three months. Warranted to be made of good materials, and durable with proper care, and to grind from 8 to 10 bushels of corn per hour, with two or four horses: can easily be worked with oxen if required.

The Mill is extremely simple in its construction, and in all the essential parts is unlike any thing of the kind ever introduced. It opperates upon a new principle. We have for the Grinder, a conical cylinder, in diameter about two feet at the base, revolving around a body of the same form—all of cast iron. Upon the inner surface of the first, and the outer surface of the latter, the reverse of each other, are three main floats, running diagonally and with a slight curve, the whole length of these cylinders. Next we have a series of shorter ones, and then a series still shorter, the distance between them all, being lastly, divided at the base by a series 3 or 4 inches in length. These are all so arranged that an ear of corn put in at the top is crowded downwards ,broke up and still forced along is finally at the bottom ground to a fine meal. The construction of the mill is such that it is not liable to get out of repair, like other mills of a similar description, and will last for many years in constant use before it will wear out. No horse power is required—the team is attached to the mill itself, and whatever the motion the quality of the grinding is the same.

We have gearing to be attached to the mill which can be drived by steam or water power,and with sufficient motion can grind from twenty-five to thirty bushels of Corn in the ear per hour.

All orders will receive prompt attention, if addressed to the subscribers at Racine.

A. P. DICKEY.
DUNCAN SINCLAIR

The following are a few of the many certificates received, of the practical use of the above Mill for grinding Corn in the ear

Delevan, Feb 13th A. D. 1851.

This is to certify that I, D. G. Foster having one of Whiting's corn and Cob Grinders, and used the same by the power of four horses, have ground fifty bushelse of Corn in cob, in four hours, at ordinary driving.

DANIEL G. FOSTER.

This is to certify that I purchased one of E. G. Whiting's Corn and Cob grinders in the month of February last, and have used it for my own grinding and some for my neighbors, and am well satisfied with its execution and will recommend it to farmers as one of the best implements they can have if they intend to feed with corn or corn and oats. I believe it will grind twelve bushels per hour with two span of horses, who are good walkers and two good horses will grind from eight to ten bushels per hour.

JOHN SCOTT

Racine, May 3d, 1851

Ground and Un-ground, Cooked and Uncooked Food.

In a communication from the society of Shakers, at Lebanon, New York, in the patent office report, we find the following upon the relative value of ground and unground, cooked and uncooked corn for feeding and fattening cattle, &c.

"The experience of more than 30 years leads us to estimate *ground corn* at one-third higher than unground as food for cattle, and especially for fattening pork; hence it has been the practice of our society for more than a quarter of a century to grind all our provender.

"The same experience induces us to put a higher value upon cooked than upon raw meal, and for fattening animals, swine particularly, we consider three of cooked equal to four bushels of raw meal.

"Until within the last three or four years, our society fattened annually for 30 years, from 40 to 50,000 pounds of pork, exclusive of lard and offal fat, and it is the constant practice to cook the meal, for which purpose six or seven potash kettles are used."

The Shakers are a close, observing, calculating people, and go in for the practical realities of life, and, therefore in the economy of food, must be presumed to be good judges. For ourself, we are disposed to believe the conclusions to which they have arrived are correct.—*American Farmer.*

Dodge County Fruit.—The Democratic, [Watertown] State Register speaks of the advantage to be derived in the culture of fruit trees, by the building of a railroad from Milwaukee to Watertown—thus affording a market for surplus produce. It remarks:

"The seasons on Rock river are earlier than on the lake shore, by about two weeks, which consequently gives our Dodge county friends that much advantage over the Milwaukee cultivators, which is worthy of consideration. There is no reason why the fruit market of Milwaukee cannot be supplied by the interior counties, and those individuals who take time by the forelock, and set out and take good care of their orchards of apples, pear and plum, will realize more than the best among them can now do from their grain. The building of a central line of railroad from Milwaukee through Watertown, stretching away to the northwest and reaching and controlling the trade and travel of Minnesota, is one of the things sure to be, and when accomplished, it will open to the farming community, advantages which they have never dreamed of in their philosophy. The hucksterirg business—that is, purchasing of the farmers their fowls, eggs, butter, cheese, honey, and other et ceteras, which they are now glad to dicker off for store pay, will prove of vast benefit to our country friends. They will be enabled to command the cash for all these things, which will be taken by the purchasers to the city for retailing. This is one of the benefits of railroads to the farmer, and if they will go right to work and set out orchards, and take care of them after they are set, they will find in the end, every reason to be thankful that they have followed our advice."

