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Transactions of the Northern Wisconsin Agricultural and Mechanical Association, for the years 1870, 1871, 1872 and 1873. Vol. I 1874

Northern Wisconsin Agricultural and Mechanical Association
Oshkosh, Wisconsin: Allen & Hicks, Printers and Stationers, 1874

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TRANSACTIONS

OF THE

NORTHERN WISCONSIN

Agricultural [&] Mechanical

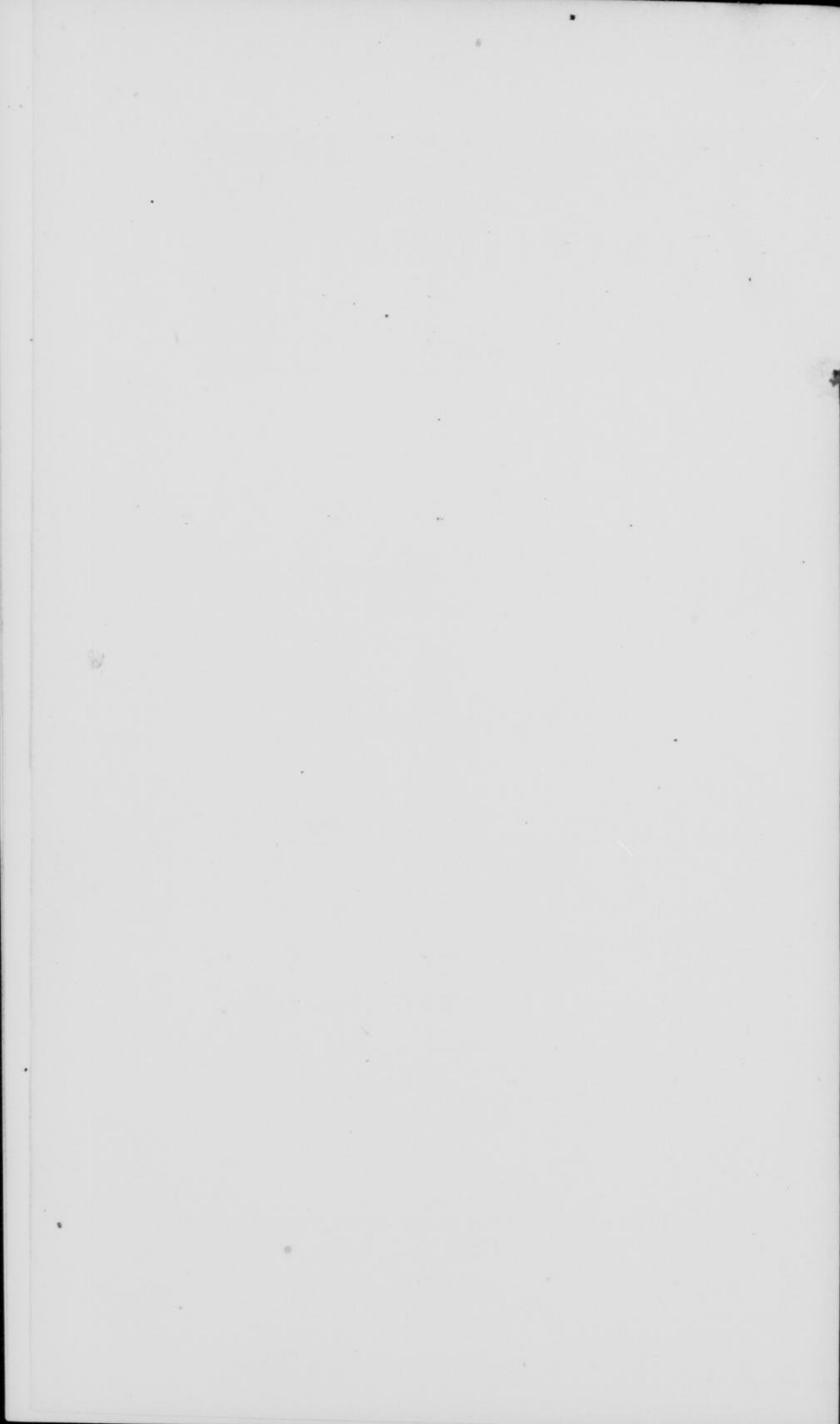
ASSOCIATION,

For the Years 1870, 1871, 1872 and 1873.

Vol. I

COMPILED BY R. D. TORREY, SECRETARY.

OSHKOSH:
ALLEN & HICKS, PRINTERS AND STATIONERS.
1874.



COMPLIMENTS OF THE

EXECUTIVE BOARD

R. D. TORREY, Secretary.

RBW
·N81
1870-73

INTRODUCTORY.

OFFICE OF THE NORTHERN WISCONSIN
AGRICULTURAL AND MECHANICAL ASSOCIATION,
JUNE 1, 1874.

To the Patrons and Friends of the Society :

In accordance with a resolution of the Executive Board we have the honor to present to you the first volume of the transactions of the N. W. A. & M. A., including the years 1870, 1, 2 and 3, or since the organization, together with the proceedings of the Agricultural Convention held at Appleton, March, 1874, under the auspices of the Society. While the volume may not in all respects be perfect, yet it is hoped that it will prove not only interesting but profitable to the careful reader, and especially to those who are interested in the prosperity of the Society and the full development of this portion of the State. The essays presented, as read at the Convention, seem to be in all essentials valuable in thought and suggestions, which, if put to practical test, may prove very beneficial. Some difficulties have been met in compiling the work, owing to the fact that earlier records were not all preserved, and several addresses given at the

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INTRODUCTORY.

first and second fairs cannot now be had, but it is expected that hereafter all addresses and papers of value will be fully preserved, and future volumes will be more perfect.

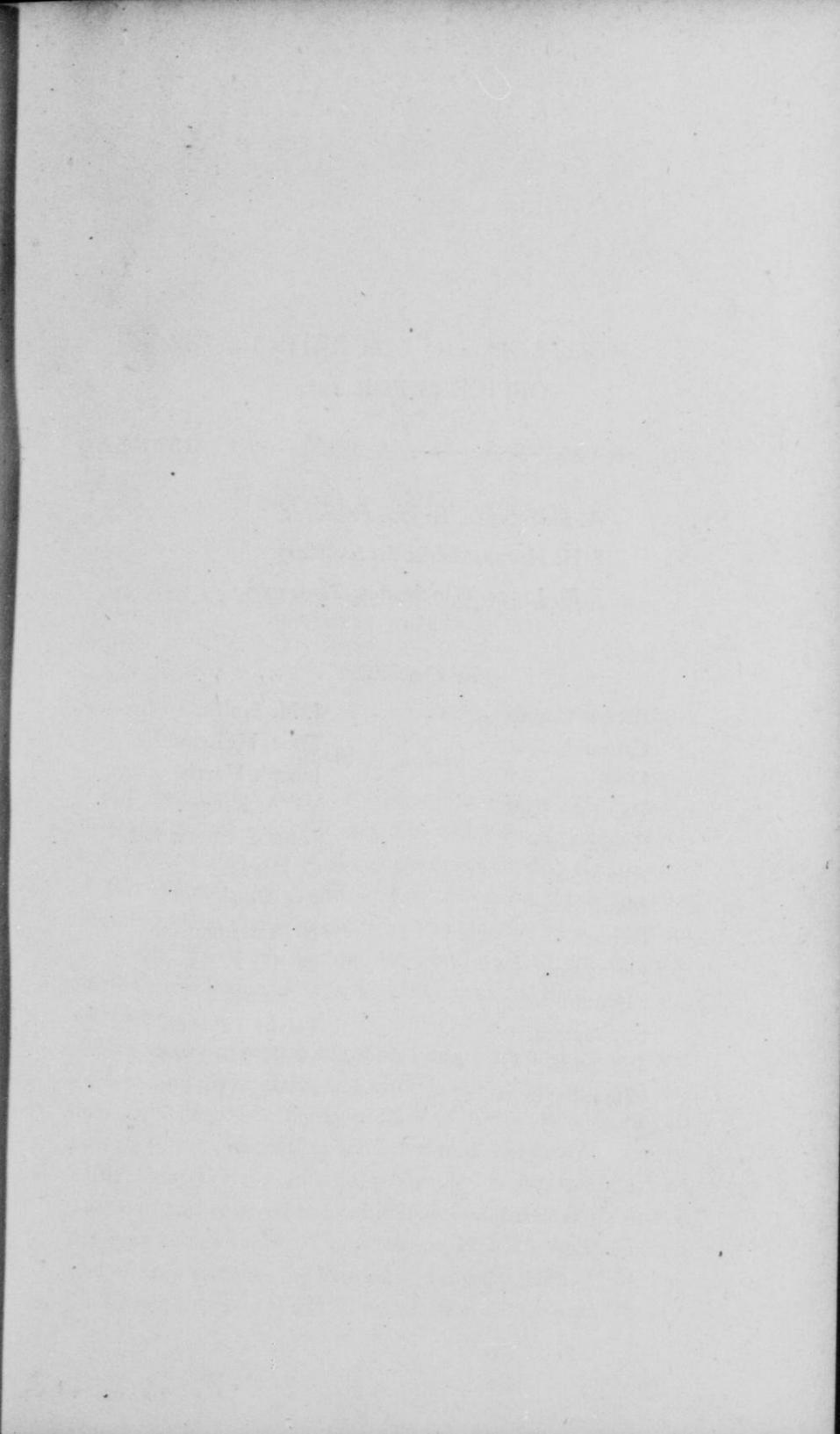
The future success of the Society seems comparatively certain, and perhaps is contingent only on the interest manifested by those who are naturally patrons of agricultural fairs.

There was an apparent necessity for the existence of a Society of this kind in the Fox River Valley, with its untold agricultural and mechanical wealth, to aid in further utilizing and developing by exciting a healthy rivalry, not between places so much as individuals, to excel, and the general conviction is that it is accomplishing its mission.

After an existence of four years it was thought that to publish a volume of transactions would be a step in the right direction, and it is hoped that the reader will be incited to earnest effort to contribute in all legitimate ways to the success of the association.

Respectfully,

YOUR SECRETARY.



OFFICERS FOR 1870.

A. M. SKEELS, Ripon, *President.*

J. H. HICKS, Oshkosh, *Secretary.*

J. H. JONES, Winchester, *Treasurer.*

Vice-Presidents :

Brown County	-	-	-	J. M. Smith.
Calumet	-	-	-	Thos. McLean.
Door	-	-	-	Joseph Harris.
Fond du Lac	-	-	-	W. A. Knapp.
Green Lake	-	-	-	John C. Sherwood.
Kewaunee	-	-	-	C. Martin.
Manitowoc	-	-	-	Jos. Vilas.
Oconto	-	-	-	Dr. Coleman.
Outagamie	-	-	-	W. H. P. Bogan.
Shawano	-	-	-	P. Semple.
Sheboygan	-	-	-	David Taylor.
Waupaca	-	-	-	W. B. Mumbrue.
Winnebago	-	-	-	G. W. Washburn.

FIRST MEETING FOR ORGANIZATION

FARMERS' AND MECHANICS' ASSOCIATION OF
NORTHERN WISCONSIN.

MEETING TO ORGANIZE AN AGRICULTURAL SOCIETY FOR
NORTHERN WISCONSIN.

OSHKOSH, March 17, 1870.

Morning Session.

The convention met in the Seymour House at 11 A.M., pursuant to call, and was called to order by Mr. Geo. Hyer, who stated the object of the convention, and in the absence of Mr. Watrous, of Fond du Lac, offered a resolution that the convention come to order by the election of a president *pro tem*. Mr. W. A. Knapp, of Fond du Lac county, was elected president, and Geo. E. Hoskinson, of Brown county, secretary.

The secretary read communications from Oshkosh, Fond du Lac, and Green Bay, reporting proceedings and appointment of delegates. Upon motion of Judge Washburn, all present in the convention were declared delegates.

Mr. George Hyer offered a form of constitution, which was read and referred to a committee consisting of one member from each county. Upon motion, Hon. G. W. Washburn was elected member for Winnebago county, Hon. J. S. Curtis for Brown county, W. H. Lanphear for Outagamie county,

W. A. Knapp for Fond du Lac county. Upon motion, further appointments on the committee were deferred until the afternoon session.

The convention adjourned till 1.30 P.M.

GEO. E. HOSKINSON,
Secretary *pro tem.*

Afternoon Session.

The convention was called to order at 2 P.M. Upon the nomination of Hon. G. W. Washburn, Mr. W. A. Knapp, of Fond du Lac, was unanimously elected president of the convention, and Geo. E. Hoskinson, of Brown county, secretary.

The committee having in charge the draft of constitution reported. Upon motion of Mr. Judd the constitution was taken up, and acted upon section by section. Upon motion of Hon. G. W. Washburn, a committee of three was appointed by the president to report names of officers for permanent organization. Motion amended by increasing the committee to consist of one member from each county represented in convention.

The president appointed as such committee:—

M. P. Lindsley, of Brown;
Jas. H. Jones, of Winnebago;
Theo. Conkey, of Outagamie;
G. T. Thorn, of Fond du Lac.

Committee on organization reported as follows:—

The committee on organization respectfully report the following as permanent officers of this Society for the ensuing year:—

President:

W. A. KNAPP, of Fond du Lac county.

Vice-Presidents:

Brown County	-	-	-	J. M. Smith.
Fond du Lac	-	-	-	A. M. Skeels.

Outagamie	-	-	-	W. P. H. Bogan.
Green Lake	•	-	-	John C. Sherwood.
Shawano	-	-	-	P. Semple.
Manitowoc	-	-	-	Jos. Vilas.
Waupaca	-	-	-	W. B. Mumbrue.
Winnebago	-	-	-	G. W. Washburn.
Oconto	-	-	-	Dr. Coleman.
Door	-	-	-	Joseph Harris.
Sheboygan	-	-	-	David Taylor.
Calumet	-	-	-	Thomas McLean.
Kewaunee	-	-	-	C. Martin.
Marquette	-	-	-	
Waushara	•	-	-	

Recording Secretary.

Geo. E. Hoskinson, Brown County.

Corresponding Secretary.

H. B. Dale, Winnebago.

Treasurer:

J. H. Jones, Winnebago.

Respectfully submitted,

M. P. LINDSLEY,	} Committee.
J. H. JONES,	
THEO. CONKEY,	
G. T. THORN,	

NOTE.—This Constitution was revised Jan 14, 1873.

CONSTITUTION.

The name of this Society shall be the "Northern Wisconsin Agricultural and Mechanical Association." Its object shall be the promotion of agriculture, manufactures, mechanic and household arts.

SEC. I. The Society shall consist of such citizens of the state as shall pay to its treasurer one dollar annually;

also, of honorary and corresponding members. The presidents of all agricultural, mechanical, horticultural and stock growers' societies within the jurisdiction of this society shall be ex-officio members of it, and any person may become a life member upon the payment of five dollars without the payment of any annual sum thereafter.

SEC. 2. The officers of the Society shall consist of a President, one Vice-President for each county, a Recording Secretary, a Treasurer, a Corresponding Secretary, and an Executive Committee, consisting of the President, Vice-Presidents and Recording Secretaries and Treasurer, and such executive committee shall have power to fill all vacancies that may occur in said committee. The President, Treasurer, Recording Secretary, and any two of the Vice-Presidents shall constitute a quorum, and in the absence of either, or any of these said officers, a quorum may be formed by any of the officers of the Society.

SEC. 3. The Recording Secretary shall keep the records of the Society; the Corresponding Secretary shall carry on the correspondence with other societies and with individuals in the furtherance of the objects of the Society.

SEC. 4. The Treasurer shall keep the funds of the Society, and disburse the same on the written order of the President, and no order shall be drawn by the President except it shall have been audited by the Executive Committee.

SEC. 5. The Treasurer shall be required to give bonds for the faithful discharge of his duty, in such sum as the Executive Committee shall require.

SEC. 6. The Executive Committee shall take charge of, preserve and distribute, all seeds, plants, books, models, &c., which may be transmitted to the Society, and shall have charge of all communications designed 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. They may also establish such by-laws and regulations as they deem necessary for the government of the Society, provided the same shall not conflict with this Constitution.

SEC 7. There shall be an annual meeting of delegates appointed by all the Agricultural, Mechanical, Horticultural and Stock Growers' societies within the jurisdiction having an organization; and each of such societies shall be entitled to three delegates, who shall meet at the place of exhibition for the current year, and at 6 o'clock P.M. of the second day of the fair, proceed, under such rules and regulations as may be prescribed by the executive committee, to elect the officers of this Society, who, when so elected, shall enter upon the duties of their respective offices on the second Monday of January following the election. Said election shall be by ballot, unless two-thirds of the delegates present shall otherwise determine.

SEC. 8. This Society shall hold an annual fair at such time and place as shall be designated by the executive committee.

SEC 9. This Constitution may be amended by a vote of two-thirds of the delegates present at any annual meeting.

The constitution as a whole was adopted.

Report of committee on permanent organization was adopted. Mr. W. A. Knapp resigned his position as President, and upon motion Mr. A. M. Skeels was elected President for the ensuing year. Mr. Knapp was elected Vice-President for Fond du Lac county. Mr. S. Bowron was elected Vice-President for Winnebago county in place of Hon. G. W. Washburn, declined.

The following resolutions were adopted:

Resolved, That the executive committee be authorized to appoint a Vice-President for every county not represented

in this association that may signify their desire to become connected with this society.

Resolved, As the sense of this convention, that the annual fair of this society should not be held during the session of the State Fair.

Thanks of the convention were tendered to Mr. Stringham for the use of hall. Upon motion of Mr. Felker, the Corresponding Secretary elect was directed to enter into correspondence with the different localities throughout this district for the purpose of securing from such localities offers for the location of the first annual fair of this association. Also, that the Secretary of this convention notify the permanent officers of this organization of their election.

Convention adjourned *sine die*.

W. A. KNAPP, President.

GEO. E. HOSKINSON, Secretary.

(From the Oshkosh Journal.)

THE NORTHERN WISCONSIN STATE FAIR.

According to notice given by the Secretary, a meeting of the Executive Committee of the Northern Wisconsin State Fair was held at the Court House on Wednesday last. A large number were present from the surrounding counties. Considerable business was done by the committee, the most important of which was the passage of the following resolution :

Resolved, That in the opinion of the Executive Committee, it will require about the sum of four thousand dollars to procure and fix the grounds for the purpose of holding our first annual fair, and that the said fair be located at Oshkosh for the year A. D. 1870, provided the said city shall furnish ample grounds and fix the same to the satisfaction of this

committee, or raise a sufficient sum of money to furnish and fix the grounds as herein submitted.

From the above resolution it will be seen that the first Northern State Fair will be held in Oshkosh, if she wants it. And now, citizens of Winnebago County, and Oshkosh in particular, will you come forward and put your shoulder to the wheel, and assist in raising the required amount, before the next meeting of the executive board on the 29th inst. You subscribed liberally in trying to get the old State fair held here, and we know you will not be backward now when we can make a sure thing of the location of the Northern Wisconsin State Fair in Oshkosh for the year 1870.

A committee has been appointed to canvass the city and see what can be done. Meet them with smiling faces, and—greenbacks—and all will be well.

The Executive Committee have fixed upon the first week in October for the holding of the fair.

LOCATION OF THE FAIR.

At a meeting of the Executive Committee of the Northern Wisconsin Agricultural and Mechanical Association yesterday, the fair for 1870 was located at Oshkosh, the city having fulfilled all the requirements of the committee, the fair to be held the first week in October next, continuing four days.

OFFICE OF NORTHERN WISCONSIN
AGRICULTURAL AND MECHANICAL ASSOCIATION,
OSHKOSH, April 20, 1870.

Meeting of Executive Committee Northern Wisconsin Agricultural and Mechanical Association, called to order by President Skeels. Present, Smith, Knapp, Bowron, Semple, Jones, Morris, Dale.

J. M. Smith, Recording Secretary, tendered his resignation. On motion it was accepted.

On motion the name of I. J. Hoile was presented as Secretary. Consideration of the same was deferred.

President Skeels tendered his resignation. Remarks.

On motion of W. A. Knapp, a committee of five, consisting of Corresponding Secretary, Vice-President, Treasurer, and E. Stilson, to confer with county officers and prepare premium lists to be presented at next meeting. Carried.

Motioned that the fair be held the first week in October.

Adjourned to Friday, April 29, 1870.

H. B. DALE, Secretary.

Meeting of the Executive Committee, April 29, 1870.

Present, Messrs. Skeels, Bowron, Smith, Jones and Dale.

On motion, Messrs. Hyer, Morley, Stilson, and Hoile were invited to take part in proceedings.

The resignation of J. M. Hoskinson by letter was presented and accepted.

On motion, J. H. Hicks, of Oshkosh, was elected Recording Secretary.

The resignation of Corresponding Secretary was not accepted.

Proposition from city of Oshkosh for location of Fair, signed by prominent citizens, was received, and on motion the proposition was accepted.

On motion, Eli Stilson was appointed to see to the preparation of the grounds for the coming Fair.

On motion the meeting adjourned.

J. H. HICKS, Secretary.

(From the Oshkosh Journal of May, 1870.)

THE FAIR.

We barely had time last week to make mention of the fact of the location of the Northern Wisconsin Agricultural and

Mechanical Association, at Oshkosh for the year 1870. Our citizens have taken hold of the work with a zeal worthy of them, and arrangements are being perfected to make it the best fair ever held in the State. A deputation of our citizens with the Executive Committee will see to the fitting up of the grounds and putting them in order. A premium list will be issued in a few days, or as soon as one can be perfected.

It was thought best to hold the fair the first week in October, as then it would be the least liable to conflict with the other fairs held in the State, and as a general thing we have finer weather than during the month of September. At the meeting of the Executive Committee on Friday last, a letter was received from Mr. Hoskinson, the editor of the *Green Bay Gazette*, asking to be relieved from acting as Secretary, as his duties were such that he could not give the necessary time and labor the office required. His resignation was accepted, and Mr. J. H. Hicks, of our city, was elected in his stead. The election of Mr. Hicks, in our estimation, was the best that could have been made, as his long connection with the agricultural pursuits of our county fit him for the position. He is a thorough, go-a-head chap, and we will bet on his head any time in making the fair a rousing success. Our President, Mr. Skeels, is a man in the right place. He takes hold of the matter with a will, and is bound to see it a success.

The following card from him speaks volumes, and we hope to see his suggestions carried out by our citizens.

Let every one take hold and work from this time out till the close of the fair.

OFFICE OF THE N. W. A. & M. ASSOCIATION,
April 30, 1870.

The Northern Wisconsin Agricultural and Mechanical Association has decided to hold its first annual fair in the city of Oshkosh the first week in October next. In arranging for the fair we selected your city as a central and convenient point, and because we find the people willing to furnish suit-

able ground and buildings, and seemingly willing to contribute largely to the exhibition.

Our premium list will be published in a few days ready for delivery, and will be freely and widely distributed. To make this, our first fair, successful and creditable, the people of your city and the near surrounding country must take a lively interest in it. Every gentleman and lady should commence early in the season to prepare articles for the fair. If the people of this northern section of the State will engage earnestly in this enterprise we can, by united efforts, have the most creditable fair ever held in the State. Let us try it with a determination to succeed.

By order of the Executive Committee.

A. M. SKEELS, President.

OFFICE OF THE N. W. A. & M. ASSOCIATION,
OSHKOSH, Oct. 5, 1870.

MEETING OF NORTHERN WISCONSIN AGRICULTURAL AND MECHANICAL ASSOCIATION FOR THE PURPOSE OF ELECTING OFFICERS.

Meeting called to order by President Skeels.

Moved that we adjourn until to-morrow evening at 7½ o'clock. The motion was carried.

J. H. HICKS, Secretary.

OSHKOSH, Oct. 6, 1870, 7½ P.M.

Meeting called to order by President Skeels. A motion to vote by ballot was carried.

On motion, all persons that had paid one dollar for tickets were considered members.

The following officers were elected:—

A. M. SKEELS, *President.*

J. H. HICKS, *Recording Secretary.*

J. H. HICKS, *Corresponding Secretary.*

J. H. JONES, *Treasurer.*

Vice-Presidents:

Clinton Matteson.	H. B. Sherman.
J. P. Sweeting.	W. B. May.
H. T. Hubbard.	P. Semple.
J. V. Jones.	L. L. Post.
Joseph Haines.	T. Trowver.
— Holt.	F. Decker.
J. H. Boynton.	C. H.

On motion the Secretary and Geo. Gary, Esq., were empowered to perfect the constitution.

On motion the meeting adjourned.

J. H. HICKS, Secretary.

OFFICE OF N. W. A. & M. ASSOCIATION,
Oct. 26, 1870.

At a meeting of the Executive Committee of the Northern Wisconsin Agricultural and Mechanical Association, Messrs. Skeels, Jones, Bowron, Dale, and Hicks were present. The meeting was called to order by President Skeels.

Resolved, That the fair of 1871 be held at Oshkosh, commencing September 11th and continuing 5 days, provided the grounds are fitted free of expense to the Society.

Ordered that the Secretary get 50 diplomas.

Resolved, That Mr. Bowron distribute the same for Oshkosh, and C. Hall for Algoma.

Meeting adjourned.

J. H. HICKS, Secretary.

The fair of 1870 was a complete success, far in advance of the most sanguine expectations of its friends, the citizens of Oshkosh, with their accustomed liberality and public spirit, giving freely to arrange the grounds and buildings without cost to the Society, and the people of the surrounding country turning out almost en masse, thus giving the Society a good start. At the close of the first year of its history the following is the official list of premiums awarded and paid, as shown by the Treasurer's books.

NORTHERN STATE FAIR.

PREMIUMS AWARDED.

HORSES FOR ALL WORK.

Best stallion, 4 years old, C P Kasson, Oshkosh	\$12 00
Second best, A Stone, Omro	6 00
Best stallion, 3 years old, J Waters, Dale.....	12 00
Best stallion, 1 year old, N Olin, Omro.....	8 00
Second best A L Baldwin, Waupacca	4 00
Best brood mares, 4 years old, T Davis, Algoma	12 00
Second best, O Lindsley, Vinland.....	6 00
Best gelding or mare, 4 years old, E P Brockway, Ripon.....	12 00
Second best, J R Forbes, Oshkosh	6 00
Best gelding or mare, 3 years old, W Johnson, Appleton.....	10 00
Second best, M Harris, Oshkosh	5 00
Best gelding or mare, 2 years old, S M Wagstaff, Omro	8 00
Second best, A Stone, Omro	4 00
Best gelding or mare, yearling, D E Pingrey, Omro	6 00
Second best, F J Gillingham, Oshkosh	3 00
Best colt under 1 year, E Dunham, Vinland	4 00
Best pair mares or geldings in harness, G Giddings, Clayton	12 00
Second best, D P Morrison, Nepeuskun.....	6 00

CARRIAGE HORSES.

Best stallion, 4 years old, J V Sweeting, Berlin	12 00
Second best, W A Hargrave, Ripon.....	6 00
Best stallion, 3 years old, J Shields, Friendship	12 00
Best stallion, 2 years old, Dr Kezertee, Oshkosh.....	10 00
Best stallion, 1 year old, C E Russell, Green Lake.....	8 00
Second best, Dr Kezertee, Oshkosh.....	4 00
Sweepstakes, J V Sweeting, Berlin.....	Tip
Brood mare, colt at side, 4 years old, J E Enos, Neenah, second best.....	6 00
Best driving mare in harness, E Bills, Omro	12 00
Second best, E R Calmerton, Ripon.....	6 00
Best mare or gelding, 4 years old, G Willett, Fond du Lac.....	12 00
Second best, G A Whiting, Oshkosh	6 00

Best mare or gelding, 3 years old, Dr Kezertee, Oshkosh.....	10 00
Second best, J P Bassett, Berlin.....	5 00
Best mare or gelding, 2 years old, L L Post, Weyauwega.....	8 00
Second best, J Shinglewood, Oshkosh.....	4 00
Best mare or gelding, 1 year old, E Hubbard, Algoma.....	3 00
Best colt, under 1 year old, Dr Kezertee, Oshkosh.....	4 00
Best pair mares or geldings in harness, C N Paine, Oshkosh	12 00
Second best, E Vanwie, Waupaca	6 00

EQUESTRIANISM.

Mrs R Hartell, New London, 1st.....	15 00
Miss Libbie Sprague, Oshkosh, 2nd	10 00
Miss Emma Worden, Oshkosh, 3rd.....	5 00

TROTTING.

Best 3 year old, J A Ackerman (mare).....	20 00
Second best, O J Loper (Wis Girl)	10 00
Best 4 year old, W F Steele, *(Bill).....	20 00
Second best, E F Bills (Lady Bills).....	10 00

* Protested on account of age by E F Bills.

MATCHED HORSES—TWO IN THREE.

J S Holmes (Kentucky George and mate) 1st	30 00
Cameron & Worden (Prompt and Mate) 2nd.....	15 00

THREE MINUTE HORSES—THREE IN FIVE.

John Lucas (Molly Bawn) 1st	30 00
J Clark (Blind Tom) 2nd	15 00

ALL HORSES—THREE IN FIVE.

J S Holmes (Kentucky George) 1st.....	60 00
J Clark (Blind Tom) 3d	
E W Brand (Velocipede) 2nd	30 00

Protested by J S Holmes that Blind Tom and Velocipede are owned and entered by one man, and controlled by the same.

RUNNING RACE—HALF-MILE AND REPEAT.

W Hall (Pocahontas) 1st.....	20 00
E D Matteson (Sorrel Ned) 2nd.....	10 00

ALL HORSES—BEST THREE IN FIVE.

R H Barnes (Williamsport) 1st.....	60 00
W F Steele (Farmer Girl) drawn after second heat	

SHORTHORNED CATTLE—THOROUGHbred.

Best bull, 4 years old, J Atheain & Co. Algoma	12 00
Second best, S Atkins, Nepenskun.....	6 00
Best bull, 3 years old, C Matteson, Rosendale.....	12 00
Best bull, 2 years old, D N Abbott, Rushford	12 00
Best yearling bull, E P Brockway, Ripon.....	12 00
Best cow, 4 years old, E P Brockway, Ripon	12 00
Second best, E P Brockway, Ripon.....	6 00

Best cow, 2 years old, E P Brockway, Ripon.....	10 00
Second best, E P Brockway, Ripon	5 00
Best cow, 1 year old, E P Brockway, Ripon	10 00
Second best, E P Brockway, Ripon.....	5 00
Best heifer calf, E P Brockway, Ripon	5 00
Second best, B P Brockway, Ripon	3 00

AYRSHIRE CATTLE—THOROUGHBREDS.

Best bull, 4 years old, J Stoddard, Greenbush.....	12 00
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DEVON OR ANY OTHER CATTLE—THOROUGHBRED.

Best Jersey bull, 1 year old, H C Janes, Waukau	6 00
Best Jersey bull calf, H C Janes, Waukau	5 00
Best bull, 1 year old, M H Clark, Stockbridge.....	6 00
Best bull, 3 years old, S J Perry, Greenville	10 00
Best bull calf, S J Perry, Greenville	5 00

GRADE AND NATIVE CATTLE.

Best cow, 4 years old or over, J R Forbes, Oshkosh	8 00
Second best, N Olin, Omro.....	4 00
Best cow, 3 years old or over, L S Jones, Algoma	8 00
Second best, T Davis, Algoma	4 00
Best cow, 2 years old or over, E Hall, Algoma	8 00
Second best, J Paine, Omro	4 00
Best heifer, 1 year old or over, H C Janes, Waukau	8 00
Second best, C Kahler, Oshkosh	4 00
Best working oxen, 4 years old, N G Sturtevant, Oshkosh	8 00
Best pair steers, 2 years old, N Olin, Omro	5 00
Best pair steers, 1 year old, T Davis, Algoma	6 00
Second best, T Davis, Algoma	3 00

HERD.

E P Brockway, Ripon, 1st premium	70 00
Best bull, any age.....	20 00
Best cow or heifer.....	20 00
Best bull and 4 cows or heifers, over 1 year old, any breed.....	30 00

SPANISH MERINO SHEEP.

Best ram, 2 years old and over, Eli Stilson, Oshkosh	5 00
Second best, W M Lee, Rosendale	4 00
Best ram, 1 year old, Eli Stilson, Oshkosh	3 00
Best ram lamb, W M Lee, Rosendale.....	3 00
Best 3 ewes, 2 years old and over, Eli Stilson, Oshkosh	5 00
Second best, W M Lee, Rosendale	3 00
Best 3 ewes, 1 year old and over, W M Lee, Rosendale	4 00
Second best, Eli Stilson, Oshkosh	2 00
Best 2 lambs, W M Lee, Rosendale.....	3 00
Best ram of any age, Eli Stilson, Oshkosh	Dip
Best ewe of any age, Eli Stilson, Oshkosh	Dip

COTSWOLD AND LEICESTER SHEEP.

Best ram, 2 years old, Cotswold, S Hadley, Algoma.....	5 00
Second best, Leicester, T Davis, Algoma	3 00
Best ram, 1 year old, Cotswold, C Matheson, Rosendale.....	4 00
Second best, B Stone, Clayton	2 00
Best ram lamb, O P Clapp, Ripon, Dip and	3 00
Second best, W M Lee, Rosendale	2 00
Best 3 ewes, 2 years old, O P Clapp, Ripon	5 00
Second best, E D Matteson, Clayton	3 00
Best 3 ewes, 1 year old, O P Clapp, Ripon.....	Dip

MEDIUM WOOL SHEEP.

Best ram, 1 year old and over, M B Green, Oshkosh.....	4 00
Second best, O Lindsley, Vinland.....	2 00
Best ram lamb, M B Green, Oshkosh	3 00
Second best, M Towers, Omro.....	2 00
Best 3 ewes, 1 year old and over, M B Green, Oshkosh, sweepstakes and	4 00
Second best, M Towers, Omro	2 00
Best 3 ewe lambs, M B Green, Omro.....	4 00
Second best, M Towers, Omro	2 00

GRADES FROM FINE WOOL SHEEP.

Best ram, 1 year old and over, Eli Stilson, Oshkosh	3 00
Best 3 ewes, 1 year old and over, Eli Stilson, Oshkosh	3 00
Best 3 ewe lambs, A B Wade, Algoma	3 00
Second best, Eli Stilson, Oshkosh.....	2 00
Best ram, of any age, Eli Stilson, Oshkosh	Dip

GRADES FROM LONG WOOL SHEEP.

Best ram lamb, F Beardmore, Waupaca.....	3 00
Second best, F Beardmore, Waupaca.....	3 00
Best 3 ewe lambs, F Beardmore, Waupaca	3 00
Second best, N Olin, Cmro.....	2 00

SWINE.

Best boar, 2 years old and over, Eli Stilson, Oshkosh	6 00
Best boar, 1 year old and under 2 years old, E D Matteson, Clayton	5 00
Second best, E Stilson, Oshkosh ..	3 00
Best boar pig, L S Jones, Algoma	4 00
Second best, T Davis, Algoma	2 00
Best Berkshire, G W Athearn, Algoma	4 00
Second best, C Matheson, Rosendale	2 00
Best small breed, M B Green, Oshkosh	4 00
Best Pollard China, M Duel, Eldorado	2 00
Best breeding sow, 2 years old and over, C W Welby, Omro	6 00
Second best, small breed, T Davis, Algoma.....	4 00
Best small breed, 1 year old and under 2 year old, L S Jones, Algoma.....	5 00
Second best, Eli Stilson, Oshkosh.....	3 00
Best sow and pigs, Mason Campbell, Omro	6 00
Second best, F Whiting, Clayton.....	4 00
Best sow pig, over 6 months old, small breed, M B Green, Oshkosh.....	3 00
Best sow pig, over 6 months old, large breed, T Davis, Algoma	3 00

Best sow pig, over 6 months old, Berkshire, C Matteson, Rosendale	3 00
Best sow pig, over 6 months old, M Duel, Eldorado	3 00

POULTRY.

Best trio ducks, H B Bateman, Ripon	1 00
Second best, H B Bateman, Ripon	50
Best Leghorns, H B Bateman, Ripon	1 00
Second best, A Cooley, Ripon	50
Best geese, H B Bateman, Ripon	1 00
Best buff Cochins, H B Bateman, Ripon	1 00
Best game, H B Bateman, Ripon	1 00
Second best, H B Bateman, Ripon	50
Best game bantams, H B Bateman, Ripon	1 00
Second best, H B Bateman, Ripon	50
Best Brahmas, (light) H B Bateman, Ripon	1 00
Second best, (dark) H B Bateman, Ripon	50
Best Polands, H B Bateman, Ripon	1 00
Best collection, H B Bateman, Ripon	Dip
Second best collection, J Hicks, Oshkosh	Dip
Best Dorkings, J Hicks, Oshkosh	1 00
Second best Brahmas, (light) J N Ward, Oshkosh	50
Best black Spanish, C W Bloss, Oshkosh	1 00
Second best, J N Ward, Oshkosh	50
Best Houdons, C W Bloss, Oshkosh	1 00
Best dark Brahmas, A Howard, Omro	1 00
Second best Polands, E A Potter, Oshkosh	50
Best Dominiques, J Hicks, Oshkosh	1 00
Second best Cochins, J Hicks, Oshkosh	50
Second best geese, L S Jones, Algoma	50
Best Turkeys, E A Potter, Oshkosh	1 00

GRAIN.

Second best Fife wheat, T Davis, Algoma	2 00
Best Rio Grand wheat, T Davis, Algoma	3 00
Best barley, T Davis, Algoma	3 00
Best rye, T Davis, Algoma	3 00
Second best dent corn, T Davis, Algoma	2 00
Second best buckwheat, T Davis, Algoma	2 00
Best oats, J Sanderson, Black Wolf	3 00
Second best, B Strong, Clayton	2 00
Best club wheat, F Weyerhurst, Black Wolf	3 00
Best field beans, E Hall, Algoma	3 00
Second best, N C Crats, Vinland	2 00
Best Fife wheat, A Hubbard, town of Oshkosh	3 00
Best flint corn, A Hubbard, town of Oshkosh	3 00
Second best, Eli Stilson, Oshkosh	2 00
Best hops, A G Parkinson & Co. Grand Chute	3 00
Gold straw, H E Huxley, Neenah	3 00
Second best, blue stem, O Lindsley, Vinland	2 00
Timothy seed, L E Huxley, Neenah	3 00
Second best, Eli Stilson, Oshkosh	2 00

Best winter wheat, M Dewell, Eldorado	3 00
Second best, G Clemens, Vinland.....	2 00
Second best Rio Grande wheat, G A Scott, Neenah	2 00
Second best field peas, J P Roe, Algoma	2 00
Best dent corn, Eli Stilson, Oshkosh.....	3 00
Best buckwheat, Eli Stilson, Oshkosh.....	3 00
Best clover seed, Eli Stilson, Oshkosh.....	3 00
Best collection, T Davis, Algoma.....	8 00
Second best, Eli Stilson, Oshkosh	4 00

FRUITS, ETC.—APPLES.

Best and greatest variety, Eli Stilson, Oshkosh.....	5 00
Second best, T Mattam, Poygun.....	3 00
Best 10 varieties adapted to the north west, Eli Stilson, Oshkosh.....	3 00
Second best, W C Woolcott, Eldorado.....	2 00
Best five varieties, J F Steele, Eldorado	3 00
Second best, Lyon & Boswell, Fort Howard.....	2 00
Best show Autumn, E Chase, Omro	3 00
Second best, R J Judd, Algoma	2 00
Best show winter, R J Judd, Algoma.....	3 00
Second best, P R Rogers, Utica	2 00
Best show seedling, M H Scott, Vinland.....	2 00

PEARS.

Best and greatest variety, Jas Brainerd, Oshkosh.....	3 00
Second best, S M Hay, Oshkosh	2 00

PLUMS.

Best and greatest variety, R J Harney, Oshkosh	2 00
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GRAPES.

Best and greatest variety, J Brainerd, Oshkosh.....	3 00
Second best, R J Harney, Oshkosh	2 00
Best 3 varieties adapted to the north west, R J Harney, Oshkosh	2 00
Second best, J Brainerd, Oshkosh.....	1 00

WINES.

Best grape wine, C Kohlman, Oshkosh	2 00
Best currant wine, J Brainerd, Oshkosh	2 00

PRESERVES.

Best and greatest variety, Mrs W A Boyd, Black Wolf.....	3 00
Second best, Mrs Eli Stilson, Oshkosh.....	2 00

JELLIES.

Best and greatest varieties, Mrs Eli Stilson, Oshkosh	3 00
Second best, Mrs L G Taplin, Oshkosh	2 00

CANNED FRUIT.

Best and greatest varieties, Mrs Eli Stilson, Oshkosh	3 00
Second best, Mrs J Brainerd, Oshkosh	2 00

PICKLES.

Best and greatest varieties, J M Smith, Green Bay.....	\$3 00
Second best, Mrs Eli Stilson, Oshkosh.....	2 00

FLOWERS.

Best and greatest varieties house plants, Isaac Miles, Oshkosh.....	3 00
Best 3 geraniums, Wm Strever, Oshkosh.....	1 00
Best dahlias, J C Plumb, Milton	2 00
Best verbenas, Isaac Miles, Oshkosh	1 00
Best fuschias in pots, Isaac Miles, Oshkosh	1 00
Best asters, C Derber, Oshkosh	1 00
Best carnations, Wm Strever, Oshkosh	1 00
Best roses, Isaac Miles, Oshkosh	1 00
Most tastefully arranged collection of art, flowers, Mrs H B Knapp, Algoma.	2 00
Best pair round bouquets, Isaac Miles, Oshkosh.....	1 00
Best pair flat bouquets, C Derber, Oshkosh.....	1 00
Best variety pansies, C Derber, Oshkosh	1 00
Best variety gladiolas, H G Roberts, Janesville	50
Greatest variety of flowers raised by exhibitor, Mrs I J Hoile, Oshkosh.....	2 00

DAIRY AND HOUSEHOLD PRODUCTS.

Best butter, A W Hawley, Utica	5 00
Second best, Mrs M B Green, town of Oshkosh.....	3 00
Third best, Mrs Mettam, Poygan.....	2 00
Best cheeses, C Hazen, Ladoga.....	5 00
Second best, C Rogers, Oshkosh	1 00
Best milk yeast bread, Mrs T Mettam, Poygan	2 00
Second best, Mrs Sarah Rolph, Utica.....	1 00
Best hop yeast bread, Nellie H Barnes, Oshkosh (11 years old)	2 00
Second best, Carrie McAllister, Oshkosh	1 00
Best brown bread, Mrs Mary L Boyd, Black Wolf	2 00
Best Graham bread, Mrs Mary L Boyd, Black Wolf	2 00
Best cake, Mrs T Mettam, Poygan	2 00
Best honey, Wm M Steward, Lawrence	2 00
Second best, John Rook, Oshkosh.....	1 00
Best spring wheat flour, Bean & Palfrey, Waukau	2 00

VEGETABLES.