Steamboat building is carried on to a considerable extent at Pittsburgh. From the 1st of January, 1851, to September 1st there have been 32 steamboats built, and 27 others are in course of construction.—Two of these are over 1,000.

During the New York State fair which came off in the city of Rochester, it was supposed that above one hundred thousand persons from various distant parts were assembled on the occasion. It lasted four days of delightful weather, and the show ground enclosing an area of twenty-three acres. exhibited one continual scene of novelty, curiosity and profusion, without any great discomfort to so large a concourse of people; and the agriculturists from Canada, who visited Rochester on that occasion, had reason to be well pleased with the civility and hospitality of the mayor and citizens of Rochester, and also with the urbanity and attention of the president of the agriculture society, and the office-bearers of that state institute.—*Canadian Agriculturist.*

☞ A Mr. John McGillivary in the township of Lochiel, had a cow which became sick a short time ago and on the application of some milk, a snake about three feet and a half was disgorged from the stomach. The cow, however, ultimately died, and on opening her another old snake, about two feet and a half, and three young ones were found in her gullett.—*Constitutional.*

To our Mechanics.

"COME, LET US REASON TOGETHER."

It is an undeniable fact that the great majority of our mechanics are not reading men, that is, they do not read useful and instructive works. We do not mean to say that our mechanics cannot, and do not read at all ; far from it, for there are but few among us who have not received the elements of a common education ; but we do say that the majority do not make a practice of reading works which expand the intellect and improve the mind. The works which they make a practice of reading, tend to grossify and puddle the mind. This is one reason why there are so few among our mechanics capable of taking charge of and managing the business they have learned as trades. It is also a reason why so many of them are rough in speech, and uncourteous in manner. There are many, very many men in our country who were once journeymen mechanics, but who now occupy high and important positions in the republic. We rejoice at this, but we are not a little sorry to add that the majority of them had to leave their trades, and become lawyers ; they at least did not move out from the workshop direct to the house of representavies, or the senate chamber.—Fillmore, our president, and Douglass, senator from Illinois, were once tradesmen, but they arose to their present positions, not through the tailor's or cloth-dresser's bench, but the lawyer's bench. There is not a solitary individual in our country, who has, from a lowly, elevated himself to a high position in society, but has been and is a reading man, one who has read and does read books that are books.

Those mechanics who rise to foremen and employers are the reading men of the mass; they aspired to be something, and adopted the best means to secure the desired ends. Worth and intelligence always command respect from those whose respect is worth striving for. We are not pleading for a gross struggle for wealth, although a reasonable amount of it—as a provision for sickness or old age, is a laudable and proper desire : but we plead first of all for an elevation of character as a means to a social elevation among men of *real worth.*—Wealth without worth will never make a man pass among gentlemen as a current coin, but the man who is industrious, intelligent, trusty, and courteous, will always passs for the genuine metal.

Industry, honesty and intelligence are qualities of character more valuable than gold seven times purified. A talented, first-rate handy mechanic, without such qualities, will never rise, for he cannot be trusted.—It is not the *smartest* man who is always selected to be a superintendent among his fellow workmen ; it is he who combines the greatest amount of abilities with those qualities which give his employers confidence in his *moral* worth. We have often been solicited to furnish competent mechanics to take charge of new establishments, and have found it very difficult to secure, at any time, *the proper man;* and no further back than last week a gentleman writing to us from the south, uses the following language. "Last summer, I visited the north and purchased machinery for the manufacture of chairs, and after considerable trouble hired a man alleged to be competent to superintend the whole business. I have not yet been able to commence operations, owing to the incompetency, in every respect, of the man in whom I trusted to superintend my business ; can you send me a man with the requisite qualifications, and above all, let him be a gentleman?"—We cannot send him the kind of man he wants and requires. Our real good men are scarce ; they soon find situations, and we believe there would be more good situations for men (manufacturing establishments would increase) if we had more men capable of filling them honorably and well.