Best early Goodrich potatoes, E W Sanders, Oshkosh	1 00
Best early June potatoes, E W Sanders, Oshkosh	1 00
Second best, L S Jones, Algoma.....	50
Best early rose potatoes, E W Sanders, Oshkosh.....	1 00
Second best, I O Vandoren, Nekimi.....	50
Best Merger potatoes, H E Huxley, Neenah	1 00
Best peach blow, N C Coats, Vinland.....	1 00
Second best, O Lindsley, Vinland.....	50
Best Garnet Chili, E W Sanders, Oshkosh.....	1 00
Second best, P R Rogers, Utica.....	50
Best Harrison, E W Sanders, Oshkosh.....	50
Best Fluke, W A Boyd, Black Wolf	1 00
Best peck onions, J M Smith, Green Bay.....	1 00

Second best, E W Sanders, Oshkosh	50
Best peck turnips, A Huxley, Neenah.....	1 00
Second best, L S Jones, Algoma	50
Best peck parsnips, F R Sanborn.....	1 00
Second best, J M Smith, Green Bay	50
Best peck beets, E Hall, Algoma	1 00
Second best, J Fowle, Oshkosh.....	50
Best sweet potatoes, W M Stewart, Lawrence	1 00
Second best, J M Smith, Green Bay.....	50
Best carrots, J M Smith, Green Bay.....	1 00
Second best, C Derber, Oshkosh.....	50
Best mangolds, Henry Searle, Rosendale	1 00
Second best, E Bowman, Algoma	50
Best rutabagas, L S Jones, Algoma.....	1 00
Best tomatoes, E Hall, Algoma.....	1 00
Second best, T Davis, Algoma.....	50
Best squashes, L M Sumner, Winneconne	1 00
Second best, Dr Buxton, Oshkosh	50
Best pumpkins, T Davis, Algoma	1 00
Second best, G A Scott, Oshkosh	50
Best celery, Isaac Miles, Oshkosh.....	1 00
Best cabbage, W B May, Grand Chute.....	1 00
Second best, I O Vandoren, Nekimi.....	50
Best cauliflower, J Brainerd, Oshkosh.....	1 00
Second best, J Rook, Oshkosh.....	50
Best and greatest variety, J P Roe, Algoma.....	8 00
Second best, L S Jones, Algoma.....	4 00

DOMESTIC MANUFACTURES.

Best flannel, Mrs M F Cotton, Algoma	2 00
Second best, Mrs L Barker, Poygan.....	1 00
Best rag carpet, Mrs W W Moore, Oshkosh.....	2 00
Second best, Mrs B Strong, Clayton.....	1 00
Best woollen blanket, Mrs O E Manning, Oshkosh	2 00
Second best, Mrs E Smith, Oshkosh.....	1 00
Best white quilt, Mrs L B Reed, Oshkosh.....	2 00
Second best, Mrs E Moss, Oshkosh	1 00
Best cotton patchwork quilt, Mrs John Buckstaff, Oshkosh	2 00
Second best, Miss W H Barnes, Oshkosh.....	1 00
Best worsted patchwork quilt, Miss Emma Morrison, Omro.....	2 00
Second best, Miss Hettie Squires, Neenah.....	1 00
Best silk patchwork quilt, Mrs M L Collins, Oshkosh	2 00
Second best, Mrs L G Taplin, Oshkosh.....	1 00
Best quilt of any other material than above mentioned, Miss S Fisher, Black Wolf.....	2 00
Second best, Mrs R Slocum, Omro	1 00
Best woollen Yarn, Mrs. H. E. Huxley, Neenah	1 00
Second best, Mrs. L. S. Jones Algoma	50
Best men's socks, Mrs. L Spore, town of Oshkosh	1 00
Second best, Mrs O E Manning, Oshkosh	50
Best ladies stockings, Mrs L Spore, town of Oshkosh	1 00
Second best, Miss S R Hamm, Oshkosh	50

Best Woolen mittens, Mrs O E Manning, Oshkosh	1 00
Second best, Mrs L S Jones, Algoma	50
Best worsted tidy, Mrs E N Conlee, Oshkosh	1 00
Second best, Miss A Hamer, Oshkosh.....	50
Best cotton tidy, Miss Nettie Selden, Oshkosh.....	1 00
Second best, Mrs J N Avery, Oshkosh.....	50
Best crochet work, Miss Anna Godfrey, Oshkosh.....	1 00
Second best, Mrs Wm Wakeman, Oshkosh	50
Best tatting work, Miss K Lowrey, Fond du Lac.....	1 00
Second best, Mrs Anna Ferris, Omro.....	50
Best worsted embroddery, Mrs S H Norton, Oshkosh.....	1 00
Second best, Mrs H Hasbrouck, Oshkosh.....	50
Best silk embroidery, Mrs G A Bronson, Oshkosh	1 00
Second best, Mrs L Collins, Oshkosh.....	50
Best floss embroidery, H W Bowen, Oshkosh	1 00
Second best, Miss Mary Clark, Oshkosh	50
Best wax fruit, Mrs J E Simpson, Oshkosh	1 00
Second best, Miss L Hyatt, Chilton	50
Best wax flowers, Miss M Clark, Oshkosh	1 00
Second best, Mrs G A Bronson, Oshkosh.....	50
Best wax work, Mrs D H Forbes, Oshkosh.....	1 00
Best hair work, Mrs J Bauman, Oshkosh.....	1 00
Second best, Mrs W B Felker.....	50
Best moss work, Mrs C A Johnson, Oshkosh	1 00
Second best, Mrs H G Roberts, Janesville.....	50
Best shell work, Mrs Armor Brown, Oshkosh	1 00
Second best, Mrs H Roberts, Janesville	50
Best bed work, Mrs G W Foster, Oshkosh.....	1 00
Second best, Mrs A W Sagstetter, Menasha	50
Best agricultural wreath, Mrs T B Carpenter, Oshkosh.....	1 00
Best dried grass and flowers, Mrs L G Taplin, Oshkosh	1 00
Best lace work, Mrs T B Carpenter, Oshkosh.....	1 00
Second best, Mrs T B Carpenter, Oshkosh.....	50
Best millinery, Mrs A Rogers, Oshkosh	2 00
Second best, Mrs M L Collins, Oshkosh	1 00

WORKS OF ART, ETC.

Best painting in oil, Mrs S Hoskinson, Oshkosh	3 00
Second best, C W Bloss, Oshkosh.....	2 00
Best pen drawing, E C Atkinson, Oshkosh.....	2 00
Second best, A J Palmer, Oshkosh	1 00
Best India ink drawing, C Palmer, Oshkosh	2 00
Photographs in variety, W H H Robinson, Oshkosh.....	Dip

MACHINERY AND IMPLEMENTS.

Best and largest display of plows, R C Farthing, Ripon.....	3 00
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LEATHER AND LEATHER MANUFACTURES.

Gents' boots and shoes manufactured in Wisconsin, C A Johnson & Co., Oshkosh, Dip and.....	3 00
Best ladies' shoes, manufactured in Wis., J M Rollins & Co., Dip and.....	3 00

Best boots, C A Johnson & Co.	2 00
Best display of trusses, etc, Heady & Co. Milwaukee, Dip. and.....	2 00

PRINTING AND BINDING.

Printing, Rounds & Morley, Oshkosh.....	2 00
Binding, W Niedecken & Co. Milwaukee.....	2 00

MANUFACTURES OF WOOD.

Wagon timber, Webster & Lawson, Menasha, Dip and	3 00
Best furniture display, B H Soper, Oshkosh, Dip. and	3 00
Second best, J F Atkinson, Appleton.....	2 00
Best furniture, single article, B H Soper, Oshkosh	1 00
Barrels for meats and liquors, H Johnson, Oshkosh	1 00
Case of matches, J L Clark, Oshkosh, Dip and.....	2 00
Extension table, Mathews Bros., Milwaukee, Dip. and.....	2 00
Willow ware, R Schnetzky, Oshkosh.....	Dip
Wooden ware, E D Smith, Menasha.....	Dip
Pumps, C Carter, Oshkosh	Dip
Picket fence, E L Fraker, Oshkosh.....	Dip
Machine sawed staves, Bishop Bros. Menasha.....	Dip

MISCELLANEOUS.

Earthenware, Herman & Co. Milwaukee, Dip and.....	2 00
Folding arm chair and bed, W H Brazier & Co. Milwaukee.....	Dip
Force pumps, W H Hiner & Co. Fond du Lac	Dip
Doeskin, Chandler, Congdon & Co. Beaver Dam.....	2 00
Cassimere, Chandler, Congdon & Co. Beaver Dam	2 00
Woollen Goods, Congdon & Co. Beaver Dam, Dip and	2 00
Satinet, O E Manning, Oshkosh	2 00
Affghan, Mrs M P Lindsley, Green Bay.....	2 00
Hats and caps, W H Courtney, Oshkosh, Dip and.....	2 00
Furs, W H Courtney, Oshkosh, Dip and.....	2 00
Best carriages, Rudd and Holden, Oshkosh, Dip and.....	2 00
Best double carriages, Rudd & Holden, Oshkosh.....	5 00
Second best double carriages, Rudd & Holden, Oshkosh.....	3 00
Best single top buggy, Rudd & Holden, Oshkosh	5 00
Second best, Rudd & Holden, Oshkosh	3 00
Lumber wagon, L P & M P Jerdee, Madison.....	3 00
Double sleigh, Rudd & Holden, Oshkosh	3 00
Single sleigh, Rudd & Holden, Oshkosh	2 00

The Committees, finding that the Premium list does not cover all the meritorious articles entered, would recommend as worthy of special mention the following :

- Collection of apples, A Kennedy, Omro.
- Oleanders, R. C Campbell, Oshkosh.
- Raspberry wine, Mrs L G Taplin, Oshkosh.
- The superior arrangement, naming, and varieties of apples would entitle Mr. Eli Stilson to further premiums, which he cordially waives.
- Mrs Sawyer's contribution of house plants, for rarity and variety, attracted every one's attention.

- Madeira vine, Mrs C W Pike, Oshkosh.
 Sweitzer cheese, John Reif, town of Oshkosh.
 Sweitzer cheese, Boss & Keutell, town of Oshkosh.
 Tucked skirt, Mrs J Sturtevant, Oshkosh.
 Embroidery fine, Mrs E Mills, Oshkosh.
 Scarf bag fine, Mrs S M Foster, Oshkosh.
 Moss wreath, Mrs G W Foster, Oshkosh.
 Silk embroidery, Mrs C E Smith, Oshkosh.
 Worsted embroidery, Miss H J Selden, Oshkosh.
 Silk embroidery, Mrs J A Kimberley, Neenah.
 Patch rug, Miss H Eldridge, Menasha.
 Woolen quilt, Mrs R Slocum, Omro.
 Seedling grape, Ed Chase, Omro.
 Cheeses good, E D Knapp, Omro.
 Cheeses good, Jenkins & Waterman, Rosendale.
 Beehive, Dip. A H Hart, Appleton.
 Washing machine and wringer, A E Benedict, Winneconne.
 Quilt and tidy, Miss G Reese, Oshkosh.
 Rag carpet, Mrs F W Dale, Oshkosh.
 Hearth rug, Mrs F W Bale, Oshkosh.
 Sofa pillow, Mrs D H Forbes, Oshkosh.
 Worsted scarfs, Anna Faas, Neenah.
 Toilet set, Mrs S E Tuttle, Oshkosh.
 White quilts, Mrs J R Loper, Oshkosh.
 Chemisette, (crotchetted) Miss Kate Lowry, Fond du Lac.
 Feather wreath, Mrs P Sawyer, Oshkosh.
 Worsted rug, Hiss J Hunter, Utica.
 Velvet hassock, Mrs L G Taplin, Oshkosh.
 Patchwork rug, Mrs L G Taplin, Oshkosh.
 Silk bible cushion, Mrs L G Taplin, Oshkosh.
 Patchwork rug, Miss A Godfrey, Oshkosh.
 Perforated card work, Miss A Godfrey, Oshkosh.
 Wall basket and shell work, Mrs S H Norton, Oshkosh.
 Watch case, Mrs C A Johnson, Oshkosh.
 Silk stockings (the silk raised and spun, and the stockings knit by the exhibitor), Lucy Spore, Oshkosh.
 Fine display carpets, McKey, Bro & Folds, Oshkosh.
 Ancient quilt—A prize taken in the first privateer that sailed from Salem, Mass., commanded by Capt Daniel Goodhue, in the war of '76. Entered by E B Norton, Oshkosh.
 Worsted embroidery (ancient) J H Osborn, Oshkosh.
 Sculpture in wood, G A Kaltwasser, Oshkosh.
 Stave machine, G M Beach, Menasha.
 Display of implements, Fletcher & Everett, Oshkosh.
 Display of implements, W D Stroud, Oshkosh.
 Display of implements, G A Whiting, Oshkosh.
 Under Clothing, Mrs Hasbrouck, Oshkosh.
 Sewing Machines, Grover & Baker, F N Violet, Agent.
 Sewing Machines, Florence, Mary Wadleigh, Agent.
 Sewing Machines, E Howe, Jr., J F Bryant, Agent.
 Feed Grinder, Challenge Mills, Ills.
 Harrow, C E Bristol, Oshkosh.

- Wagon Jack, I Griffin, Oshkosh.
 Land Roller, Beckwith & Davis, Oshkosh.
 Horse Rake, G E Scott, Neenah.
 Mower, S L Sheldon, Madison.
 Mower and Reaper, E J Lindsley, Milwaukee.
 Mower and Reaper, self raking, W C Rayner Fond du Lac.
 Steam Thresher in operation, J. Abrams, Nekimi.
 Trunks, H Schmidt & Co., Oshkosh.
 Brooms, Ira Rogers, Oshkosh.
 Tin ware, P A Chesley, Waupaca.
 Parlor Grind Stone, J M Simpson, Oshkosh.
 Acorn Stove, K M Hutchinson, Oshkosh.
 Live Oak Stove, S M Hay & Bro. Oshkosh.
 Musical Instruments, G B Lampard, Oshkosh.
 Musical Instruments, H S Chandler, Oshkosh.
 Matches, W D Curtis, Oshkosh.
 Stencil Work, J H Johnson, Oshkosh.
 Sleigh, D Mierswa, Oshkosh.
 Soap, Loper Bros. Oshkosh.
 Lime, J Williams, Oshkosh.
 Stump Machine, G W A thearn, Oshkosh.
 Heat Radiator, C C Chase, Oshkosh.
 Iron Fence, Dip. P Ransom, Oshkosh.
 Room Ventilator, H C Janes, Oshkosh.
 Brick and Tile, J A Day & Co. Oshkosh.
 Premiums will be paid upon application, at the office of J H Jones, County Treasurer, in the Court House, Oshkosh.

J. H. HICKS, Secretary.

TREASURER'S REPORT FOR 1870.

RECEIPTS.

To Cash Receipts at gate,	-	-	\$3,926	13
Rents,	-	-	493	25
Per cent on races,	-	-	108	00
Life and members tickets,	-	-	32	00
				<u>38</u>
			\$4,559	38

EXPENDITURES.

By paid orders,	-	-	\$3,740	97
Errand boy,	-	-	25	
288 dinners,	-	-	144	00
Error,	-	-	10	00
To balance,	-	-	664	16
				<u>38</u>
			\$4,559	38

ACT OF INCORPORATION.

* During the winter of 1871 it was thought advisable by the friends of the Association to perfect as far as possible the organization and place it upon a substantial basis, hence application was made to the Legislature for an act of incorporation, which was obtained as follows :

CHAPTER 413, LOCAL LAWS 1871.

AN ACT to incorporate the "Northern Wisconsin Agricultural and Mechanical Association."

The people of the State of Wisconsin, represented in Senate and Assembly, do enact as follows :

SEC. 1. Eli Stilson, Stephen Bowron, James H. Jones J. H. Hicks, Clinton Matteson, A. M. Skeels, H. B. Dale Wm. B. Felker, James V. Jones, J. M. Smith, and the other members of the Northern Wisconsin Agricultural and Mechanical Association organized at a convention held at the city of Oshkosh, on the seventeenth day of March, A.D. 1870, and those who shall become associated with them and their successors, are hereby created and declared to be a body politic and corporate for the purposes and objects of promoting agriculture, manufactures, mechanic and household arts, by holding fairs and any other proper and suitable means, and for the purposes aforesaid may receive and hold by purchase, gift, devise or otherwise, real and personal property, and loan, mortgage, sell or otherwise dispose of the same, contract and be contracted with, sue and be sued, and have and exercise generally all the powers and functions of a corporation under the laws of this State, by the name and title aforesaid.

SEC. 2. The officers of the said association and their

powers and duties, and the terms and conditions of membership therein, shall be, and remain as provided in the constitution adopted for said association at the convention aforesaid, and the amendments thereto adopted at the last annual meeting of the association until otherwise provided by by-laws duly adopted at some regularly called meeting of the association, and the present officers shall continue to be the officers of the association until others are elected and qualified, at the first annual meeting to be held under this act.

SEC. 3. The books and papers, money and effects of the association under the organization before stated shall be passed over to the proper officers of the association to be elected at the first annual meeting thereof under this act; which meeting shall be held at the Court house, in the city of Oshkosh, on the first Tuesday in May, A.D. 1871, at two o'clock in the afternoon of that day, and the annual meetings thereafter shall be held on the first Tuesday of May of each year, unless changed by a majority of the members of the association present at any regularly called meeting thereof.

SEC. 4. Notice of the first annual meeting of the association shall be given by publication in two or more of the weekly newspapers published in the city of Oshkosh, which notice shall be published for at least three successive weeks before the time of said meeting, and may be given by the present secretary, or by any five members of the association under the former organization.

SEC. 5. The police powers granted to agricultural societies organized under the general laws of this State are hereby extended to this association.

SEC. 6. The constitution aforesaid, as amended at the annual meeting aforesaid, shall stand and be in force as by-laws of the corporation hereby created, until the same shall be changed, modified or repealed.

SEC. 7. The members of said corporation, by a vote of two-thirds of the members present and having the right to

vote at any annual meeting, may adopt, repeal, amend or change any by-law of the corporation, and may by such by-laws confer such powers and impose such duties upon the officers and executive committee of the corporation as they may deem proper, including the power to make such rules and regulations in relation to the details of the business of the corporation as may be necessary and convenient.

SEC. 8. This act shall take effect and be in force from and after its passage.

WM. E. SMITH,
Speaker of the Assembly.

THAD. C. POUND,
President of the Senate.

Approved March 21, 1871.

LUCIUS FAIRCHILD, *Governor.*

STATE OF WISCONSIN, } ss.
Secretary's Office.

The Secretary of the State of Wisconsin hereby certifies, that the foregoing has been compared with the original enrolled Act deposited in this office, and that the same is a true and correct copy thereof, and of the whole of such original.

In witness whereof, I have hereunto set my hand and affixed the great seal of the State, at the Capitol in Madison, this 16th day of October, A.D. 1871.

JOHN S. DEAN,
Assistant Secretary of State.

OFFICERS FOR 1871.

A. M. SKEELS, Ripon, *President.*

R. D. TORREY, Oshkosh, *Secretary.*

J. H. JONES, Winchester, *Treasurer.*

Vice-Presidents :

Fond du Lac County	-	-	-	Clinton Mattison.
Green Lake	-	-	-	J. V. Sweeting.
Winnebago	-	-	-	J. V. Jones.
Calumet	-	-	-	— Holt.
Outagamie	-	-	-	W. B. May.
Shawano	-	-	-	P. Semple.
Waupaca	-	-	-	L. L. Post.

ANNUAL MEETING OF 1871.

OFFICE OF THE N. W. A. & M. ASSOCIATION,
OSHKOSH, May 2, 1871.

First annual meeting of the Northern Wisconsin Agricultural and Mechanical Association, held under act of the Legislature of 1871, president A. M. Skeels in the chair.

Motion prevailed to appoint a committee on credentials. Chair appointed W. B. Felker, J. H. Jones and S. Bowron such committee, who reported the following as delegates, and entitled to seats in the meeting:

From Winnebago County Agricultural Society: R. J. Judd, H. E. Huxley and S. Bowron.

From Winnebago Stock Growers' Association: J. V. Jones, Samuel Beckwith and Earl P. Finch.

From Oshkosh Horticultural Society: J. Brainerd, I. J. Hoile and Geo. Hyer.

From Brown County Agricultural Association: W. G. Boswell, J. G. Lawton and J. M. Smith.

From Ripon Agricultural Association: A. M. Skeels, with power to cast three votes.

From Omro Agricultural and Mechanical Association: W. B. Felker, with power to cast three votes.

Motion prevailed to empower delegates to cast the full vote, in case of absence of any delegates.

Motion prevailed to proceed to elect President for the ensuing year. A. M. Skeels received 15 votes, scattering 3. Mr. Skeels declared duly elected.

On ballot for Secretary, R. D. Torrey received 15 votes, and was declared duly elected.

On ballot for Treasurer, J. H. Jones was duly elected, receiving all the votes cast.

Motion prevailed to make the Recording and Corresponding Secretary one office. Under suspension of rules, the old Vice-Presidents were declared elected. I. G. Hoile, W. B. Felker and James Brainerd were chosen committee on By-Laws. Eli Stilson, J. H. Hicks, I. J. Hoile and E. P. Finch were chosen committee on revision of Premium List.

The following resolutions were on motion carried:

Resolved, That the pay of the Secretary shall be \$200 and expenses; also,

Resolved, That no marshal shall receive to exceed \$5, and no superintendent to exceed \$3 per day. On motion meeting adjourned two weeks, to meet at the office of the Society at 2 P. M.

R. D. TORREY, Secretary.

OFFICE OF THE N. W. A. & M. ASSOCIATION,
OSHKOSH, May 16, 1871.

MINUTES OF ADJOURNED MEETING.

President Skeels in the chair.

On motion, adjourned to 1st Monday of June, 1871.

R. D. TORREY, Secretary.

Immediately after the adjournment, there being a quorum of the executive committee present, the following executive business was done:

Motion prevailed to make the aggregate of premiums for the speed of Horses, \$500.

The committee on premiums presented report. See report as published.

On motion meeting adjourned to June 5th.

R. D. TORREY, Secretary.

JUNE 5th, 1871.

MINUTES OF ADJOURNED MEETING.

The President being absent, on motion adjourned until the arrival of the President.

R. D. TORREY, Secretary.

JUNE 7, 1871.

President Skeels being in the city an executive board convened, and on motion, adjourned to the evening of the 2nd day of the fair, of 1871.

R. D. TORREY, Secretary.

FAIR GROUNDS, Oct. 2d, 1871.

At a meeting of Executive Committee, the following Marshals were appointed by the President, to act during the fair: W. B. Felker, chief; assistants, Asa Worden, J. A. Day, C. P. Dunning.

R. D. TORREY, Secretary.

OCT. 3d, 1871.

Adjourned annual meeting was held at the Court House.

Present, A. M. Skeels, J. V. Jones, J. M. Smith, R. D. Torrey, C. Matteson, J. H. Jones.

Motion prevailed to add J. M. Smith, to list of Vice-Presidents.

Motion prevailed to fix the regular annual meeting on the second Tuesday in January instead of May.

Motion prevailed to instruct the Secretary to advertise for proposals for place of holding the next fair.

On motion adjourned.

R. D. TORREY, Secretary.

NORTHERN STATE FAIR.

PREMIUMS AWARDED—1871.

THOROUGHBRED HORSES.

Best filly, 1 year old, C W Foster	\$8 00
Best stallion, 2 years old, Cameron & Worden.....	10 00
Second best, Dr Kezertee,	4 00
Best colt, 2 years old, J & G W Athearn.....	10 00

CARRIAGE HORSES.

Best stallion, 4 years old, W O Hargrave.....	12 00
Second best, pair matched geldings, Gib Lane.....	6 00
Best pair matched mares, Doctor Gibbs.....	12 00
Best mare, 3 years old, H McCulloch	12 00
Second best, O F Potts.....	6 00
Best single carriage horse, H A Smith.....	12 00
Second best, J V Jones	6 00

HORSES FOR ALL WORK.

Best filly, 1 year old, O Egger	8 00
Best mare, 2 years old, D E Pingree	10 00
Best stallion, 4 years old, A Stone	14 00
Second best, W N Casson	6 00
Best stallion, 3 years old, Wm Hargrave	10 00
Second best, David Loomer	5 00
Best stallion, 2 years old, Isaac Anthony	10 00
Second best, W H Jones.....	5 00
Best mare, 4 years old, Thos Davis	12 00
Second best, J B Forbes.....	6 00
Best mare, 3 years old, B A Knapp	12 00
Second best, colt, J & G W Athearn	6 00
Best brood mare and colt, Jas Sanderson.....	14 00
Best pair matched colts, 3 years old W A Freeborn.....	5 00
Best brood mare and colt, E R Potts.....	5 00
Best pair horses, Fred Eaton	12 00
Second best mare, 2 years old E Hubbard	5 00
Best pair mare colts, L T Coats	10 00

Mare colt, 1 year old, G W Strong, 2nd	2 00
Pair mares or horses, Hiram Cross, 2nd.....	5 00
Best sucking colt, E F Dunham.....	8 00
Best mare colt, John Freeborn.....	6 00
Best colt, 2 years old, D C Darrow	10 00
Best horse, 6 years old, John B Beardmore.....	12 00

SPEED OF HORSES AND LADIES EQUESTRIANISM.—RACE FOR
FOUR YEAR OLD HORSES.

1st, A Miller's Waupun Belle	35 00
2nd, Thad Lawrence's Billy Collender.....	15 00

HORSES THAT HAVE NEVER TROTTED FOR MONEY.

1st, C Westbrook's Wisconsin Maid.....	20 00
2nd, Thos. Goe's Flora Temple	10 00

2-50 RACE.

1st, ——— Dick Turpin	70 00
2nd, John S Holmes' Lady Franklin.....	20 00
3rd, J B Paddleford's Winnebago Chief.....	10 00

DOUBLE TEAM RACE.

1st, ——— Lady Franklin and Mate	70 00
2nd, ——— Billy Mason and mate.....	20 00

* SWEEPSTAKES—RUNNING RACE.

1st, William Hyant's Whalebone.....	100 00
2nd, R H Barnes' Kitty Stacy.....	35 00
3rd, A Miller's Williamsport.....	15 00

SWEEPSTAKES—TROTTING RACE.

1st, C Westbrook's Charlie Westbrook.....	150 00
2nd, W D Edgerton's Darkness.....	50 00

EQUESTRIANISM.

1st, Libbie Sprague	15 00
2nd, Emma Brown.....	10 00
3rd, Anna Judd	5 00

SHORTHORNED CATTLE—THOROUGHbred.

Best bull, 4 years old, Eli Stilson.....	15 00
Second best, J W Mears.....	8 00
Best bull, 3 years old, D N Abbott.....	15 00
Best bull, 2 years old, E P Brockway.....	15 00
Best bull, 1 year old, J & G W Athearn.....	15 00
Best bull calf, 6 months old, Eli Stilson.....	10 00
Best cow, 4 years old, E P Brockway.....	15 00
Second best, E P Brockway	8 00
Best cow, 3 years old, E P Brockway.....	15 00
Second best, E P Brockway	8 00
Best cow, 2 years old, E P Brockway	15 00
Second best, E P Brockway.....	8 00
Best cow, 1 year old, E P Brockway	15 00
Second best, Eli Stilson.....	8 00
Best heifer calf, 6 months old, E P Brockway	10 00

Second best, Eli Stilson.....	5 00
Best heifer calf, 5 weeks old, Nathan Johnson	10 00

AYRSHIRES.

Best bull, 4 years old, J Stoddard.....	15 00
Best bull, 2 years old, J Stoddard	15 00
Second best, Grand Chute Club	8 00
Best bull, 1 year old, Grand Chute Club.....	15 00
“ “ Chester Hazen, no choice.....	15 00
Second best, J Stoddard	8 00
Best cow, 4 years old or over, Chester Hazen	15 00
Second best, J Stoddard.....	8 00
Best cow, 2 years old, Chester Hazen.....	15 00
Best cow, 1 year old, D Huntley	15 00
Best heifer calf, Chester Hazen.....	10 00

DEVONS.

Best bull, 4 years old, S J Perry.....	8 00
Best bull, 2 years old, W H Cook	8 00
Best bull calf, 6 months old, J Stoddard.....	4 00
Second best, S J Perry	2 00
Best cow, 3 years old, J W Athearn.....	8 00

GRADE AND NATIVE CATTLE.

Best cow, over 4 years old, J G & W Athearn	8 00
Second best, J & G W Athearn	4 00
Best cow, over 3 years old, L S Jones	8 00
Best cow, over 2 years old, M Morris.....	8 00
Second best, L S Jones.....	4 00
Best heifer, 1 year old, T Davis.....	6 00
Second best, S Freeman	3 00
Best heifer calf, T Davis	4 00
Second best, T Davis.....	2 00
Best bull calf, N G Sturtevant	4 00
Second best, L P Sheldon, recommended.....	
Pair working oxen, B & J Doughty.....	8 00
Second best, Geo E Scott.....	4 00
Pair steers, T Davis.....	8 00
Best pair steers, 2 years old, T Davis	6 00
Second best, T Davis	3 00
Best pair steers, 1 year old, T Davis.....	5 00

CATTLE—SWEEPSTAKES.

Best bull calf, Eli Stilson.....	12 00
Best bull and 4 cows, E P Brockway.....	50 00
Second best, Eli Stilson.....	35 00
Best bull, E P Brockway	20 00
Best cow, E P Brockway.....	20 00
Best heifer calf, E P Brockway	12 00

MERINO SHEEP.

Best buck, 2 years old, Eli Stilson.....	5 00
Second best, E R Martin	4 00

Best buck, 1 year old.....	5 00
Best pen 3 ram lambs, Eli Stilson	4 00
Second best, Eli Stilson.....	2 00
Best pen 3 ewes, 2 years old, Eli Stilson.....	5 00
Second best, G C Goodfellow	3 00
Best pen 3 ewes, 1 year old, G C Goodfellow.....	5 00
Second best, Eli Stilson.....	3 00
Best pen 3 lambs Eli Stilson	4 00
Best ewe of any age, Eli Stilson	Dip

COTSWOLD AND LEICESTER.

Best buck, 1 year old, George Keyes,.....	5 00
Second best, Q. P. Clapp,	3 00
Best pen of ram lambs, J. O'Brien,	4 00
Best pen of ewe lambs, J. O'Brien,	5 00
Best 3 Cotswold ewes, 1 year old, E. Humphrey,	5 00
Second best, E. Humphrey,	3 00
Best 3 Cotswold buck lambs, E. Humphrey,	4 00
Best 3 Cotswold ewe lambs, E Humphrey,	2 00
Best 1 Cotswold ram, George Keyes,	5 00
Second best, E Humphrey,	3 00
Best 3 Cotswold lambs, George Keyes,	2 00
Best 3 Cotswold ewes, George Keyes,.....	5 00
Best 4 Cotswold ewe lambs, George Keyes,	2 00
Best 4 Cotswold ewes 1 year old, Sweepstakes.	
Best Leicester buck 2 years old, J. N. Hoaglin,	5 00
Second best, J. N. Hoaglin,	3 00

Note by Judges.—We find this flock superior in carcass and wool.

MEDIUM WOOL.

Best buck, 1 year old, Horace Clemons,	2 00
Best buck two years old, M. B. Green,	3 00
3 ewes 2 years old, W. B. Green, Second,	2 00
3 buck lambs, W. B. Green, Second,	2 00
Buck 2 years old, Thomas Davis, Second,	2 00
3 ewes 1 year old, Thomas Davis, second,	2 00
Best 3 ewe lambs, Thomas Davis,	3 00
Best buck, 1 year old, Nathan Towers,	3 00
Best 3 buck lambs, Nathan Towers,	3 00
Best 3 ewes, 2 years old, Nathan Towers,	3 00
Best 3 ewes, 1 year old, Nathan Towers,	3 00
3 ewe lambs, J. D. Vandoren, second	2 00

GRADES FROM MEDIUM WOOL.

Best pen of ewes, 1 year old, A. B. Wade,	3 00
3 ewes, 2 years old, J. C. Goodfellow, second,	2 00
Best buck, 1 year old, E. R. Martin,	3 00
Best 3 ewes, 2 years old, E. R. Martin,	3 00
Best 3 ewes, 1 year old, E. R. Martin,	2 00
Best 3 ewe lambs, E. R. Martin,	3 00
Buck, 2 years old, Eli Stilson, second,	2 00

GRADES FROM LONG WOOL.

Best 3 ewes, D. McAllister,	3 00
Best 3 ewe lambs, D. McAllister,	3 00

Best buck, 1 year old, H. A. Gallup,	3 00
Southdown buck, Dave Robinson, premium recorded	
3 ewes, 2 years old, E. A. Petter, second,	2 00

SWINE—BERKSHIRE.

Best Berkshire sow and pigs, E Stead.....	premium recommended
Best boar pig 1 year old, J & G W Athearn, first premium.....	5 00
Best breeding sow 1 year old, J & G W Athearn, first premium.....	5 00
Best boar pig over 6 months, J & G W Athearn, first premium.....	4 00
Best boar pig under 6 months, J & G W Athearn, first premium	4 00
Second best boar pig 1 year old, G W Minkler	3 00
Best sow 2 years old, G W Minkler.....	6 00
Second best boar pig over 6 months old, G W Minkler.....	2 00
Second best boar pig under 6 months old G W Minkler.....	2 00
Best boar pig over 6 months old, J D Vandoren.....	4 00
Best boar pig under 6 months old, J D Vandoren.....	4 00
Best Essex sow pig 7 months old, J D Vandoren.....	4 00
Best Breeding sow and pigs, Eli Stilson.....	6 00
Best Berkshire sow 6 months old, J & G W Athearn	4 00

SWINE—CHESTER.

Best Chester boar 1 year old, Horace Clemons.....	5 00
Second best boar 1 year old, Jacob Fowle	3 00
Best boar 2 years old, Eli Stilson	6 00
Second best boar 6 months old, M B Green.....	2 00
Best boar under 6 months old, J E Moore.....	4 00
Second best boar under 6 months old, Albert Huxley.....	2 00
Best sow and 6 pigs, L S Jones.....	6 00
Best sow 2 years old, Eli Stilson.....	6 00
Second best sow 2 years old, Eli Stilson.....	4 00
Best sow under 6 months old, Albert Huxley.....	4 00
Second best sow under 6 months old, Fred Snydam.....	2 00
Best pig under 6 months old, J Darlington.....	4 00

POULTRY.

Second best trio black African Bantams, W H Patton.....	1 00
Best trio dark Brahmas, W H Patton.....	2 00
Best trio black Spanish, E Stead	2 00
Second best pair dark Brahmas, E C Atkinson.....	1 00
Second best greatest collectirn, E C Atkinson	6 00
Best trio Derby Guinea, Robert Campbell.....	2 00
Best pair Bremen geese, S H Seamens.....	2 00
Second best pair Rouen ducks, S H Seamens.....	1 00
Best pair Aylesbury ducks, S H Seamens	2 00
Best trio white Leghorns, S H Seamens	2 00
Best trio Dominiques, S H Seamens	2 00
Best trio black Polands, S H Seamens	2 00
Best trio Red Game Bantams, S H Seamens....	2 00
Best greatest collection, S H Seamens	10 00
Best pair Bronze Turkeys, E C Wade.....	2 00
Second best trio light Brahmas, T R Goe	1 00
Best trio Golden Seabright Bantams, T R Goe	2 00
Second best trio White Leghorns, T R Goe.....	1 00

Second best pair English Red Game chickens, Ben Walker	1 00
Second best pair geese, Thos Davis.....	1 00
Best Peacock, John Fullerton.....	2 00
Best pea hen, John Fullerton.....	2 00
Second best pair Bronze Turkeys, John Fullerton.....	1 00
Best trio Silver Hamburgs, S Freeman	2 00
Second best trio Partridge Cochins, S Freeman.....	1 00
Second best pair turkeys, J D Vandoren.....	1 00
Best trio Partridge Cochins, F B Norton.....	2 00
Best trio Houdans, F B Norton.....	2 00
Second best pair Houdans, F B Norton	1 00
Second best trio Polands, E A Potter.....	1 00
Best pair turkeys, E A Potter.....	2 00
Best trio Buff Cochins, C M Hutchins	worthy special notice
Best trio light Brahmas, C M Hutchins.....	2 00
Second best cage Pea Fowls, Wm Pierce.....	1 00

GRAIN.

Best winter wheat, Geo E Scott.....	3 00
Second best winter wheat, David Snyder	2 00
Best Rio Grande, Thos Davis.....	3 00
Second best Rio Grande, Wm C Woolcot	2 00
Best Fife wheat, J C Davis	3 00
Second best Fife wheat, C P Houghton	2 00
Second best Club wheat, J C Davis	2 00
Best Golden Straw wheat, Wm Pierce.....	3 00
Second best Mammoth wheat, E F Potts.....	2 00
Best Surprise oats, M B Green	3 00
Best common oats, Thos Davis.....	3 00
Second best Norway oats, E A Potter.....	2 00
Best Dent corn, John P Roe.....	3 00
Second best Dent corn, Eli Stilson.....	2 00
Best yellow Flint corn, Eli Stilson.....	3 00
Second best yellow Flint corn, E W Saunders	2 00
Best rye, Thos Davis	3 00
Second best rye, Wm Pierce	2 00
Best barley, H A Gallup.....	3 00
Second best barley, Jas Sanderson	2 00
Best Timothy seed, Thos Davis.....	3 00
Second best Timothy seed, Eli Stilson.....	2 00
Best Clover seed, Eli Stilson.....	3 00
Second best Clover seed, O A Hale	2 00
Best beans, J P Roe.....	3 00
Second best beans, I W Cross	2 00
Best peas, M B Green.....	3 00
Second best peas, J P Roe	2 00
Best buckwheat, Eli Stilson	3 00
Second best buckwheat, William Pierce.....	2 00
Best collection, Thos Davis.....	10 00
Second best collection, Eli Stilson.....	6 00
Best barrel flour, Wakefield & Bros	3 00
Second best barrel flour, Wakefield & Bros.....	2 00

Committee recommend a diploma to Geo S Haskell, for best assortment of seeds, etc., ever exhibited in Northern Wisconsin, also a special premium of \$5 to H H McAfee, Superintendent of State University farm, for 35 varieties of cereals and 26 samples of potatoes.

FRUIT.

Best and greatest variety of apples, Eli Stilson	10 00
Second best and greatest variety of apples, Edmund Chase	6 00
Best ten varieties of apples adapted to the Northwest, Eli Stilson	6 00
Second best ten varieties of apples adapted to the Northwest, R J Judd	3 00
Best fifteen varieties of apples adapted to the Northwest, R J Judd.....	6 00
Second best fifteen varieties of apples adapted to the Northwest, W C Woolcot	3 00
Best fifteen varieties of apples adapted to the Northwest, N P Reynolds.....	6 00
Second best fifteen varieties of apples adapted to the Northwest, Eli Stilson..	3 00
Best show of autumn apples, E chase.....	6 00
Second best show of autumn apples, Eli Stilson	3 00
Best show of winter apples, P R Rogers.....	6 00
Second best show of winter apples, Eli Stilson.....	3 00
Best seedling specimen apples, P R Rogers.....	3 00
Best seedling specimen apples, H Floyd	4 00
Best and greatest variety of pears, E B Thomas.....	6 00
Second best and greatest variety of pears, Eli Stilson,.....	3 00
Best three varieties of pears, H Floyd	4 00
Second best three varieties of pears, Eli Stilson.. ..	2 00
Best single variety of pears, A G Cusick.....	3 00
Second best single variety of pears, H Floyd	1 00
Second best Flemish Beauty pears, I Kezertee.....	2 00
Best Bell pears, R C Campbell.....	2 00
Best show of plums, R J Harney.....	3 00
Second best show of plums, Isaac Miles.....	2 00
Best show of grapes, Jas Brainerd	8 00
Second best show of grapes, R J Harney.....	4 00
Best ten varieties of grapes, R J Harney.....	5 00
Second best ten varieties of grapes, Jas Brainerd	3 00
Best five varieties of grapes, R J Harney	3 00
Second best five varieties of grapes, J P Roe.....	1 00
Best five varieties of grapes, J H Osborn, recommendation.....	3 00
Best single variety of grapes, J N Hoaglin.....	2 00
Best seedling specimen of grapes, J P Roe, recommendation.....	
Best exhibition of fruit of all kinds, Jas Brainerd.....	15 00
Second best exhibition of fruits of all kinds, R J Harney.....	10 00
Best grape wine, J H Osborn.....	2 00
Best currant wine, Jas Brainerd.....	2 00

Exhibition of seedling apples by J P Roe; excellent spray winter, by H Floyd; handsome Tart winter, by Wm C Woolcot; large collection fall and winter by A G Cusick; specimens of seedlings summer pears of excellent quality, for which we recommend a favorable notice.

We also find a collection of specimen apple and other trees and plants exhibited by J C Plumb, of Milton, Wisconsin, worthy of notice, for their ripeness and full supply of roots, well suited to the tree planter of this section.

DELICACIES, PRESERVES, ETC.

Best collection canned fruits, 30 varieties, Mrs Eli Stilson	3 00
Best variety preserves, Mrs W A Boyd	3 00

Second best variety preserves, L S Jones	2 00
Best variety jellies, Mrs W A Boyd.....	3 00
Second best variety jellies, Mrs L G Taplin.....	2 00

FLOWERS.

Best display of house plants, amateur, Mrs A Brown	3 00
Second best display of house plants, amateurs, W L Stroud !.....	1 50
Best three specimens Begonias, Mrs A Brown	1 00
Best variety cactus, Mrs A Brown.....	1 00
Best bouquet pressed flowers, Mrs L G Taplin,.....	special mention
Best wreath of pressed flowers, Mrs L G Taplin.....	special mention
Best variety of house plants named, J H Osborn	
Best geraniums in variety, J H Osborn	1 50
Best variegated geraniums in variety, J H Osborn	1 50
Best and largest display of geraniums, J H Osborne.....	2 00
Best and largest display of fuschias, J H Osborne	1 00
Best display of Chinese roses, J H Osborne	
Best Double Petunias, J H Osborn	1 00
Best ornamental design of cut flowers, Mrs F A Hoile,	2 00
Best table bouquet, Mrs F A Hoile,	1 00
Display of house plants, Wm Strever, 2nd,	1 50
6 carnations in bloom, Wm Strever, 2nd,	1 50
Best varieties of roses, Wm Strever,	1 50
Best display of chrysanthemums, Wm Strever,	1 00
Best assortment for ornamental foliage plants, Wm Strever,	1 00
Largest collection of flowers in variety, Wm Strever, 2nd,	1 00
Best show of Oleanders, W L Stroud,	2 00
Best display of geraniums, W L Stroud,	1 50
Best display of double geraniums, W L Stroud,	2 00
Best variety of house plants, Isaac Miles,	3 00
Best roses in bloom, Isaac Miles,	1 00
Best carnation pinks, Isaac Miles,	1 00
Best pair round bouquets, Isaac Miles	1 00
Best pair flat bouquets, Isaac Miles,	1 00
Best basket bouquet, Isaac Miles,	1 00
Best verbena bouquets, Isaac Miles,	1 00
Best dahlias bouquets, Isaac Miles,	1 00
Best gladiolus, H G Roberts,	1 00
Best cut flowers, Isaac Miles,	2 00
Best 5 varieties of astors, Mrs L M Billings,	1 00
Best hanging basket, Isaac Miles,	1 50

DAIRY AND HOUSEHOLD.