We have now preached a sermon long enough for a week's calm reflection, and next week we will point out the way whereby young mechanics are sure to rise.—*Scientific American.*

On the Cultivation of Hemp.

Hemp requires for its growth a soil of deep rich, moist alluvium, such as is found in the best part of Lincolshire, where the ingredients of the earth are numerous, finely combined, and very intimately mixed. It will thrive on friable loams, and on loamy sands, provided the culture be rich, and the manuring abundant. On the latter soils the produce is not so abundant as black

rich moulds, but the quality is finer, and can be used for more valuable purposes.—The land must be very perfectly cleansed and heavily manured, or made very rich by the previous cropping. If freshly mauured the quantity may be 16 to 20 loads of dung on an acre. On this rich and pulverised surface, two bushels of hemp seed are sown by the hand in broadcast, buring the two first weeks of the month of April, and covered by a light and gentle harrowing. The heaviest and brightest colored seed should be selected and some of them should be cracked to see if they have the germ perfect. Birds must be scared from the sown ground till the plants appear. It has been practised to hoe the crop, setting the plants at 12 or 26 inches apart, cutting down all weeds, and repeating the hoeing at the distance of a month or six weeks ; but when the culture of the land is proper, the plants very soon cover the ground and kill every weed.

In about four months after sowing, the plants of hemp turn yellow in the leaves, and the stalks become white, when the crop is ready to be pulled. When thread only is intended, without any regard to seed, the whole produce is pulled at once; when ripened seed is grown, the male plants are first pulled, usually in August, and the female ones afterwards, in the beginning of October, when the seeds are seen to be ripe. In both ways the stems are tied in bundles of about a yard in diameter, and with a rope at each end. The crop is then conveyed to the steep of water, in order to undergo the operation of water-rotting.—The bundles are placed in rows crossing each other, and are kept under water by blocks and logs of wood. It soaks generally from four to ten days, if the weather be warm ; if not, five or six more, till the outside easily rubs off. It is then spread out singly on the grass, and turned, if there be showers, thrice a week ; if not, twice a week. This is called grassing, and requires five or six weeks. It is then tied up in large bundles, and carted to a barn or house for breaking, by a machine called a brake; this is either done directly, or the bundles are laid up to dry for the future purpose. The hemp being beat and broken by the hand or mill, is dressed or combed, by being drawn through the hickles or heckles, resembling wool-comers' tools, only fixed. The hemp that is broken off by the operation is called "shorts ;" this is bound up by itself, and is about the value of the long hemp. The offal, is called hemp sheaves, and makes good fuel. Sometimes the hemp is dressed to one quality of fineness, or it is made into two or three sorts, as the demand of purchace may direct. The heckler sells the hemp to be spun for thread or himself applies it to that purpose. Being converted into yarn, it is sent to the "whitester," who returns it in a bleached condition.

The female plants of hemp produce the ripened seeds, and for that purpose remain longer on the ground. The pulled bundles of tied stems are stalked up or housed till the seed be threshed out. In the spring, (January or February) the stems are spread upon grass, and if the season suits, particularly if covered with snow, it will soon come a good colour, and make a strong coarse cloth ; but it is much inferior to hemp pulled in proper time, and water-rotted or steeped. Although hemp, in the process of manufacturing, passes through the hand of the breaker, heckler, spinner, whitester, weaver and bleacher, yet many of these operations are frequently carried on by the same person. Some weavers bleach their own yarn and cloth; others their cloth only. Some heckle their tow and put it out to spinning ; others buy the tow and put it out ; and some carry on the whole of the trade themselves. When the trade is conducted by different persons, their interests often clash. By under-rotting the hemp, the grower increases the weight ; by slightly beating it, the heckler increases the quantity of tow, but leaves it fuller of bark ; by drawing out the thread beyond the staple, the spinner increases the quantity of yarn, but injures the quality ; by forcing the bleaching, the whitester increases his profit but diminish the strength of the yarn. In general, in manufacturing cloth, strength is sacrificed to fineness and colour.

The average produce of an acre of hemp may be estimated at 40 stones, or £16 in money. The expense per acre may be about £10, leaving £6 for profit along with seed (£4).—J. D.—*Canadian Ag.*

The Effects of a Railroad.—Last year the town of Dunkirk, at the western terminus of the New York and Erie railroad, had only 500 inhabitants. Now it has 3,000, and next year will have 6,000. So says the N. Y. Express.

EDITOR'S TABLE.

AN EXTRA NUMBER.

We shall publish an extra number of the Farmer for the present year, containing an index to the 3d volume—the conclusion of the proceedings of the Pomological Convention, commenced in the December uumber; also the article on the management of sandy lands. It will not be published until after the January number of the 4th vol. is issued, as we wish to take time by the forelock in commencing the next volume. We have a good deal of extra work to do in making the enlargement and other improvements contemplated.

Correspondents. — We are gratified with the increased number of our correspondents. Notwithstanding our past sins, there never has been a time since we commenced the Farmer, when we felt more courage to go ahead than we do at the present. We have several communications on hand which will appear in due time. We have received more letters of substantial encouragement, within the last month, than in any previous six months of the existence of our paper.

No. 3 of the Early History of Wisconsin, will appear in the January number; having been received to late for insertion in this.

New England Railroads.—According to a pamphlet, just published, Massachusetts has, up to this time, constructed 1,150 miles of railroad at a cost of $25,000,000; and the other N. England states have constructed over 1,700 miles more, at a cost of $55,000,000. To these might be added the Northern New York (or Ogdensburgh) railroad, which is virtually a New England railroad, making a total of about 3,000 miles of railroad constructed at a cost of $110,000,000.

The gross earnings in 1850 of all the railroads in Massachusetts, and of those that are partly in Massachusetts and partly in adjoining states, were $6,903,328. The net earnings during the same period were $3,480,357. The cost of these roads was $52,264,000. The net income was therefore more than six per cent on the total cost.

The number of passengers transported over these roads during the same time was 8,973,661, which gives an average of 28,761 a day for 312 days.

More Consumption of Wool.—Three new shawl factories have gone into operation recently in Massachusetts, which will annually consume 9,000,000 lbs. of wool—four times the amount now produced in Michigan. An increased protection to a few woolen articles would double the quantity of wool wanted in this country for its own consumption.

J. M. Clark's Patent, Combined Grinding, Bolting, or Merchant Mill.—This mill was in operation on the late fair ground, and attracted much attention, and was deemed worthy of a premium.

This mill, externally, looks not unlike what we used, in Pennsylvania, to call a "gum"—being the ball of a tree from which the internal portion had been removed, leaving a few inches of rim on the outside.

The interior diameter of this mill frame, is about three feet, with an altitude of about five feet. From this, its compactness will at once be perceived, and if its execution shall be in an inverse ratio to the room occupied, the mill cannot but become a favorite, especially in newly settled countries.

As we have said, this mill is about five or six feet high, and near the top is a run of French burr stones of a diameter corresponding with the interior of the circle in which they run. Into these, of course, the wheat falls in the usual way—is ground and thrown outward to the rim of the mill, There it is encountered by circular sweeps or brushes, and thrown into the ceter, where it falls down, encountering in its descent a draft of air for cooling, when it strikes the bolting apparatus—the extra flour coming out of one viaduct; the superfine, at another; middlings from a third; skip stuff from a fourth, and bran from the fifth and last.