Sample honey extracted, A H Hart, 1st premium	
Best loaf milk yeast bread, Mrs L S Jones	2 00
Second best, Mrs C P Houghton.....	1 00
Best hop yeast bread, Mrs R T Wyman.....	2 00
Second best, Nellie Barnes.....	1 00
Best brown bread, Mrs L S Jones	2 00
Second best, Mrs R T Wyman.....	1 00
Best Graham bread, Nellie Barnes.....	2 00
Second best, Mrs D J Bardwell.....	1 00
Best sponge cake, Nellie Barnes.....	2 00

Best show of cake, Hattie Stilson, 2nd.....	1 00
Best farm dairy cheese, George Rodgers	5 00
Best 3 farm dairy cheese, George Rogers	3 00
Best 3 factory cheeses, E F Dunham	3 00
Second best, Chester Hazen.....	3 00
Best single cheese, E D Knapp.....	5 00
Best honey, C Church	2 00
Second best, John Rook.....	1 00
Best jar butter, Mrs M B Green	5 00
Second best, Mrs C P Houghton	3 00
Margaret Ham, Dip and	3 00

VEGETABLES.

Best potatoes, cherry blows, E Stead, premium recommended	
Best peach blows, C W Foster	2 00
Best flukes, C W Foster.....	2 00
Best Prince Albert, C W Foster, premium recommended	
Best early June, L S Jones, premium recommended.....	
Second best flukes, L S Jones	1 00
Second best early rose, J E Moore.....	1 00
Best early rose, E W Sanders	2 00
Best early Goodrich, E W Sanders	2 00
Best early prolific, E W Sanders	2 00
Best peerless, E W Sanders	2 00
Second best early Goodrich, David Snyder	1 00
Neshannoek, C W Foster, premium recommended.....	
Best mangolds, yellow oval, D Huntley	2 00
Second best, E Stead	1 00
Best pumpkins, L S Jones	2 00
Best turnips, A Huxley	2 00
Second best, A Huxley	2 00
Best rutabagas, E W Sanders	2 00
Best carrots, E W Sanders.....	2 00
Second best, E M Darrow.....	1 00
Best onions, red Wethersfield, E W Sanders.....	2 00
Best yellow Danvers, J D Ham.....	2 00
Second best, J M Smith	1 00
Yams, O F Potts, recommended premium.....	
Best sweet potatoes, J M Smith	2 00
Second best, J P Roe	1 00
Best tomatoes, John Roush	2 00
Second best, John Roush	1 00
Best beets, John P Roush	2 00
Second best, John P Roe	1 00
Best squash, Neil Christern	2 00
Yellow Chili, W M Stuart, premium recommended.....	
Variety of squashes and gourds, J D Vandoren, special mention	
Best variety and exhibition of vegetables, J P Roe	8 00
Second best, E W Sanders	4 00

DOMESTIC MANUFACTURES.

Best case wax work, Mrs Mary Edgerton	1 00
Second best, Mrs Mary Edgerton.....	50
Best Afghan carriage blanket, F N Violet	1 00

Second best, Mrs T D Grimmer	1 00
Gents' wool scarf, Mrs T D Grimmer	1 00
Fancy basque, Mrs T D Grimmer	1 00
Rag carpet, Mary Edgerton.....	1 00
Worsted ottoman cover, Mrs W H H Robinson	1 00
Best needle embroidery.....	1 00
Shell work, Mrs A Bowen.....	1 00
Boquet feather flowers, Mrs A Bowen	1 00
Dried grass and flowers, Mrs H B Knapp.....	1 00
Knit bed spread, Miss Alice Galentein.....	2 00
Wreath hair flowers, Miss Alice Galentein, recommended	2 00
Mat, Miss Alice Galentein	2 00
Skein wool yarn, Mrs H E Huxley.....	2 00
Best silk quilt, L G Taplin.....	2 00
Second best, L G Taplin.....	1 00
Wreath pressed flowers, 2nd Mrs L G Taplin.....	50
Moss work, Mrs C A Johnson.....	1 00
Knit counterpane, Mrs Perry, 2nd	1 00
Bed quilt, Mrs Perry.....	1 00
Tatted tidy, Mary M Hay, 1st, recommended.....	1 00
Best crocheted tidy, Mary M Hay.....	1 00
Tatted baby waist, Mary M Hay	1 00
Rag carpet, Mrs Reese, 2nd.....	1 00
Embroidered skirt, Mrs J M Amareaux, 2nd.....	50
Embroidered pillow case, Mrs J M Amareaux, 1st.....	1 00
Patchwork quilt, E Moss	2 00
Worsted cross, Mrs O Van Orman.....	2 90
Embroidered sofa pillow, Mrs O Van Orman, 2nd.....	1 00
White crib quilt, Mrs M Graves, 2nd	1 00
Crochet tidy, Miss Nettie Selden, 2nd	Dip
Crochet tidy, Miss Nettie Selden.....	50
Worsted boquet, Mrs H D Wise, 2nd	1 00
Agricultural wreath, Mrs J Castinger, 1st.....	50
Wreath hair work, C Church, 2nd	50
Pair cushions, Laura Wheeler, 2nd	2 00
Embroidered tidy by a girl 12 years, Flora Bates, Dip received	1 00
Log cabin quilt, Mrs J C Hough, 1st	1 00
Rug, Alice Galentein, 1st	1 00
Worsted patch quilt, Maggie Scovill, 2nd.....	2 00
Bead cushion, Maggie Scovill, 1st	50
Skein yarn, Miss E C Wade, 2nd	2 00
White quilt, Mrs P M Potter, 1st	1 00
Tatted collar, Mrs P Potter 1st.....	1 00
Crochet bed spread, Mrs Wm Kellett, recommended	1 00
Silk embroidery, Mrs Wm Kellett, recommended.....	50
Coral toiletmat, Sadie Goe, 1st.....	50
Hair work, Mrs C Wilson, 2nd.....	00
Worsted tidy, Miss Emma Watts, 2nd.....	00
Knit coat, Miss Francis Tripp, 1st.....	1 00
Knit goods, Miss Francis Trip, 1st	1 00
Woolen socks, Miss Francis Tripp, 1st.....	1 00
Wreath autumn leaves, Mrs C P Houghton, 1st	1 00

Yarn, Mrs C P Houghton, 2nd	50
Mineral frame, Mrs C P Houghton, recommended	
Hearth rug, Mrs John Buckstaff, 1st	
Rag carpet, Mrs John Buckstaff, 1st	2 90
Needle embroidery, W H H Robinson, 2nd	50
Moss work, H G Roberts, 1st	1 00
Wool mittens, Purchase Sawings, 1st	1 00
Table linen, Purchase Sawings, 1st	1 00
Towel linen, Purchase Sawings, 1st	1 00
Woolen socks, Lucy Spore, 2nd	50
Woolen mits, Lucy Spore, 2nd	50
Cotton socks, Lucy Spore, 1st	1 00
Linen socks, Lucy Spore, 2nd	50
Hair work, Mrs M A Olcott, 1st	1 00

WORKS OF ART, ETC.

- Lithograph, August Schoen, first premium.
- Oil painting, Wisconsin Landscape, August Schoen, first premium.
- Oil painting, general landscape, August Schoen, first premium.
- Oil painting, general landscape, Mrs T D Grimmer, first premium
- Oil portraits, A Papeman & Co first premium.
- Solar photograph, W H H Robinson, first premium
- Printing in variety, Allen & Hicks, first premium.
- Painting in Oil, Mrs Geo A Whiting, second premium.
- 3 Paintings in Oil, Miss Laura Black second premium.
- Pencil drawing, Miss Mary Osthane, first premium.
- Oil portrait, Mrs C Bloss second premium.
- Sculpture, G A Kaltwasser, first premium.
- Wood carving, G A Kaltwasser, second premium.
- Pen and ink drawing, Mrs J N Hoaglin, first premium.
- Marble medallion, J J Moore, second premium.
- Map of Wisconsin, Elmer Rogers, first premium.
- Monochromatic painting, Mrs C P Houghton, second premium.
- Cone work and frame, watch case, needle book, Mrs C P Houghton second premium.
- Pen drawing, Daggett & Devlin, second premium.
- Map of Wisconsin, Eddy Hunt, second premium.

MACHINERY.

- Exhibition of plows, Geo Bergchorn, first premium.
- Wheat separator and cockle machine, H M Brooks, first premium.
- Steel stubble plow, M K Dahl, first premium.
- Mower, M E Fuller, first premium.
- Horse and hay fork E J Cook, first premium.
- Fanning mill, Delos Roberts, first premium.
- Wind mill and pump, E E Kellogg, first premium.
- Washing machine, J Bauman, first premium.
- Champion horse power, Depere Iron Works, first premium.
- Combined clover thresher and huller, Joseph Johnson, first premium.
- Straw Cutter, O E Drentzer, first premium.
- Well pumps, W Clough, first premium.
- Clamping machine, N T Stickney & Co, first premium.
- Water elevator, W G Hamilton, first premium.

Variety plows, J H Ward, second premium.
 Combined self raker, reaper and mower, Geo A Whiting, first premium.
 Hub turning machine, H Liebber, first premium.
 Road scraper, A P Dickey, first premium.
 Farm fanning mill, A P Dickey, second premium.
 Warehouse fanning mill, A P Dickey, second premium.
 Stump machine, T R Parish, first premium.
 Geo Esterly, seeder and cultivator, W C Raynor, first premium.
 Single top phaeton, F P Wallace first premium.
 Open buggy, F P Wallace, first premium.
 Concord patent, F P Wallace, second premium.
 Double carriage, F P Wallace, first premium:
 Taylor champion hay and grain rake, O F Stone, first premium.
 Farm Gate, A E Boynton, first premium.
 Johnson reaper and mower, J Walker, first premium.
 Single top buggy, J E Richardson, first premium.
 Double top buggy, J E Richardson, first premium.
 Two seat sleigh, J E Richardson, first premium.
 Single cutter, R McMillen, first premium.

LEATHER AND LEATHER MANUFACTURES.

Exhibition of trunks, Schmidt bros, first premium.
 Exhibition of boots and shoes manufactured in Wisconsin, N T Stickney & Co
 first premium.
 Shoulder braces, trusses, etc., Hinckley & Co., first premium.
 Pair of gents calf boots, N T Stickney & Co., first premium.
 Mens river boots, N T Stickney & Co., first premium.
 Bookbinding and Printing, Allen & Hicks, first premium.

MANUFACTURES OF WOOD.

Display of matches, Jas L Clark, first premium.
 Display of barrels, Henry Johnson, first premium.
 Display of tight barrel staves, Smith, Cross & Co., first premium.
 Bee hive, A H Hart, first premium.
 Display of wagon stock, Webster & Lawson, first premium:
 Display of furniture, B H Soper, first premium.
 Display of willow ware, B Schnetzky, first premium.
 Single article furniture, H G Roberts, first premium.

MANUFACTURES OF IRON, STONE AND CLAY.

Patent boiler, Hasbrouck & Monroe, first premium.
 Brick, J A Day & Co., first premium.
 Lime, J A Day & Co., first premium.
 Flour scoop sieve and strainer combined, C Beuces, first premium.

TEXTILE FABRICS MANUFACTURES.

Display of woolen goods, J W Hutchinson, first premium.
 Flannel, J W Hutchinson, first premium.
 Flannel blue twilled, J W Hutchinson, first premium.
 Doe skin, dd do
 Beaver, do do
 Cassimere, do do
 Blankets, do do
 Display of harnesses, Bray & Hewitt, do

Carriage harness.	Bray & Hewitt	first premium
Wagon harness,	do	do
Single harness,	do	do
do	do	second premium.

MISCELLANEOUS.

Collection of coins, W P Coolbaugh,	first premium.
Cider Mill, W C & E E Dickenson,	do
Mule colt, Jewell Lawrence & Co ,	do
Confectionery, J H Smith,	do
Medley "celebrities" Mrs L G Taplin,	do
Medley "merry making" Mrs L G Taplin,	do
Brooms, Frank Stolk,	do
Soap, Warfield cold water soap company,	do
Building paper and quartz cement roofing, Rock River Paper Company.	do
Musical instruments, H S Chandler,	do
Watches and Jewelry, I G Hatch,	do
Gold pens, I G Hatch,	do
Organs, G R Lampard,	do
Case fancy goods, Bauman & Co.,	do
Oils and leads, G F Stroud,	do
China plated ware, Jacob Fowle	do
Hat rack, D F McArty,	do
Window blind, E Drummond,	do
Washing machine, J I. Barres,	do
Paper holder, Mrs T R Goe,	do
Fancy groceries, R Ash & Co.,	do
Display of stoves, K M Hutchinson ; Hay & Bro and Hasbrouck & Monroe, all exhibit fine stoves, no premium awarded to either.	
Clocks, I G Hatch,	first premium
Apple trees, J C Plumb,	do
Cigars, T V Dercksen,	do
Washing machine. A Burdick, diploma.	
Stencil work, J H Johnson,	do
Guns pistols etc., E Stevens,	do
Case of minerals. K M Hutchinson,	do
Case of silver and jewelry, J H Shonrds,	do
Hive of Bees, Lyman Jones,	do

SECRETARY'S WARRANT ACCOUNT FOR 1871.

DATE.	NO. ORDER.	TO WHOM AND FOR WHAT.	AMOUNT.
1871.			
October 7,	1	Charles Westbrook, premium	\$195 00
do	2	John Holmes do	50 00
do	3	John Holmes do	10 00
do	4	Waupun band, music	100 00
do	5	L S Townsend, premium	70 00
do	6	A Millen do	180 00
do	7	W D Edgerton do	50 00
do	8	S D Paddleford do	30 00
do	9	Ben Walker do	1 00
do	10	H A Gallup, hay	87 50
do	11	D McAllister, premium	14 00
do	12	R Perry, do	10 00
do	13	do do	2 00
do	14	Frank Cross, clerk	19 50
do	15	A C Nye, gatekeeper	10 00
do	16	N Bowerman, do	22 50
do	17	J S Derby, do	22 50
do	18	C P Dunning, do	15 00
do	19	W B M Torrey, clerk	15 00
do	19½	L G Crawford, do	12 00
do	20	A W Kellogg, gatekeeper	12 00
do	21	C Christensen, clerk	13 50
do	22	A H Read, ticket seller	10 50
do	23	S Bowron, do	273 87
do	24	R D Torrey, salary and expenses	2 50
do	25	H S Orton, hotel bill	4 50
do	26	C E Hudson, watchman	119 05
do	27	A M Skeels, salary and expenses	8 00
do	28	A C Badger, assistant superintendent	73 70
do	29	Times office, printing	10 47
do	30	S M Hay & Bros. mechanism	211 00
do	31	E P Brockway, premiums	113 15
do	32	Allen & Hicks, printing	15 00
do	33	Eli Stilson, superintendent	8 00
do	34	M N Towers, assistant superintendent	27 00
do	35	Eli Stilson, straw	10 00
do	36	H K Orvis, premium	10 00
do	37	J N Paine, do	2 00
do	38	Newcomb, carpenter	5 00
October 9,	39	D Loomis, premium	5 00

SECRETARY'S WARRANT ACCOUNT FOR 1871.

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DATE.	NO. OF ORDER.	TO WHOM DUE AND FOR WHAT.	AMOUNT.
1871.			
October 7,	40	J G Gallup, superintendent	20 45
do	41	A Schoen, premium	10 00
do	42	Bounds & Morley, printing	51 10
do	43	A Sheeran, assistant superintendent	12 00
do	44	W A Boyd, premium	3 00
do	45	J S Fraker, do	1 00
do	46	E W Humes, watch	4 50
do	47	J Rook, premium	5 00
do	48	W N Casson, do	6 00
do	49	J A Day, marshal	25 00
do	50	do, premium	1 00
do	51	W L Stroud, labor and superintendent	46 50
do	52	J Castengen, premium	1 00
do	53	Bray & Hewitt, premium	9 00
do	54	Mrs F Trip, premium	2 00
do	55	Kaltwasser, do	4 00
do	56	M Towers, do	12 00
do	57	Emma Watts, do	50
do	58	Nettie Selden do*	50
do	59	R H Rollins, care of ladies' room	12 00
do	60	J Stoddard, premium	50 00
do	61	C P Mallett, do	7 00
October 10,	62	Barna Haskell, labor	12 00
do	63	J & G W Athearn, premium	73 00
do	64	J Wilson, do	50
do	65	Geo Rogers, do	10 00
do	66	Chas F Faber, do	1 00
do	67	Thos Dowling, watch	4 50
do	68	W B Felker, marshal	25 00
do	69	D C Raymond, watch	4 50
do	70	J Smith, laborer	6 50
do	71	B H Soper, premium	3 00
do	72	James Sanderson, premium	16 00
do	73	Wm Pierce do	8 00
do	74	Mrs Amareaux do	50
do	75	I J Hoile, superintendent	28 00
do	76	Mrs I J Hoile, premium	3 00
do	77	E B Thomas, do	6 00
do	78	T R Goe, do	4 00
do	79	H A Smith, do	12 00
do	80	Mrs Van Orman do	1 00
do	81	T Dowling, do	1 50
do	82	J K Vandoren, do	12 00
do	83	R Schnetzky, do	3 00
do	84	Gertie Torrey, do	1 00
do	85	Robt Campbell, do	4 00
do	86	Mrs M Edgerton, do	2 50
do	87	Isaac Miles, do	15 50
do	88	Silas McAllister, do	8 00
do	89	J J Veile, do	50

DATE.	NO. ORDER.	TO WHOM AND FOR WHAT.	AMOUNT.
1871.			
October 10,	90	E Moss, premium,	2 00
do	91	A Schoen, do	4 00
do	92	J H Osborne, do	10 00
do	93	H Floyd, do	12 00
October 11,	94	—— Semple, not issued,	——
do	95	Wm Strever, premium	\$ 6 50
do	96	L M Billings, do	1 00
do	97	Mrs A Brown, do	7 00
do	98	J B Bates, watchman	12 00
do	99	O F Potts, premium	7 00
do	100	L S Jones, do	23 00
do	101	N T Stickney & Co premium	5 00
do	102	Mrs L S Jones, do	4 00
do	103	Mrs H B Knapp, do	1 00
do	104	Jacob Fowle, use of crockery	14 00
do	105	do premium	3 00
do	106	Allen & Hicks, do	4 00
do	107	I Kezertee, do	10 00
do	108	H McCulloch, do	10 00
do	109	C P Houghton, do	7 50
do	110	W H Hame, do	6 00
do	111	Mrs John Buckstaff, premium	2 00
do	112	E C Atkinson, do	7 00
do	113	S Freeman, do	4 00
do	114	B & J Doughty, do	8 00
do	115	S J Perry, do	10 00
do	116	J W Mears, do	8 00
do	117	J V Jones, lumber	119 12
do	118	I W Cross, premium	2 00
October 12,	119	S H Seamans, do	23 00
do	120	Eli Stilson, do	185 00
do	121	Mrs L G Taplin, premium	6 50
do	122	W H H Robinson do	50
do	123	Maggie Scoville, do	1 00
do	124	Mary M Hay do	2 00
do	125	J N Hoaglin, do	12 00
do	126	B A Knapp, do	12 00
do	127	F Zentner, gate keeper	25 00
do	128	Wm Suhl, board of band	45 00
do	129	R J Harney. premium	25 00
do	130	J D Ham, do	4 00
do	131	E Stead, do	3 00
do	132	Thos Davis do	76 00
do	133	M Morris, do	8 60
do	134	N M Reynolds, do	6 00
do	135	Jas Brainerd, do	28 00
October 13,	136	H J Roberts, do	2 00
do	137	C W Foster, do	12 00
do	138	R C Campbell, do	1 50
do	139	H A Gallup, do	6 00

SECRETARY'S WARRANT ACCOUNT FOR 1871.