These several products are equal to the best produced by flouring mills of the larger growth, while in some respects they claim to be better. These mills can be attached to any ordinary power, and will grind according to the size of the stone, and the velocity imparted. They cost about 300 dollars and are deservedly favorites with the public.—*Rochester Rep.*

☞ Leaves shaded from the light do not acquire depth of color or strength of flavor; gardners take advantage of this fact, tying up lettuces and earthing cellery, that they may be white and mild.

Self-Moving Carriage—It Will Go.—M. Provost, the inventor of the self-moving carriage is traveling over Europe in his new invention.—He is now in Paris on his way to Bordeaux. He traveles, on machadamized road, eighty miles a day: The machine is put in motion by the weight of his person, which acts upon it as the weight upon the wheels of a clock.—*Wisconsin.*

The Famous St. Charles Indian Bread.—Receipt for making the St. Charles Indian bread as prepared at the St. Charles Hotel, New Orleans:

Beat two eggs very light, mix alternately with them one pint of sour milk or buttermilk and one pint of fine Indian meal, one table spoonful of butter and add to the mixture, dissolve one table spoonful of soda or salaratus &c., in a small portion of the milk and add to the mixture the last thing, beat very hard and bake in a pan in a quick oven.

The above receipt, Mr. Editor, was sent by a lady friend in South Carolina to the lady of a neighbor of mine, in the upper end of our county. I have eaten of the bread, and unhesitatingly pronounce it the very *ne plus ultra* of Indian bread.—*Germantown Tel.*

Worth Knowing.—A young lady while in the country some years ago, stepped on a rusty nail, which ran through her shoe into her foot. The inflamation and pain were of course very great, and lockjaw was apprehended. A friend of the family recommended application of a beet taken fresh from the garden, and pounded fine, to the wound. It was done, and the effect was very beneficial. Soon the inflamation began to subside, and by keeping on the crushed beet, changing it for a fresh one as its virtues seemed to become impaired, a speedy cure was effected.—Simple but effectual remedies like this should be known by everybody,—*Charleston Adv.*

Brahmin Cattle.—We yesterday saw at Reynold's stable on Second street, a pair of Brahmin cattle, a bull two years and a half old and a heifer about twenty months old. They are very singular animals in their appearance. In shape the female seems more like a mule than a cow. The horns are not more than three inches in length and are very large where they join the head. The male has a hump on his shoulders somewhat resembling the hump of a camel.

These animals belong to Mr. Eades, of Lexington, who is taking them to the Henry County fair. They were imported direct from their native country by Dr. Davis of South Carolina, of whom Mr. Eades purchased them, as he informs us, for four thousand dollars. Mr. E. says they can travel at the rate of seventy or eighty miles per day without fatigue. This quality would render the ox particularly valuable.

The Brahmin cow does not give an unusual quantity of milk, but it is said to be very rich.—*Louisville Jour.*

Arkansas Wine.—The editor of the Fort Smith (Ark,) Herald acknowledges the receipt of a bottle of wine made from grapes raised in the Creek nation. It is said to have a flavor similar to Maderia.

☞ When an implement is no longer wanted for the season, lay it aside, but first let it be well cleaned.

The Monthly Literary Miscellany for December, published by Beecher & Quenby, Detroit, at one dollar a year, is at hand.—Among the contributors to this monthly, we notice some of the most popular writers in the country. It maintains a highly literary cast, is a "compendium of Literary, Philosophical and religious knowledge," and should receive, as we doubt not it does, a liberal support.

☞ At the last fair of the Norfolk County, Agricultural Society held at Dedham, Mass. nearly 1000 fowls were exhibited, embracing all the popular vanities. "The hen fever" in Massachusetts is more intense than was the morus multicaulis fever which affected Yankeedom a few years ago.

Mammoth Squash.—A squash weighing 135 lbs., raised by Mr. H. Crawford, of Wauwatosa, can be seen at the store of S. Sercomb, West Water St.—*Wisconsin.*

☞ Our friend and townsman, Avery M. Starkweather, Esq., has a colt which is only fifteen months of age, yet weighs 850 lbs., and exhibits the easy and graceful motion of an old and well trained horse. He designs to present him at the state fair.—*Orleans American.*

A reward of $500 will be given to the first active man who discovers one single news-paper-borrower that is willing to admit that there is any thing published now-a-days worth reading.