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DATE.	NO. OF ORDER.	TO WHOM AND FOR WHAT.	AMOUNT.
1871.			
October 13,	140	D Huntley, premium,	46 00
do	141	E Chase, do	12 00
do	142	D Snyder, do	3 00
do	143	G W Strong, do	4 00
do	144	J M Smith, do	31 00
do	145	Mrs T D Grimmer, premium	1 00
do	146	Mrs Mary Edgerton, do	2 00
do	147	Major Worden, marshal	25 00
do	148	Cameron & Worden, premium	10 00
do	149	W A Freborn, do	11 00
October 14,	150	O Egger, do	8 00
do	151	S J Coats, do	10 00
do	152	D C Darrow, do	10 00
do	153	P Sawings, do	3 00
do	154	Mrs H C Hough, do	2 00
do	155	Elmer Rogers, do	2 00
do	156	O A Hale, do	2 00
do	157	J E Moore, do	5 00
do	158	J B Beardmore do	12 00
do	159	E W Sanders, do	14 00
do	160	Hasbrouck & Monroe, do	2 00
October 16,	161	N G Sturtevant, do	4 00
do	162	E Humphrey, do	17 00
do	163	Lucy Spoor, do	2 50
do	164	Robert McMillen, do	2 00
do	165	Geo Whiting, do	2 00
do	166	D McAllister do	6 00
do	167	J P Roe, do	21 00
do	168	Nellie Barnes, do	5 00
do	169	E T Kellogg, do	5 00
do	170	J Gibbs, do	12 00
do	171	A Stone, do	12 00
do	172	M B Green, do	20 00
do	173	C Matteson, superintendent	15 00
do	174	M A Olcott, premium	1 00
do	175	J H Osborne, do	2 00
October 18,	176	— Hargraves, do	12 00
do	177	J W Hayram, do	10 00
do	178	J P Clapp, do	2 00
do	179	— Goodfellow, do	15 00
do	180	J O'Brien, do	9 00
do	181	Libbie Sprague, do	15 00
do	182	Secretary of State, copy of charter	1 25
do	183	Cameron & Worden, carriage hire	23 00
do	184	R J Judd, premium	9 00
do	185	Anna Judd, do	5 00
do	186	W H Cook, do	8 00
do	187	Gib Lane, do	6 00
do	188	E P Weston, walking	125 00
do	189	Alice Galentein, premium	6 00
do	190	J H Jones, expenses	23 50

DATE.	NO. ORDER.	TO WHOM AND FOR WHAT.	AMOUNT.
1871.			
October 20,	191	Hindley & Co., premium	5 00
do	192	Mrs R T Wyman, premium	3 00
do	193	W H Jones, do	5 00
do	194	P R Rogers, do	10 00
do	195	Fred Eter, do	12 00
do	196	H A Scott, do	1 00
do	197	Sadie Goe, do	1 00
do	198	W L Stroud, do	7 00
21	199	A B Wade, do	5 50
do	200	Albert Huxley, do	9 00
do	201	D N Abbott, do	15 00
do	202	J R Forbes, do	6 00
do	203	J E Richardson, do	10 00
do	204	E A Potter, do	7 00
do	205	H B Dale, superintendent	15 00
23	206	P A Dale, assistant	15 00
24	207	Neils Christensen, premium	2 00
do	208	Oliver Pretty, do	10 50
do	209	Fred Snyder, do	2 00
25	210	E R Martin, do	14 00
do	211	Mrs Reese, do	1 00
28	212	D J Bardwell, do	1 00
November 2,	213	J D Vandoren, do	3 00
do	214	J H Johnson, do	2 00
6	215	Wm Woolcot, do	2 00
do	216	Clemons, do	2 00
do	217	Geo B Scott, do	7 00
9	218	Geo S Church, do	2 50
10	219	G W Minkler, do	15 00
11	220	Mrs Hartell, do	10 00
14	221	D E Pingree, do	10 00
Nov. 14,	222	Horace Clemons, premium	7 00
do	223	Thad Lawrence, do	15 00
16	224	E Hubbard, do	5 00
21	225	Mrs M Graves, do	1 00
25	226	A C Austin, Assistant Superintendent	15 00
28	227	Rounds & Morley, printing	3 50
Dec. 2	228	W C Woolcot, premium	3 00
5	229	E R Potts, do	3 00
8	230	Hutchinson, do	11 00
11	231	E D Knapp, do	5 00
27	232	N Johnson, do	10 00
29	233	H D Wise, do	50
do	234	Chester Hazen, do	55 00
do	235	P M Potter, do	3 00
do	236	Isaac Anthony, do	10 00
do	237	Geo Keyes, do	8 00
30	238	J V Jones, do	6 00
1872.			
January 2	239	Fullerton, do	3 00
9	240	Job Darlington, do	4 00

SECRETARY'S WARRANT ACCOUNT FOR 1871.

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DATE. 1872.	NO. ORDER.	TO WHOM AND FOR WHAT.	AMOUNT.
January 2,	241	F H Bates, do	4 50
do	242	H E Huxley, superintendent	15 00
do	243	Mrs H E Huxley, premium	2 00
do	244	F B Norton, do	5 00
do	245	E W Saunders, do	6 00
13	246	C McCabe, do	6 00
15	247	Eastman Bros., stationery,	7 86
20	248	J H Jones, salary	100 00
23	249	F N Vilet, premium	2 00
25	250	J Heath, rent	4 50
February 2	251	Capt Ruby, premium	7 50
20	252	R A Vosburg do	1 00
24	253	E Stead, do	5 00
March 1,	254	C P Dunning, costs in suit	22 75
do	255	E L Hunt, premium	1 00
27	256	C S Boynton, printing	7 50
April 8,	257	W B Felker, expenses	11 50
May 1,	258	Bergstrom & Son, premium	3 00
15	259	E M Darrow, do	1 00
June 19	260	error not drawn	
July 16,	261	J V Jones, bill	10 00

OFFICERS FOR 1872.

A. M. SKEELS, Ripon, *President*.
 R. D. TORREY, Oshkosh, *Secretary*.
 J. H. JONES, Winchester, *Treasurer*.

Vice-Presidents :

Brown County - - -	J. M. Smith.
Calumet - - -	— Cleveland.
Door, - - -	J. Harris.
Fond du Lac, - - -	C. Mattison.
Green Lake, - - -	Mr. Flint.
Kewaunee, - - -	E. Decker.
Manitowoc, - - -	Jos. Vilas.
Marathon, - - -	W. H. McIndoe.
Marquette, - - -	S. A. Pease.
New Holstein Ag'l. Soc. -	Clans Olson.
Outagamie, - - -	H. Turner.
Oconto, - - -	J. M. Stevenson.
Portage, - - -	Thos. McDill.
Sheboygan, - - -	J. Stoddard.
Shawano, - - -	P. Semple.
Winnebago, - - -	J. V. Jones.
Waupaca, - - -	L. L. Post.
Waushara, - - -	M. L. Kimball.

ANNUAL MEETING OF 1872.

OFFICE OF THE ASSOCIATION,
OSHKOSH, WIS., Jan. 9, 1872.

Meeting called to order by Hon. A. M. Skeels, president.

Motion prevailed to appoint committee on credentials.

Chair appointed J. M. Smith, of Green Bay; I. J. Hoile, of Oshkosh; M. C. Bushnell, of Omro.

Committee reported the following named gentlemen entitled to seats in the meeting:

Winnebago County Agricultural Society: Eli Stilson, J. H. Jones, H. E. Huxley.

Grand Chute Horticultural Society: D. Huntley, A. K. Hart, A. Tolman.

Omro Agricultural and Mechanical Association: M. C. Bushnell, S. Simmons, W. B. Felker.

Outagamie County Agricultural Society: Henry Turner, M. H. Lyon, E. C. Foster.

Grand Chute: L. L. Randall, O. Babcock, Harmon Jones.

Brown County Agricultural Society: J. G. Lawton, J. M. Smith.

Ripon Agricultural Society: A. M. Skeels, three votes.

Oshkosh Horticultural Society: J. H. Osborn, Ira Kezer-tee, Geo. Hyer.

Fond du Lac County Agricultural Society: Clinton Matteson, three votes.

Oshkosh Stock Growers' Association: J. V. Jones, three votes.

On motion report adopted.

J. H. Jones, treasurer, made his report as treasurer for the year 1871, which was referred to a committee of three members, viz: J. V. Jones, M. Turner, J. M. Smith. Mr. Turner desired to be excused. Mr. Stilson was substituted.

R. D. Torrey, as secretary, made his report, which was referred to same committee. The following are the reports, with the action of the committee.

TREASURER'S REPORT FOR 1871.

RECEIPTS.

To balance on hand	- - -	\$ 664 16
To Cash receipts at the gate,	-	3,508 77
Rents,	- - - - -	374 00
Race stands,	- - - - -	220 85
Per cent. on Races	- - -	183 00
		—————\$4,950 78

EXPENDITURES.

By paid orders,	- - -	\$4,325 99
323 dinners,	- - - - -	161 50
Balance on hand,	- - - - -	463 29
		—————\$4,950 78

Your committee, to whom was referred above report have examined the same and find it correct, and recommend that the report be adopted.

Motion prevailed to adopt the Treasurer's report, together with the action of this committee thereon.

SECRETARY'S REPORT.

To the President, and members of the Northern Wisconsin Agricultural and Mechanical Association :

GENTLEMEN: I hereby present to you, with some degree

of satisfaction, the condition of the Northern Wisconsin Agricultural and Mechanical Association at the close of the second year of its existence. The organization of this society dates only as far back as March, 17, 1870, and yet in the short space of time intervening it has grown to be considered one of the best societies in the north-west, and its exhibitions are looked forward to, and enjoyed as much, and are as profitable to the exhibitor, all things considered, as are older organizations. This arises from this fact, perhaps, as much as any other, that it brings an annual fair, rivaling in magnitude the fairs of the State organizations, and excelling all county or district fairs, to the very doors of the farmer, manufacturer and other exhibitors. And it is to be hoped that all in the northern part of the State will become more interested, and promptly step forward and enroll themselves as life members, and by thus identifying their interests, lend their influence to place the association on a substantial basis and make it one of the permanent organizations of the State.

THE FAIR OF 1871

was all the most sanguine hoped or expected, and though it was held after all other fairs in the State, when people were more or less "faired out," and at a time when the terrible fires of the year were raging through the country, yet the number of entries and attendance were larger than last year, and the latter in excess of the State Fair.

No department was deficient and some were full, especially those of manufactures, fine arts, horticulture and floriculture. Some of the finest specimens of fruit, especially seedlings, were exhibited, thus giving evidence of the adaptation of this portion of the State to its successful culture. It would lengthen this report too much to speak in detail of all the departments, so that I will only allude to the stock, in which were to be found some of the finest herds in the north-west.

The annual address, full of practical thought, was delivered by the Hon. H. S. Orton, and listened to with delight by the many who had the privilege of being present. Eloquent addresses were also given by Gov. Fairchild and Gen. S. Fallows.

FINANCIALLY.

The liabilities of the fair were about \$800 more on the premium list than last year, and yet every premium has been paid as fast as called for, and while some remain yet unpaid, these will be cashed as fast as presented.

The report of the Treasurer herewith submitted shows the receipts to have been \$4,286.62. The expenditures for salaries of officers, including superintendents, marshals, watchmen and laborers, was \$900.50; for premiums, \$2,760; for incidentals, including printing, music, hay, grain, improvements on the grounds, etc., was \$826.98. Premiums and expenses were all paid by orders drawn on the Treasurer. The books of reports of judges, together with the bills presented, are the Secretary's vouchers for drawing the same, to which your attention is called for examination.

Thus it will be seen that the proportion of premiums to expense is larger than any similar organization. In conclusion, permit me to say we have every reason to expect success in the future. I would also take this occasion to thank the officers and members for the aid rendered me in arranging the details of the fair of 1871.

Respectfully,

R. D. TORREY, Secretary.

Motion prevailed to adopt report and print.

Proposals from Cities and Associations for next fairs were delivered in order.

The only one made was from the Stock Growers' Association of Oshkosh, offering the free use of the grounds of the Association for the year 1872. Motion was made to refer to the incoming Executive Board. Amendment offered by

Mr. Smith, of Green Bay, to accept the proposition from Oshkosh. Amendment carried, question recurring on the original motion as amended.

Adopted.

Motion prevailed to suspend rules and elect officers by acclamation.

The following officers were elected :

A. M. SKEELS, *President*.

R. D. TORREY, *Secretary*.

J. H. JONES, *Treasurer*.

Vice-Presidents. — J. V. Jones, Oshkosh, Winnebago County ; C. Matteson, Rosendale, Fond du Lac County ; Mr. Cleveland, Calumet County ; J. Stoddard, Sheboygan County ; Judge Vilas, Manitowoc County ; H. Turner, Appleton, Outagamie County ; J. M. Smith, Green Bay, Brown County ; L. L. Post, Weyauwega, Waupaca County ; M. L. Kimball, Waushara County ; Thos. McDill, Portage County ; W. D. McIndoe, Marathon County ; P. Semple, Shawano County ; Dr. S. A. Pease, Marquette County ; M. Flint, Green Lake County ; E. Decker, Kewaunee County ; Col. J. Harris, Door County ; I. M. Stevenson, Oconto County ; Clans Oleson, New Holstein Agricultural Society.

The following resolution was introduced by Mr. Stilson, which was unanimously adopted :

Resolved, That the thanks of this Association are tendered to Hon. A. M. Skeels, President, and R. D. Torrey, Secretary ; also, J. H. Jones, Treasurer, and all the Vice-Presidents of the Association, and while we cannot discriminate when all have done their duty so well, yet that the resident Vice-President, J. V. Jones, was deserving of special commendation for his untiring effort to make the fair a success.

Motion prevailed to appoint committee on premium list. The following were chosen :

R. D. Torrey, Eli Stilson, J. M. Smith, A. M. Skeels, J. V. Jones.

Committee on by-laws reported. Motion prevailed to refer to committee on premiums, who are to report to executive committee for adoption.

Motion prevailed to exclude all gambling and games of chance from the grounds in the future.

Mr. Keyes, of Empire, having tendered his premiums of 1871 to the society, was by unanimous vote made a life member, with the thanks of the association.

Motion prevailed to fix the time of the next fair on September 30, 1872, continuing five days.

On motion adjourned subject to call of the President.

R. D. TORREY, Secretary.

Executive meeting held January 9, 1872.

The following accounts allowed:

Mrs. Dunham, - - -	Sixth premium.
H. A. McAfee, - - -	Diploma.
H. E. Huxley, - - -	Superintendent.
Allen & Hicks, - - -	Paper.
Joe. Heath, - - -	Rent of stands.
C. McCabe, - - -	Bill.
— Bates, - - -	Labor.
— Vosburg, - - -	“
— Egger, - - -	“
— Ruby, - - -	“

On motion adjourned.

R. D. TORREY, Secretary.

THIRD ANNUAL FAIR.

(Report of the Daily Northwestern.)

The first and second days were devoted to receiving entries.

THIRD DAY.

Wednesday was as pleasant as could be desired and the crowd in attendance at the fair grounds steadily increased from early in the morning until late in the afternoon. There was considerable delay in getting in a number of articles which had been entered, and for a time it looked as if some of the classes were to be but partially filled, but at the present writing, nearly every class is filled as well as, if not better than last year. The only exception to this is in the fruit department which will fall somewhat below the display of last year. Upwards of 2600 entries were made in all, a larger number than last year.

FINE CATTLE.

Adjoining the herd of thoroughbred cattle owned by Eli Stilson which were mentioned yesterday is the celebrated Rosendale herd owned by Clinton Matteson, of Rosendale, one of the Vice-Presidents of the Association. Mr. Matteson has fifteen head of pure-blooded Durham Short Horns, which are excelled by few in the State. Mr. Matteson has some 34 head in all, and has devoted a great deal of time and pains to the growth of pure stock. In company with E. P. Brockway, of Ripon, Mr. Matteson made some of the first purchases of blooded stock which were brought to the State. Mr. Matteson also has on the grounds two fine Cotswold Bucks and a pen of ewes. Adjoining the Matteson herd is a

small herd of Thoroughbreds exhibited by Johnson, of Algoma, which contains several fine specimens.

VEGETABLES.

In the hall devoted to field and garden products several large additions have been made, and the show is better than last year. Squashes, pumpkins, beets, carrots, wheat, oats, etc., are exhibited in great variety. In the same hall some excellent crocks of butter and several savory cheeses of both farm and factory make are exhibited.

CARRIAGES AND CUTTERS.

The manufacturers of carriages and cutters are out in full force. A firm in Worcester, Massachusetts, and two or three Fond du Lac factories show a great number of carriages, nearly filling half of one building.

OLD COINS.

W. P. Coolbaugh, of this city, has on exhibition a valuable case of rare coin, containing specimens of the famous Pine Tree shilling, the cast of 1797, coins of the Roman Empire under each of the Emperors, and other interesting relics.

SEWING MACHINES.

Nearly all the principal sewing machines are represented, embracing the Wilcox & Gibbs, the Grover & Baker, the Singer, the Home Shuttle, the Domestic and several others.

FINE ARTS.

With a commendable interest in the cultivation of a taste for painting and fine arts, the Association offers premiums for best specimens of oil painting, drawing, &c., and this has brought out some good pieces, and a number which are not quite so good. There is, however, more than the average amount of talent visible to the naked eye in these samples. Daggett's Business College shows a number of excellent specimens of pen drawing, and the show of fine printing from the NORTHWESTERN office looks well.

We were glad to see several "batches" of bread and cake entered for premiums, showing that the old-fashioned love for good bread has not entirely died out.

THE RACES.

The races begin on Thursday afternoon. The following are the entries with the names of the horses:

GREEN RACE.

J. S. Holmes enters Black Billy; J. R. Paddleford enters Fannie Wood; R. P. Mason enters Flora Lee.

THREE MINUTE RACE.

D. J. Pulling enters Oshkosh; L. Conner enters Black Jake; C. Westbrook enters Billy Graham; J. S. Holmes enters Patsey; Ira Clark enters Prince Albert.

RUNNING RACE.

J. S. Holmes enters Dundee; R. H. Barnes enters Shoo-Fly; W. Hull enters Fire Fly; G. R. Lampard enters Topsey; R. Carey enters Brick Dust; Mr. McAfferty enters Captain Jinks.

HORSES THAT NEVER MADE 2:50.

C. Westbrook enters C. Westbrook; D. J. Pulling enters Oshkosh; L. Conner enters Black Jake; J. S. Holmes enters Patsey; Ira Clarke enters Prince Albert.

SWEEPSTAKES TROTTING.

C. Westbrook enters C. Westbrook; D. J. Pulling enters Oshkosh; J. S. Rowell enters Badger Girl.

THE WALKIST.

The champion walkist, Mr. James Smith, created considerable interest at the fair on Wednesday afternoon by attempting his feat of walking six miles inside of an hour, one mile backwards. About three o'clock Smith toed the mark and at a given signal started on his tramp. Smith was dressed in white shirt and pants fitting tight to the skin and walked bareheaded.

He walked half way round the race track and back again, making twelve times back and forth in front of the stand. Smith seemed to walk with every muscle of his body and walked as hard with his hands as with his feet. He struck out with his open hands as though cutting the air in front of him and walked perfectly erect without any bending of the body. But everybody was doubly anxious to see him walk backwards. He took the fifth mile for this heat probably as it would give him a change of motion and consequently rest him a little and thus be able to make time on the last heat. His backward motion was about as fast as ordinary men walk when in a hurry.

He however accomplished the feat and came up to the stand making the journey in 54 minutes and 53 seconds.

LADIES EQUESTRIANISM.

The ladies did not ride as there was only one entry, that of a daughter of Mr. R. J. Judd, and consequently no competitors.

THE RACES.

On Wednesday at 2 p. m. took place the trotting of four year old horses, best two in three, mile heats. There were three entries, Wisconsin Maid, Western Maid and Fannie Wood. Wisconsin Maid came in ahead—time, 3.14½ and 3.13, Western Maid came in second.

In the Green Race was entered Black Billy, Fannie Wood and Flora Bell.

Black Billy took first prize—time 3.14½ and 3.13. Fannie Wood took the second—time 3.18.

FOURTH DAY.

Little was done Thursday morning, except placing the ribbons upon the stock awarded premiums on Wednesday. There was a fine display of carriage horses on the track, however, all the morning, which created a continual interest toward the course. J. M. Bray took the first premium on the best pair matched carriage horses. J. R. Rowell took

the premium for the best mare or gelding, four years old or over, and G. W. Athearn for three years old or under.

THE ADDRESS.

At 2 o'clock, Governor Washburn delivered the following excellent address :

I have often wondered what might be the reason why those gentlemen who compose our agricultural and mechanical associations, in selecting persons to address them on occasions of this kind, should so often make choice of persons whose everyday pursuits and life-labors have been devoted to entirely different channels from their own, and whose knowledge of the subject upon which they are required to speak is, at the best, but of a theoretical character.

The only solution of this question which my mind has been able to discover, consists in that common infirmity of our natures which causes us to derive pleasure from the reflection that we are wiser than those who undertake to instruct us. If I have been selected upon any such principle I beg to assure you that you have made no mistake, for candor compels me in the outset to declare unto you, that what I know about farming, is — if possible — even less than the knowledge of Uncle Horace ; for, although born and brought up on a farm, amid the rough, bleak, and comparatively sterile hills of New England, my labors at farming terminated almost as soon as they began, and before my acquaintance with the fertile and teeming acres of this glorious western country ; and, considering the difficult and unpromising lot of agriculturists of the last generation, could one be blamed, whose natural inclination toward hard labor was not excessive for abandoning, while yet a boy, a pursuit which promised, at that time, only a bare subsistence as the scanty and dearly earned reward of never ending labor.

In my earlier years the life of a farmer was one of patient, prolonged, unremitting toil, with but a slight recompense awaiting him even at the end of long years of persistent

industry; at that time few of those multitudinous modern miracles, which now serve to lighten the labors of the husbandman, had an existence. The farmer had to plod his weary way from early morn till dewy eve behind the old fashioned cumbrous plow. The cultivator, the reaper, the mower, and the threshing machine were yet perhaps in the uncreated brain of their subsequent discoverers. Then, the back-breaking sickle was the only instrument for the cutting of grain, while the threshing was still accomplished, as in the old scripture days, beneath the hoofs of cattle, or the grain beaten out upon the threshing-floor under the now obsolete flail. The spinning-wheel and hand-loom were inmates of every house, however humble; and few were the farmer's daughters whose nimble fingers were not employed early and late in producing the indispensable homespun, — fortunate indeed if the supply was not exhausted more rapidly than it could be produced. Not many of the lads of to-day would consider it a privilege to be permitted three months of attendance at a district school, in the winter season, at the expense of wading some miles every day through the snow drifts, after doing "the chores" in the mid-winter twilight before daybreak! In those primitive days, when the son of some unusually well-to-do farmer was enabled to enter college he was the wonder and envy of the surrounding community! Now-a-days we have substituted the music of the piano for the buzz of the spinning-wheel, and the only yarn spun by our daughters is street yarn, very inferior to good old-fashioned cotton or woolen fibre. Our boys go to college, and our girls go to a fashionable boarding school, the means of education having been multiplied to an extent even beyond the imagination of the good people of forty years ago.