For the Wisconsin Farmer.

Sketches from Memory—Southern Wisconsin.

BY JOHN A. KENNICOTT, M. D.

[Continued from Page 173.]

Much of the soil between Milwaukee and Madison is a light and less productive character, than that near the lake, on this route. Still, as I may have said before, it is very probable that clover and plaster may suit these oak openings, and perhaps render them as generally profitable as the heavy clay soils.

By the way, I wonder if our northern Illinois and southern Wisconsin farmers are aware of the principal cause of the unfitness of our lands for a wheat crop? They know, perhaps, that the most certain wheat lands in New York, Ohio and Michigan are often what are called "stiff clay loams"—but could they have imagined that our dry upland prairie would be found to contain *less than three per cent of* ALUMINA, or clay! and yet such is the fact, as shown by analysis made by Professor Blaney of Chicago.

Now, alumina does not enter into the composition of wheat; but experience has shown that after the first crop, wheat is uncertain on soils not containing a good proportion of clay, and there is often 10 per cent of clay in our poorest sands, and here with less than 3 per cent of alumina, we have over 8 of vegetable, or organic matter, at a depth of six inches, in virgin prairie; and five per cent of organic matter makes a productive soil.

In most of the region about Chicago, and in much of that in southern Wisconsin, there is clay enough in the subsoil, and double ploughing, (one plough behind the other in the same furrow) if deep enough, would bring up sufficient alumina to make a soil stiff enough to prevent the wheat plants drawing out, or their roots being uncovered by cold and drying winds, as is now the case in fine seasons out of every six. This plan is now much practiced by nurserymen, whose young trees are as liable to be thrown out as wheat.

But, as usual, I am running off the track, and so I will at once skip over the rich stream borders, the occasional gravel knolls —so excellent for PEACHES— and where with lime and clay enough—to promise for THE VINE—and without stopping to admire the extended oak plains, and the solitary lakes, pause only where between the last links of the sparkling chain which infolds that most picteresque of all western towns —Madison—the capital of the busy Badger State.

I have once or twice perhaps, before this, attempted to sketch the beauties of this delightful spot, and may omit a further description—suffice it to say, there is no place where all the softer elements of the beautiful and picturesque, are more admirably blended—but I will not repeat, and yet, as this paper may fall into the hands of some Wisconsin law maker, or be read by those who direct the education of of the young, I will say a few words about SCHOOL HOUSES.

A spot like "College Hill," at Madison, for the location of a seminary, I hold to be worth more than the endowment of half a dozen learned professorships that might be named.

The young are prone to imitate, and chamelion-like, the mind is colored by objects on which it unconsciously rests; and the effect is still greater, when the pupil is fully awake to the true value of a correct taste, and a just appreciation of the useful and beautiful. He then studies the models within his reach, and it is all important that those models should be the best.

It is now admitted, that a knowledge of the science of Horticulture is necessary to a liberal education; and I was much gratified to hear, through one of the Board of direction, of this "University of the State of Wis."—Simeon Mills, Esq.—that it was proposed to plant AN ORCHARD AND GARDEN, on grounds belonging to the Institution. This is a movement worthy of them, and the reputation of the head of the University; and will add another element of the beautiful and the useful, to this surpassingly lovely capital of Wisconsin.

I hope no illiberal jealousy, or narrow consideration of dollars and cents, will be permitted to interfere with this great and beneficient intention. An inconsiderable sum expended in the next two or three years, under the eye of such a man as Mr. Mills' horticultural experiments show him to be, would lay the foundation of a "school" of Pomology, Arboriculture, and perhaps floriculture, that no other college can show.

Now, one word about district school

houses and I pass on. How much more will it cost to build them in accordance with the rules of good taste, health, comfort, and adaptation to the purposes of education, than after the fashion of nine out of ten, if not 49 out of 50 of these structures, as now found in Illinois and Wisconsin?