Witness our noble State University in which all of our citizens take so just a pride, and the other collegiate and normal institutions, almost too numerous to mention, so thickly scattered over the entire country. Our public school

edifices of to-day compare more than favorably with some of the Eastern *Colleges* of forty years ago.

How different the condition of the farming population of to-day from that of the last generation! The many labor-saving machines—too many to enumerate—serve to render their labor almost a pastime in comparison. Who, then, as he contemplates their improved condition, but feels his heart swell with gratitude to the author of every good and perfect gift; and who have greater cause for thankfulness to the good God, than the fortunate people who occupy this great and magnificent country? Your lines have indeed fallen in pleasant places, and as you survey your chosen home where there lingers scarcely a trace of that primal curse which doomed all mankind to eat bread in the sweat of their faces—you might well exclaim with the poet:—

“ It is a goodly sight to see
 What Heaven hath done for this delicious land!
 What fruits of fragrance blush on every tree!
 What goodly prospects o'er the hills expand !”

That voracious traveler, Captain Lemuel Gulliver, in his voyage to Brobdignag informs us that while interviewing the King of that country, the sagacious monarch remarked, “Whoever could make two ears of corn, or two blades of grass to grow upon a spot of ground where only one grew before, would deserve better of mankind, and do more essential service to his country, than the whole race of politicians put together;” and I hesitate not to give it as my opinion that the gentlemen who have devoted themselves in this State, to the introduction of the noble breeds of stock, which you have seen here to-day, have done more to benefit the State than all your Governors, Senators and Congressmen combined have done in the past, or will do in the next half century.

But, while I may not be able to tell you precisely what you ought to do to still farther enhance your prosperity,

there are some things I shall venture to say that you ought not to do.

The great mistake of modern farming, as almost universally pursued in the United States, consists in the attempt to obtain continued crops without suitable return to the soil; the popular ignorance or carelessness concerning the true system of rotation of crops; and—last but not the least—the general craving for cultivating more land than can be properly attended to. I need not tell you, perhaps, what every farmer knows, that the method of cultivation habitually pursued in Wisconsin tends directly and speedily to the utter impoverishment of the soil. This is demonstrated to the most superficial observer by facts too well known to escape notice. When I was a boy, the great wheat producing district of the country was the Genessee valley, in the State of New York. But, by the short-sighted system of continued cropping of wheat, wheat, wheat, and nothing but wheat, that once fruitful valley has ceased to be a wheat producing region, leaving the vast mills at Rochester to fall back upon the grain fields of the West for supplies. The very same result has occurred—in a lesser degree—in the older counties of this State. The production of wheat is becoming year by year more and more difficult and precarious, and is gradually abandoned as being no longer profitable; the farmers being unwillingly compelled to turn their attention to other products. The desire to make money as rapidly as possible, regardless of the welfare of future generations, is perhaps the fundamental error of our farming population, which it is but just to acknowledge they only share in common with the great majority of the remainder of the community; this mistake,—for it is a mistake, and a very grievous one,—leads the average farmer, first to perpetrate the farther blunder of attempting to cultivate too much land; and secondly, regardless of the inevitable consequences to the land cultivated, to raise only that crop

which affords the largest immediate return.' In this manner he acts upon the assumption, "After me, the deluge;" for it is perfectly manifest that at no great distance of time in the future, there must be an end to this penny-wise-pound-foolish method of cultivation, as there must, of course, be a limit to the supply of virgin soil, so that his successors can no longer hope to plant new land when the old shall have been worn out. We shall do well to profit here by the experience of the old mother country. In England the soil has increased in fertility ever since the landing of William the Conqueror down to the present day; so that lands which have been under cultivation for a thousand years are really more productive than when first turned up by the plough; and the annual rent per acre paid by the tenant-farmers of Great Britain is not unfrequently equal to the fee simple title of the best lands in Winnebago county. This arises from their wiser system of cultivation, and more particularly from their economy of fertilizers, which are carefully saved everywhere in Europe, instead of being permitted to run to waste as with us. The amount of valuable compost annually wasted in the drainage of our large cities, is sufficient, if it were to be utilized, to renovate half the worn-out lands in the entire nation. In 1867 I availed myself of an opportunity to visit the far-famed sewers of Paris, and found them as clean and pure as the rain-water conductors upon our houses; in fact scarcely anything but the rain-water was permitted to escape into the River Seine, which forms their avenue of escape; whereas the Mississippi and its various tributaries receives each year from the numerous cities upon their banks millions of dollars worth of the most valuable fertilizing agents, which are wastefully permitted to be lost in the salt sea by our careless and extravagant countrymen, although the need for these very fertilizers is becoming greater each year. It must indeed be self-evident that the various chemical elements withdrawn from the soil in the production of any par-

ticular crop, should be forthwith returned to it again, in one or another form, in order to maintain our farming lands in their original fertility. The sun, the wind, the snow and the rain are *not* by themselves sufficient to renovate worn out land, as some of our farmers appear to believe !

Much can be done toward replenishing the soil by diversifying the character of the crops ; more, perhaps, by paying greater attention to the raising of stock ; and in the splendid exhibition of fine animals we have witnessed here to-day, I hail the promise of a higher standard of farming excellence at no very great distance of time.

The simple and yet all-sufficient remedy for our previous mistakes, and the true secret of success in the matter of properly replenishing the soil, consists in the consumption of the productions of that soil as nearly as possible upon the land where they are raised ! The products may be consumed either by the brute creation or by human beings. In the first case every farmer must determine to unite the business of stock raising to the production of the food required to feed himself and his stock. In the latter resort, the consumption of the crops by human beings implies the fact of a population very much larger than would be employed in the cultivation of the products consumed ; it follows that the labor of this surplus population will be devoted to other industries than agriculture ; which leads me to remark that the chief need of our farming population here in Wisconsin is more population, more consumers, not engaged in agricultural pursuits. In other words, it is the best interest of our farmers to create and foster manufacturing industry of any and every kind. Every new farm that is opened here increases the number of competitors, thus tending to lower the value of the agricultural productions, whereas every individual employed in manufacturing pursuits increases the number of consumers, thus enlarging the market for the productions of the farmer, and enhancing the value of his crops. The

importance of a manufacturing town, located directly in the midst of a farming community, will thus be seen in the inestimable to that community. The various perishable commodities that do not admit of prolonged transportation — such as fruits and vegetables — must be consumed in the immediate vicinity of their production. It is, therefore, with no ordinary satisfaction that I witness the rapid multiplication of manufacturing towns and villages throughout our thriving state, hailing them, as I do, as the greatest of human blessings — next to good health and a clear conscience — to our deserving agriculturists.

In raising productions to be consumed in a distant market, the question of transportation is one to be very carefully considered. To convey a bushel of wheat from Winnebago County to the consumer in New England, costs at least forty per cent of its value, while to transport beef, pork, wool, butter and cheese to the same point, will absorb but from five to ten per cent of their respective values. If the destination be Great Britain the proportion is even greater, thus it will be seen that the farmer must study how best to concentrate his ultimate production; it will be found more profitable to feed away a large portion of our surplus grain to stock, and ship the cattle or their butter and cheese, than to send forward the grain.

The assured condition of the agricultural interest of Wisconsin is beyond all question, and we may now look forward to the day when our fair young State shall take equally high rank as a manufacturing State. The growth of the various mechanical industries has been continuous and without check or hindrance; in 1860 the census returns indicated a value of about \$27,000,000, and in manufactured products of different kinds; in 1870 this had increased to the large total of \$78,000,000, and the increase since 1870 has been in a still greater ratio. This showing, is a subject of congratulation to all of our citizens, indicating as it does the speedy approach

of a day when our people shall have become truly self supporting in every sense of the word. No state in the American Union can show more numerous or exhaustless water privileges. Here, almost at your very doors, there extends a nearly continuous and unbroken water power from Lake Winnebago to Green Bay, the great lake acting as an inexhaustible reservoir and regulator. You might search this great country from end to end and fail to find a superior in its many natural facilities for manufacturing, to the valley of the Fox River. With our enormous extent of Lake Navigation providing almost unequalled opportunities for our shipments—situated in the heart of the chief grain producing districts—directly in the way of the trade of the great north west, only now commencing to be opened up—what a magnificent future opens before us! Great as has been our progress hitherto, who shall dare to say that greater still is not in store for us?

I can hardly be expected to advise the experienced farmers I see before me as to the best methods of cultivating the soil. Politicians rarely make good practical agriculturalists, and when they attempt to play that role they are more than apt to make a failure; but even an unskilled man can not fail to know, that in the raising of stock, the true policy to pursue is, to breed from the best blood to be had. It costs no more to raise a fine thoroughbred horse, a full blooded Durham, Short-horn, or a pure Chester White, than the expense incurred in the raising of comparatively worthless breeds, while the marketable value of the former is double or treble that of the latter.

The importance of furnishing shelter and protection for stock from cold and wet, is well known, but not always adequately appreciated. The farmer who fails or neglects to provide such protection, little realizes his true interests; besides being a disgrace to humanity in forgetting the comfort of the poor, dumb creatures dependent upon him. To

sustain life in the animal creation requires a much larger amount of food in a cold than in a warm climate. The esquimoux readily consumes ten or twelve pounds of the seal or walrus flesh in a single day, washing it down with a half gallon of train oil; while in the torrid zone small quantities of food, of the lightest and simplest character, amply suffice to supply all the recuperation the human system requires.

In like manner, cattle that are well fed and warmly housed during our severe winters in this latitude, will keep fat and sleek upon about one-half of the amount of food that the same animals would require without suitable shelter.

The raising of sheep is beyond all doubt a branch of husbandry that can be pursued among us to great advantage; and is one well adapted to keeping up the land. Concerning the different breeds there is a very great diversity of opinion as to which is the best.

To my own poor instructed mind it has appeared likely that the farmer would find it most for his pecuniary advantage to turn his attention largely towards the sheep that produce the long combing-wools (such as the Cotswold, the Lincolnshire and Leicestershire breeds,) rather than to Sile-sians, or the fine Spanish Merinos. The former are excellent for their mutton, as well as for their long and heavy fleeces, which (because of the many modern fabrics now being manufactured requiring long combing wools) bring a price equal to the finest Merinos. I must instance the example of our thrifty Canadian neighbors, to fortify my opinion in this regard, they having turned their attention quite extensively to the breeds first mentioned. My principle object, however in mentioning this subject is to elicit discussion out of which the real facts may be made to appear, as I apprehend that my friend Stilson would have little or no difficulty in presenting excellent reasons why the finer wools are more profitable for our Wisconsin farmers.

There is yet another subject about which I think I ought

to scold the agriculturalists of this State, and that is in relation to their extravagance and carelessness in the use of agricultural machines; a degree of thriftlessness generally prevailing among the farmers in this particular, which would in any less favored community, prove their utter ruin.

In my own section, which I presume is no worse in this regard than the remainder of the State, every farmer appears to think that he must have his own reaper, mower, horse rake and threshing machine, because his neighbor has them and he is not willing to be outdone; and even if he has not the money on hand to pay for them, he is almost always too ready to listen to the syren song of the insinuating agent for the sale of these instruments; and is, not unfrequently, persuaded to load himself down with debt, for that he might have done without; trusting to the perhaps doubtful luck of the future to be able to pay when the debt becomes due. A large proportion of the embarrassment of the farming community arises in this way, when by a little kindly reciprocity among neighbors, none need have felt the want of these implements. But worst of all is the fact, that when these costly machines have been obtained, they have not reasonable care given to their preservation. Instead of seeing them properly housed for the winter after harvest, and well greased and oiled to preserve them against the ravages of rust and decay, they are left in the field without any cover, exposed to the sun, the wind and the rain, from the close of one season to the beginning of the next. The expensive paint, of course scales off, the seams open, joints become loosened, the iron oxidizes, and finally a machine which, with proper care and attention bestowed upon it, would have done good service for eight or ten years is thrown aside utterly ruined and worthless after its second or third season.

I have already alluded to our schools, and the many convenient means of affording an education to our youth of both sexes. It has sometimes occurred to me that the facilities

for education were *too* numerous, and to be obtained too *easily*. Mankind is so strangely constituted that we value only those things that are difficult to acquire; and that which can be had for the asking, is seldom esteemed very highly. The young man who does not have to struggle for an education does not rarely realize its real value, and thus too many come to misapprehend the true *object* of education. The cunning hand and the cultured brain should be taught to work together, and in harmony with one another; and, as a long step in this direction, I should be glad to see established, in direct connection with our schools, a system of *workshops* for the practical instruction of young machinists, engineers, &c.

The idea appears to be prevalent now-a-days that the main object of an education is to enable one to obtain his living by his wits. Yet we hear not a little from the stump and elsewhere, every year, (generally just before election), about "the dignity of labor, the enviable position and honorable character of the laboring man, &c.," and, if this is really the general opinion, why is it that we see so many young men trying to escape from their fortunate fate, giving us in their struggles such a multitude of third-rate lawyers, indifferent preachers, death-dealing doctors, or poor politicians?

It is not because such men shrink from physical employment, because you may see them trudge all day behind a dog with gun on shoulder, wading swamps and crossing morasses for the proud satisfaction of bagging a poor woodcock or snipe; but if one was required to exert himself to the same extent and learn the carpenter's trade and disgrace the family in any *useful* labor, he might argue against it in the same manner as a young man I once knew, whose father having refused to "come down" as liberally as the youth deemed essential—the latter declared he would go off and learn the carpenter's trade and disgrace the family.

I am afraid that a considerable proportion of the super-

fluous talk we hear now-a-days concerning "the dignity of labor,"—"our sturdy yeomanry," &c., &c., comes from a class of men with whom it is generally easier to preach than to practice, and whose greatest anxiety it is to escape from that which they so strongly recommend to others, upon the same principle which led Artemus Ward to insist upon a vigorous persecution of the war to the last drop of blood of his *wife's* able-bodied relations!

Fortunately, the measure of success which such persons meet with is insufficient, in most cases, to render their example a very dangerous or contagious one, as a few years suffices to leave them far behind in the contest for the many good things the world has to offer; for, in life it is pretty much the same old story in *all* kinds of competition;—the *prizes* are won by those who "stitch" and strive, rather than by those who shirk, and are ashamed of the honorable employments that contented their hard-working parents before them.

Happy is it that comparatively few among us here in Wisconsin entertain such foolish notions, and that the great mass of the community can still look proudly up to Heaven in the very midst of their labors, gratified for their many blessings and calling no man "master!"

Before closing I feel that I ought again to congratulate you upon your generally happy and prosperous condition; and when we contrast the situation of the country as a whole with what it was but seven short years ago, we must be overwhelmed with amazement, and should be with thanksgiving. Now, at peace among ourselves and with the whole world. Then, ten millions of men withdrawn from the pursuits of peace, devoting themselves to the forging of instruments of death and to the killing of one another.

" You forge the coultter now,
The coultter of the kindly plow,
Sweet Mary mother bless your toil,
May its broad furrow still unturned
To genial rain, to sun and wind,
The most benignant soil."

In the earnest hope that a kind providence will continue to bestow upon you an ever increasing measure of happiness and prosperity, so that future seasons may witness many displays of the products of your industry, rivalling if not surpassing the proud exhibition you make here to-day. I will no longer detain you from the many objects that challenge your attentive admiration and well merited praise.

FIFTH DAY.

The last day of the Northern Fair was moderately successful, and taken as a whole the exhibition has met the expectations of its most sanguine friends. The gross receipts will exceed \$5,000, being largely in excess of any previous year.

THURSDAY.

Running race, best two in three, mile heats, were entered: Shoo Fly, by R. H. Barnes; Dundee, by J. S. Holmes; Fire Fly, by W. Hall; Topsey, by G. R. Lampard; Brick Dust, by R. Carey; Captain Jinks, by Mr. McAfferty.

Captain Jinks came in ahead; time 1.57 and 1.59. Brick Dust came in second.

W. Hall protests against Captain Jinks, for the reason that he is over 5 years old, and, secondly, for the reason that he did not carry weights for age—Hall claiming second money.

THREE MINUTE RACE.

Entered: Oshkosh, by D. J. Pulling; Black Jake, by L. Conner; Billy Graham, by C. Westbrook; Patsey, by J. S. Holmes; Prince Albert, by Ira Clark.

Billy Graham took the first money; time 2:46, 2:40 $\frac{3}{4}$, 2:46 $\frac{1}{2}$.

Black Jake took the second money; time 2:46 $\frac{1}{4}$.

BOARD AND LOG RULES.

Mr. E. B. Norton, of Algoma, manufacturer of board and log rules for lumbermen, has a number of excellent samples of his work in the hall of manufactures. Mr. Morton has

been engaged in the manufacture of rules for the past ten ten years and the extensive patronage which he has received from the lumbermen is proof conclusive of his wares. His rules are made of the best seasoned timber, finished in the best manner and are excelled by none. His trade in these rules is steadily increasing and we are not surprised to learn that he is shipping many outside of the city. All orders addressed to Eben B. Norton, Oshkosh, Wis., will receive prompt attention.

NORTHERN STATE FAIR.

PREMIUMS AWARDED—1872.

THOROUGHbred HORSES.

- Best stallion 4 years or over, J Holmes. Second best stallion 3 years old, I Kezertee.
Second best stallion 4 years or over, I Kezertee. Best brood mare 4 years or over R H Barnes.
Best stallion 3 years old, J S Holmes. Second best brood mare 4 years or over, I Kezertee.

HORSES FOR ALL WORK.

- Best stallion 4 years or over, T Franey. Second best blood mare with colt, W A Freeborn.
Second best stallion 4 years or over, W Abrams. Best mare or gelding 4 years, M Maloney.
Best stallion 3 years old, J Antony. Second best mare or gelding 4 years, F Jones.
Second best stallion 3 years old, G F Williams. Best filly 3 years old, D E Pinning.
Best stallion 2 years old, Cameron & Worden. Second best filly 3 years old, D C Booth.
Second best stallion 2 years old, Paddleford. Best filley 2 years old, T Lawrence.
Best stallion 1 year old, R S Hayward. Second best filley 2 years old, L C Booth.
Second best stallion 1 year old, J W Athearn. Best pair matched horses for farm work, R Barnett.
Best foal 1 year old, H Clews. Second best pair matched horses for farm work, J Robinson.
Second best foal 1 year old, H E Huxley.
Best blood mare with colt, H Clemons.

ROADSTERS AND CARRIAGE HORSES.

- Best stallion 4 years or over, A L Hoyt. with.
Second best stallion 4 years or over, W O Hargrave. Best mare or gelding 3 years, G W Athearn.
Best mare or gelding 4 years, J R Rowell. Best pair matched horses, J M Bray.
Second best mare or gelding 4 years, S Beck.

DRAUGHT HORSES.

- Best draught horse over 4 years, W N Casson Second best pair draught horses over 3 years
Best pair draught horses over 4 years, H Stiles W A Freeborn.

JACKS AND MULES.

- Best Jack kept in the state 3 months previous to exhibition, D Roberts. Best pair mules, C Matteson.

SHORTHORNED CATTLE—THOROUGHBREDS.

- Best bull 4 years old, Eli Stilson. Second best cow 3 years old, Eli Stilson.
Second best bull 4 years old, Eli Stilson. Best heifer 2 years old, Eli Stilson.
Best bull 1 year old, Eli Stilson. Second best heifer 2 years old, Eli Stilson.

- Second best bull 1 year old, U Johnson.
- Best calf 6 months old, U Johnson.
- Second best calf 6 months old, Eli Stilson.
- Best calf under 6 months, Eli Stilson.
- Second best calf under 6 months, C Matteson.
- Best cow 4 years old, Eli Stilson.
- Second best cow 4 years old, U Johnson.
- Best cow 3 years old, Eli Stilson.

- Best heifer 1 year old, Eli Stilson.
- Second best heifer 1 year old, C Matteson.
- Best heifer calf over 6 months, Eli Stilson.
- Second best heifer calf over 6 months, Eli Stilson.
- Best bull of any age, Eli Stilson.
- Best cow of any age, Eli Stilson.

AYRSHIRES.

- Best bull 4 years old, E F Dunham.
- Best bull 3 years old, C Hazen.
- Second best bull 3 years old, Grand Chute Farmers Club.
- Best bull 1 year old, C Hazen.
- Best calf, D Huntley.
- Second best calf, C Hazen.

- Best cow 4 years old, U Hazen.
- Best heifer 2 years old, D Huntley.
- Best Heifer 1 year old, C Hazen.
- Best heifer calf, D Huntley.
- Best bull of any age, E F Dunham.
- Best cow of any age, C Hazen.

DEVONS.

- Best bull 3 years old, S J Perry.

- Best cow or heifer 3 years old, M Snell.

GRADE AND NATIVE CATTLE.

- Best cow 4 years old, M Snell.
- Second best cow 4 years old, J Athearn.
- Best cow 3 years old, E Stilson.
- Second best cow 3 years old, M Snell.
- Best heifer 2 years old, E Stilson.
- Second best heifer 2 years old, T Davis.
- Best heifer 1 year old, E Potter.
- Second best heifer 1 year old, M Snell.
- Best heifer calf, T Davis.

- Second best heifer calf, J Athearn.
- Best working oxen 4 years old, T Davis.
- Second best working oxen 4 years old, N T Sturtevant.
- Best steers 3 years old, T Davis.
- Best steers 2 years old, T Davis.
- Best steers 1 year old, J Athearn.
- Second best steers 1 year old, N Johnson.

SHEEP—SPANISH MERINOS.