Please figure it up and then I will tell you how much you lose in the health of your children, and how much more they lose on that score, and in comfort, and in love for school, and a desire and faculty as well as opportunity of gaining that amount of useful knowledge, which it is your desire they should possess.

And now just remember, that there should be but one spot in the District more beautiful, in the eye of the child; and but one house more comfortable and tasteful—HOME. And if your home is a log house—like mine—cover it with vines, or hide it among trees, and go to the school meeting and vote for a new school house; and instruct your committee to purchase a work on school architecture, and build from a good plan, and not from that of your log-house carpenters, or old Deacon Dull, who would build even a church, upon the plan of his big barn.

I must not forget to mention the PEARS and APPLES, and even CHERRIES that I saw in the garden of Mr. Mills, and one or two others at Madison. The small fruits here, and through the whole of this region, were very fine. The raspberries standing the winters, without protection, and producing well.

I have no where seen the Black Currant so common and so productive, as in southern Wisconsin. And when one has acquired a taste for this fruit, it will be found very pleasant and wholesome.

But this is an age of loco-motion—and I must go on. The country between Madison and Janesville is much of it very beautiful. If there is any part of the State more so, I should like to see it. And there are good farms too—noble farms—and even some fruit trees. But here, and elsewhere in Wisconsin, the young fruit trees are of the whip-stock, o liberty-pole order—or as rome one has said—"bean poles with a tuft of leaves at the top."

Trees have *tops*, as well as roots, and this tall breed will not produce half the fruit, or commence bearing in less than double the number of years of "a good stocky plant," with "a head" within three feet of the ground, at most. We have gathered a barrel of apples from such a tree this season—only five years from the nursery, while on grounds adjoining, trees of the same age and variety, and from the same source—planted the same year—but trimmed up like switches—have not produced an apple yet-

We are constantly competed to keep a few of these "*strait trees*" in our nursery, and I perceive that the Messrs Drake of Janesville have so far permitted the demand for beautiful switches to govern them, that a large proportion of their tens of thousands of healthy looking trees are anything but "stocky plants with low heads;" and are, certainly, as tall and strait as the heart of the oldest Wisconsin farmer could desire—the very beau ideal of nine out of ten of those who ought to know better, but will purchase no other.

Now, mind you—I am not reflecting upon the Messrs. Drake—if all their nursery trees were as squat and crooked as most of ours, they could not sell them—and I am determined to imitate them, and get up a few thousands every year, at half our present expense, to sell to people who know so much better what a fruit tree should be, than those who have made them the study of a life. A nurseryman must live, and to live by his nursery, he must *sell trees*, even if his customers will have only such as he knows, are comparatively worthless.

But after all this, you are to understand that Messrs. Drake have a very large nursery of very fine trees—that they can sell you all that the region round about may require—and if you have learned that the tallest and straitest tree is not always the best to purchase, I think the Messrs. Drake could show you a plenty of the right sort too.

This JANESVILLE is a smart place—a busy place—and not badly situated—but they should think twice, before showing quite so much contempt for their less prosperous rivals—Beloit, for instance, is not a rival to be despised—though Janesville does seem to be taking the wind out of her sails just now.

But good people of the upper town, let me barely hint, that some think, and even say that your neighbors below have more of the picturesque in their surroundings, and have hitherto shown a little more tase in

rural adornments, and horticultural improvements than you have exhibited.

I confess that the people of Janesville have, in a few instances, shown a very pretty taste in cottage architecture—and ten really chaste and tasteful cottage residences, embowered in green, and sparkling with flowers, will do more to give character to a town, than twice that number of heavy, ill proportioned, though expensive public edifices, like more than half of those seen in towns, both east and west.

Truth, however compels me to tell my friends in Janesville, that a few of the Beloit gardens are entirely ahead of any I saw among them ; and would do no discredit to a town on the banks of the Hudson, or Connecticut, instead of the Rock river—that, but yesterday, was known only on the maps of the north-western territory.

Your neighbors have the hands of you, in this, and their COLLEGE, which is quite a feather in their caps—but, if *you will it*, you can lead them a long way, in truly practical—USEFUL EDUCATION. Just you get up a school of agriculture, and the mechanic arts, and sciences—throw Latin and Greek to the dogs, or leave it with *learned drones*, who for the honey we give, would fain have the mind, in the 19th century, feed on the dross of heathanism, or light the path of modern science, from the feeble reflection of barbaric conjecture. But build up such a school, and the farmer and mechanic, who are to build your city, will be prepared to build it soon, and well, and you may be able to say to your neighbors—north and south—"*what you promised, we have performed.*"

I was much pleased with my very imperfect examination of the grounds of my friend F. K. Phœnix at Delavan—all that I saw told of the knowledge and taste of this young, but accomplished pomologist, who, as far as I could learn, has had his full share in supplying the gardens of Beloit, and the fine young orchards on the way from the lake to the Rock river towns. But I have been told that Mr. P. is about seeking a new field of operations—the one at Delevan not answering his expectations.

My excellent old Buffalo friend—Col. Henry P. Russell of Rock Prairie (near Janesville) has also been disappointed in meeting the hopedfor success in his nursery operations, and from the same cause that has so discouraged friend Phœnix, and which, in fact has come nigh ruining us, and some of our friends here about—*wet soil.* Land for a nursery, must be naturally dry, or thoroughly *drained*, or disaster and disappointment will be the result of every open winter, or cold and wet spring.

Capt. B. P. Cahoon of Kenosha has a garden and nursery on sandy soil, naturally dry, and all his trees and plants appeared healthy, and sufficiently luxurious in growth—for it is a rule which the planter should never forget, that trees to do well, should be planted in a richer soil and better situation than that of the nursery from which taken.

Capt. Cahoon is great on pie plant, and my favorite among plants—the rose. His rhubarb is a seedling, or seedlings, of his own raising, much resembling the "colossal" if I remember ; and certainly as large as any pie-maker could desire. The rose appears very much at home, in Mr. Cahoons grounds, and he has a very respectable variety, and take it all in all, a very creditable establishment.

But of all rose gardens, and indeed of all miniature gardens I have ever seen, that of Dr. P. R. Hoy, of Racine is the rarest and richest. His space is the front of a city lot and contains the greatest and best variety that it has ever been my good fortune to behold; and what is seldom found in so large a collection, in so limited a space, there is nothing crowded, or incongruous. Let every dweller in cities, who would make the most of a city lot, visit this truly model city garden.

In the rear of the house will also be found some choice fruit trees, and in an out house, a model eagle and a little pirate of a hawk, living together in the same roomy quarters—and enter the Doctor's office, and you will see the birds of Wisconsin, from the tall and graceful sand-hill crane, to the tiniest warbler of the grove, preserved in the most skillful and scientific manner, and almost as natural and life-like as in their native woods and prairies.

What an acquisition this beautiful cabinet would be, for one of the Wisconsin colleges ; and if placed beside the rich native Herbarium commenced by that true western botnnist—Lapham of Milwaukee—for the Madison university, or with that most creditable collection of my learned friend,

Prof. Lathrop of Beloit—more of the young men of Wisconsin might be induced to study the nature and habits of the birds of the north-west; which next to the study of insects, is of the greatest importance to scientific cultivation.

Birds are very serviceable to the farmer and gardner, in ridding us of myriads of injurious insects, which might desolate whole districts, were it not for these busy laborers. Sometimes, however, they take very high wages, and yet, it is believed, that we had better pay them all they ask, than dispense with their services altogether.

But I have spun a very long and uneven yarn, in which a few stray thoughts may, perchance, be found entangled, if the reader should look for them; provided, however, THE PRINTERS shall have been able to decypher my hieroglyphics, and not obscure my meening by too many guesses over the composing stick—a practice that some printers seam to think my scrawls always require.