- Best ram, 2 years old, Eli Stilson
- Second best, Eli Stilson
- Best ram, 1 year old, Eli Stilson
- Second best, Eli Stilson
- Best lamb, Eli Stilson
- Second best, Eli Stilson
- Best 3 ewes, 1 year old and over, Eli Stilson

- Second best, Eli Stilson]
- Best 3 ewes, 1 year old, Eli Stilson
- Best 3 lambs, Eli Stilson
- Second best, Eli Stilson
- Best ram of any age, Eli Stilson
- Best ewe of any age, Eli Stilson

GRADES FROM LONG WOOL SHEEP.

- Best ram, 2 years old, H Clemens
- Second best, H A Gallup

- Best pen of ewes, 1 year old, E Humphrey
- Best pen of lambs, E Humphrey

SOUTHDOWN AND OTHER MIDDLE.

- Best ram, 2 years old, M Powers
- Second best, M B Green
- Best pen of 3 ram lambs, M B Green
- Second best, M Powers
- Best pen of ewes, 2 years and over, M Powers
- Second best, T Davis

- Best pen of ewes, 1 year old, E Potter
- Second best, T Davis
- Best pen of lambs, M Powers
- Best ram of any age, M Powers
- Best ewe of any age, M Powers

GRADES FROM FINE WOOL SHEEP.

- Best ram, 2 years old, Eli Stilson
- Second best, Eli Stilson

- Best pen of ewes, 1 year old, E Stilson
- Second best, E Stilson

Best ram, 1 year old, Eli Stilson
 Best pen of ewes, 2 years and over, E Stilson
 Second best, Eli Stilson

Best pen of lambs, E Stilson
 Second best, E Stilson

SWINE—BERKSHIRE.

Best boar, 2 years old, J Athearn
 Best boar, 1 year old, W Wakeman
 Best pig over 6 months old, E Stilson
 Best pig under 6 months, E Stilson
 Second best, Cameron & Worden
 Best breeding sow, 2 years old, J Athearn
 Best breeding sow, 1 year old, E Stilson

Second best, E Stilson
 Best pig over 6 months, N Johnson
 Second best, N Johnson
 Best pig under 6 months, Edgar Stilson
 Second best, E Stilson
 Best sow and pigs, E Stilson
 Second best, E Stilson

POLAND CHINAS.

Best boar pig under 6 mos, M M Thompson
 Second best, M M Thompson

Best sow pig under 6 mos, M M Thompson
 Second best, M M Thompson

CHESTER WHITES.

Best boar, 2 years old and over, J Taylor
 Second best, H Clemens
 Best boar, 1 year old, N G Sturtevant
 Second best, J Darlington
 Best pig over 6 months, J Taylor
 Second best, J Darlington
 Best pig under 6 months, J Taylor
 Second best, J Taylor

Best breeding sow, over 2 years, J Taylor
 Second best, N G Sturtevant
 Best breeding sow, 1 year old, J Taylor
 Second best, L Jones
 Best sow under six months, J Taylor
 Second best, J Taylor
 Best sow and pigs, J Taylor
 Second best, N G Sturtevant

POULTRY.

Best bantams, J McKean.
 Second best bantams, H A Smith.
 Best games, B Doherty.
 Second best games, E Brown.
 Best Spanish, J McKean.
 Second best Spanish, E Stead.
 Best white Brahmas, J McKean.
 Second best white Brahmas, C Fowle.
 Best dark Brahmas, A Richardson.
 Second best dark Brahmas, T R Gill.
 Best pair cochins, E Brown.
 Second best pair cochins, H A Smith.
 Best pair houdans, I Kezertee.
 Second best pair houdans, J N Hoaglin.
 Best leghorns, C Fowle.
 Second best leghorns, T R Goe.
 Polander—no best.
 Second best J McKean.
 White dorking—no best.
 Second best dorkings, J R Forbes.
 Best hamburgs, J E Austin.
 Second best hamburgs, E W Saunders.

Best bolton grays, J McKean.
 Second best bolton grays, E Stead.
 Golden pheasants—no best.
 Second best golden pheasants, J McKean.
 Plymouth Rock—no best.
 Second best Plymouth Rock, T R Goe.
 Best domestic turkeys, J Vandoren.
 Second best domestic turkeys, M B Green.
 Cambridge turkeys—no best.
 Second best Cambridge turkeys, J Vandoren.
 Best bronze turkeys, E Brown.
 Second best bronze turkeys, J M Smith.
 Common geese—no best
 Second best common geese, T Davis.
 Bremen geese—no best.
 Second best bremen geese, E Brown.
 Best African and China geese, E Brown.
 Best Aylesbury ducks, E Brown.
 Best rouen ducks, E Brown.
 Best common ducks, E Brown.
 Best pair fancy rabbits, T Lodge.
 Second best pair fancy rabbits, J McKean.

FIELD, GARDEN AND HOUSEHOLD PRODUCTIONS.

Best winter wheat, T Davis.
 Second best winter wheat, T L Bailey.

Best dent corn, E Stilson.
 Second best dent corn, J W Morgan.

Best life wheat, T Davis.
 Second best life wheat, S W Appleton.
 Best club wheat, Geo S Church.
 Second best club wheat, W A Boyd.
 Best Rio Grande wheat, E Stead.
 Second best Rio Grande wheat, L Jones.
 Selected Rio Grande wheat, T Davis.
 Best white oats, T Davis.
 Second best white oats, M B Green.
 Best black oats, E Potter.
 Second best black oats, E Stead.
 Best barley, J Sanderson.
 Second best barley, S W Appleton.
 Best rye, T Davis.
 Second best rye, T Davis.
 Best flint corn, E Stilson.

Best buckwheat, T Davis.
 Second best buckwheat, H Jodes.
 Best timothy seed, E Stilson.
 Second best timothy seed, T Davis.
 Best clover seed, F Noble.
 Second best clover seed, H Stiles.
 Best field peas, T Davis.
 Second best field peas, M B Green.
 Best navy beans, H A Gallup.
 Second best navy beans, L Jones.
 Best merino beans, J W Jones.
 Second best merino beans, S Jones.
 Best collection by one exhibitor, T Davis.
 Second best collection by one exhibitor, S Jones.

VEGETABLES.

Best half bushel early Goodrich potatoes, E W Sanders.
 Second best, E Stead.
 Best peach blow potatoes, S W Appleton.
 Second best, H Hall.
 Best half bushel early Chili potatoes, W W Hall.
 Second best.
 Best half bushel Harrison potatoes, H C Wolcott.
 Best half bushel fluke potatoes, E W Sanders.
 Second best, T Davis.
 Best half bushel late rose potatoe, W C Wolcott.
 Second best, J M Smith.
 Best half bushel excelsior potatoes, J M Smith.
 Second best, J K Bailey & Co.
 Best half bushel peerless potatoes, no. 4 and 6, J H Smith.
 Second best, E W Sanders.
 Best half bushel red onions, E W Sanders.
 Second best, J M Smith.
 Best half bushel white onions, L S Chase.
 Second best, E W Sanders.
 Best half bushel yellow onions, J D Mears.
 Second best, A M Brainerd.
 Best half bushel turnips, J N Hoaglin.
 Second best, L S Jones.
 Best half bushel parsnips, J M Smith.
 Second best, A M Brainerd.
 Best half bushel beets, E W Sanders.
 Second best, J M Smith.

Best half bushel sweet potatoes, W T Miles.
 Second best, J M Smith.
 Best half bushel short horn carrots, J M Smith.
 Second best, J Miles.
 Best half bushel long orange carrots, E W Sanders.
 Second best, J Nelson.
 Best half bushel mangolds, D Huntley.
 second best, E Stead.
 Best half bushel rutabagas, J M Smith.
 Second best G W Minckler.
 Best tomatoes, J Miles.
 Second best, E W Sanders.
 Best squashes, E W Sanders.
 Second best J N Hoaglin.
 Best Hubbard squash A M Brainerd.
 Second best, H Floyd.
 Best autumn squash T Davis.
 Second best, A M Brainerd.
 Best pumpkins, J N Hoaglin.
 Second best J W Minckler
 Best celery, G M Hasbrouck.
 Second best, H Searls.
 Best cabbage, J M Smith.
 Second best, J D Vandoren.
 Best cauliflower, J D Mears.
 Second best, J Miles.
 Best show and greatest variety of vegetables by one exhibitor, E W Sanders.
 Second best, J M Smith.

DAIRY AND HOUSEHOLD.

Best jar or tub of butter, A W Hawley.
 Second best, E T Jones.

Best brown bread, Mrs Mary Rolf.
 Second best, Mrs A G Cusick.

Third best A W Hawley.
 Best farm dairy cheese, Geo Rogers.
 Second best, Mrs H Jones,
 Best factory cheese, E F Dunham,
 Second best, C Hazen.
 Best milk yeast bread, Mrs A G Cusick,
 Second best, do
 Best hop yeast bread, do
 Second best, Mrs Cross,

Best Graham bread, do
 Second best Mrs K Lindsey.
 Best show of cake, Mrs K Lindsey.
 Second best, Mrs B Jones.
 Best sample of honey, G S Church
 Second best, A H Hart.
 Best sack spring wheat flour, L S Jones ag't.
 Second best, A Wood.

FRUITS, WINES ETC.—APPLES.

Greatest variety, H Floyd.
 Second greatest variety, N C Hoyt,
 Ten varieties, H Floyd.
 Second best, E Chase.
 Best five varieties adapted to northwest N C
 Hoyt.
 Second best, H Floyd.
 Best autumn apples, T Bailey & Co.
 Second best, N C Hoyt.
 Best winter apples, H Floyd.
 Second best, N C Hoyt.
 Best seedlings, E Chase.
 Best fifteen varieties, H Floyd.
 Second best, T Bailey & Co.
 Greatest varieties of pears, T Bailey & Co.
 Second best, H Floyd.
 Best three varieties pears, H Floyd.

Second best, T Bailey & Co.
 Best single variety pears, Mrs D W C Priest.
 Second best, T Bailey & Co.
 Best show grapes, R T Harney.
 Second best, J Brainerd.
 Best ten varieties, J Brainerd.
 Second best, R T Harney.
 Best five varieties, R T Harney.
 Second best, J Brainerd.
 Best single variety, J N Hoaglin.
 Second best, R T Harney.
 Best exhibition of fruits of all kinds, H
 Floyd.
 Second best, T Bailey & Co.
 Best grape wine, R T Harney.
 Best currant wine, J Brainerd.

DELICACIES, PRESERVES. ETC.

Best collection preserved fruits, M L Bond.
 Best sample preserved pears, Mrs K Lindsey.
 Best sample preserved peaches, Mrs K Lindsey.
 Best sample preserved plums, M L Bond.
 Best sample preserved cherries, D W C
 Priest.
 Best sample preserved strawberries, Mrs D
 Huntley.
 Best sample preserved raspberries, Mrs D
 Huntley.
 Best sample preserved blackberries, M L
 Bond.
 Best sample preserved currants, Mrs D
 Huntley.
 Best sample preserved gooseberries, Mrs D
 Huntley.
 Best sample preserved grapes, M L Bond.
 Best sample preserved crabapples, M L Bond.
 Best sample preserved tomatoes, M L Bond.
 Best collection of jellies, Mrs K Lindsey.
 Best Currant jellies, Mrs K Lindsey.
 Best Apple jellies, D W C Priest.

Best Crabapple jellies, D W C Priest.
 Best Grape jellies, Mrs K Lindsey.
 Best Raspberry jellies, Mrs C H Root.
 Best Blackberry jellies, Mrs C H Root.
 Best collection canned fruits, E Stilson.
 Best canned apples, E Stilson.
 Best canned pears, E Stilson.
 Best canned pared peaches, E Stilson.
 Best canned whole peaches, E Stilson.
 Best canned plums, E Stilson.
 Best canned cherries, Mrs C H Root.
 Best canned crabapples, E Stilson.
 Best canned strawberries, Mrs C H Root.
 Best canned raspberries, Mrs C H Root.
 Best canned blackberries, Mrs J Brainerd.
 Best canned gooseberries, D W C Priest.
 Best canned currants, Mrs C H Root.
 Best canned grapes, Mrs C H Root.
 Best canned tomatoes, Mrs J Brainerd.
 Best canned corn, D W C Priest.
 Best and greatest variety of pickles, Mrs K
 Lindsey.
 Second best, Mrs D Huntley.

HOUSE PLANTS AND FLOWERS.

- Best display house plants, Isaac Miles.
 Best display by amateurs, Mrs A Brown.
 Best display oleanders in bloom, Isaac Miles.
 Best display geraniums, Isaac Miles.
 Best display geraniums, variegated, Isaac Miles.
 Best display geraniums, double, Isaac Miles.
 Best display fuschias in bloom, Isaac Miles.
 Best display asters, E Chase.
 Best display petunias, I Miles.
 Best 6 carnations in bloom, I Miles.
 Largest variety of roses, I Miles.
 Best six varieties of roses in bloom, I Miles.
 Best Japan lilies in bloom, I Miles.
 Largest display of chrysanthemums, Isaac Miles.
 Largest display of hanging baskets, &c., I Miles.
 Best single cactus by amateur, I Miles.
- Best variety of cactus by amateur, Mrs Brown.
 Best single begonia, Mrs A Brown.
 Best ornamental foliage plants, I Miles.
 Best vasha pholta, I Miles.
 Best collection cut flowers, I Miles.
 Second best, J Vick.
 Best ornamental design cut flowers, I Miles.
 Second best, E Chase.
 Best table boquet, I Miles.
 Best pair round boquet, I Miles.
 Best flat hand boquet, I Miles.
 Best basket boquet, I Miles.
 Best show of asters, Isaac Miles.
 Best show of dahlias, J C Plumb.
 Best 6 named varieties, Mrs D Huntley.
 Best show of pansies, J C Plumb.
 Best show of gladiolus, J Vick.
 Best show of verbenas, I Miles.

DOMESTIC, FINE ARTS, ETC.

- Best flannel, McFetridge & Co.
 Second best flannel, McFetridge & Co.
 Best rag carpet, Mrs I Hoile.
 Best cotton patchwork quilt, Mrs Sorrenberger.
 Second best cotton patchwork quilt, Mrs C H Root.
 Best worsted quilt, Mrs Fulley.
 Second best worsted quilt, R Stilson.
 Best quilt of any material not mentioned, Mrs Sturtevant.
 Second best quilt of any material not mentioned, E T Jones.
 Best woolen yarn, Lucy Spore.
 Second best woolen yarn, McFetridge & Co.
 Best men's socks, Mrs Rogers.
 Second best men's socks, Lucy Spore.
 Best ladies' stockings, Mrs C Rogers.
 Second best ladies' stockings, Mrs D Huntley.
 Best woolen mittens, Lucy Spore.
 Second best woolen mittens, Mrs Houghton.
 Best worsted tidy, S Fulton.
 Second best worsted tidy, Mrs H Watner.
 Best cotton tidy, Mrs K Lindsey.
 Best crochet work, Mary Hay.
 Best rug, Mrs Coffin.
 Best wool scarf, Hurlburt & Woodhead.
 Best ottoman cover, Mary Basche.
 Second best ottoman cover, Mary Basche.
 Best knit spread, Mary Hay.
- Second best knit spread, Mrs Guile.
 Best tatted tidy, Mary Hay.
 Second best tatted tidy, B M Ostrander.
 Best tatted collar, Mary Hay.
 Second best tatted collar, Mrs Priest.
 Best crochet tidy, Mary Hay.
 Best knit breakfast shawl, B Stilson.
 Best knit hood, Mrs C M White.
 Second best knit hood, Mary Hay.
 Best worsted embroidery, Miss J Goodman.
 Second best worsted embroidery, Miss E Beers.
 Best floss embroidery, R Stilson.
 Second best floss embroidery, Mary Hay.
 Best wax flowers, Mrs C H Root.
 Best moss work, Mrs Kellman.
 Best work in shell, Mrs A Brown.
 Second best work in shell, Mrs A Brown.
 Best work in beads, Mary Hay.
 Best dried grass and flowers, Mrs I J Hoile.
 Second best dried grass and flowers, E B Thomas.
 Best lace work, Mrs K Lindsey.
 Best worked lamp mat, Mary Hay.
 Best wrought set of ndergarments, Mrs D W C Priest.
 Best leather work, Mrs H C Watner.
 Best plain sewing, Miss E Cross.
 Best darned stockings, Mrs D Huntley.

NATURAL HISTORY.

Mineralogy, K M Hutchinson.

Entomology, K M Hutchinson.

WORKS OF ART, ETC.

Best original painting in oil of Wisconsin landscape, Mrs Bentley.
 Best original painting in oil of any landscape T Patton.
 Second best original painting in oil of any landscape, Mrs E R Snow.
 Best pen and ink drawing, W W Daggett.
 Second best pen and ink drawing, J N Hoaglin.
 Best penmanship, W W Dtggett.
 Second best penmanship, J N Hoaglin.

Best pencil drawing, Mrs Bentley.
 Best cone work, Mrs Houghton.
 Second best cone work, Mrs Houghton.
 Best stencil cutting, J H Johnson.
 Best sculpture, Stewart & Baldwin.
 Best portrait in crayon, Nellie Ostrander.
 Second best portrait in crayon, R Stilson dip.
 Best photograph in India ink, Chas Faber.
 Best exhibition of printing, Allen & Hicks.
 Best oil paintings, Mrs Bentley, dip.

MANUFACTURES OF IRON, STONE AND CLAY.

Cast iron gate, Beckwith & Davis.
 Cast iron fence, Beckwith & Davis.
 Cook stove with furniture, Hasbrouk & Monroe.
 Parlor stove, K M Hutchinson.

Manufactures of iron and steel, W L Bronsden.
 Stone cutting, Stuart & Baldwin.
 Collection of drain tile, D Roherain.

MACHINERY AND FARM IMPLEMENTS.

Best cultivator and potato digger, J G Lacey.
 Thomas' smoothing harrow, W C & E E Dickenson,
 Hand corn planter, A C Kent,
 Wood's self raking reaper, Williams & Co.
 Wood's new iron reaper do
 Harvester sickle grinder, Cornell & Sturgeon.
 Sulky plow, B J Crane.
 Self-clearing plow, D G Wyman.
 Track sprinkler for horse power, E Brown.
 Monitor seeder and cultivator, W D Stroud.
 Marsh harvester, C H Wheeler agent.
 Heavy plow, J H Ward.
 Horse cultivator, J H Ward.
 Steel plow for general use, J H Ward.
 Kiding corn cultivator, N C Thompson.

Walking corn cultivator, N C Thompson.
 Stubble plow, N C Thompson.
 Seed sower, J Bacon.
 Johnson's sweepstakes reaper, J Walker
 Horse rake, J Walker.
 Two horse cultivator, J Walker.
 Gang plow, cultivator and seeder combined,
 Fox Lake Manufacturing company.
 Straw cutter, W C & E E Dickenson.
 Corn sheller, do
 Root cutter, do
 Wind mill, Hazen Bros.
 Fountain auger and fixtures for cleaning wells, J B Jordan,
 Horse stump machine, T R Parish.
 Hand stump machine, T R Parish.

The judges found many worthy machines which from the rules they could not give diplomas, viz: Wood, Williams, Champion and Manny machines, and very difficult to decide upon.

LEATHER AND LEATHER MANUFACTURES.

Traveling trunk, Schmidt Bros.
 Ladies satchel, Schmidt Bros.

Best calf skin, C V N Brundage.
 Best other kinds leather, J Buskirk.

MANUFACTURES OF WOOD.

Best display of carriages, Rudd & Holden.
 Second best, Dodge & Manville.
 Best display double carriages, Dodge & Manville.
 Second best, D E Smilh.

Second best, Clemons & Wilsen.
 Best Lumber wagon, T Koepfer.
 Best Double sleigh, Rudd & Holden.
 Best single sleigh, Squire & Purdy.
 Best bunch shingles, Webb, Alberts & Co.

Best single top buggy, Rudd & Holden.
 Second best, Dodge & Manville.
 Best open buggy, Richardson Gallup-

Best set chamber furniture, B H Soper.
 Best set Parlor furniture, B H Soper.

TEXTILE FABRICS.

Best Doeskin, McFetridge, Burchard & Co.
 Best Cassimeres, do
 Best blanketing do
 Best Woolen goods, do

Best machinery and knit goods, Hulbert & Woodhead.
 Best furs, C V N Brundage.

SEWING MACHINES.

Wilcox & Gibbs Manufacturing company, dip.
 Home Shuttle, G M Robinson, diploma.
 Singer, L C Session, diploma.
 Wilson Shuttle, Sewing Machine Company, dip.

Domestic, A G Turner, diploma.
 Sewing machine work, Wilcox & Gibbs, Manufacturing company, diploma and premium recommended.

MISCELLANEOUS.

Commodore Harshaw's horn, Special premium of a ten cent tin cup to H P Leavens.

Grape vines, R J Harney.
 Fire Kindler, R T Smith, diploma and premium recommended.

Spring brace, J C Lacey, diploma.

Yeast cakes, Waterloo Yeast Co, diploma.

Universal steamer, J C Bishop, diploma.

Fruit jars, S J Osborn, diploma.

Live racoon, C V N Brundage. This being a loyal coon and vouched for, the blue ribbon was attached to his tail.

Agates from Lake Superior, E S Hammond, diploma.

Lamb knitting machine, Hurlbert & Woodhead, diploma.

Horse whiffletrees, W J Burdick, diploma.
 Rick rack tidy, Mrs W Wakeman, diploma.
 Preserved sweet apples, Mrs D Huntley, diploma.

Victor Washing Machine, Yeoman & Hanrechen, diploma.

Fanning mill, J Felton, diploma.

Curtis scythe holder, W C & E E Dickinson, diploma.

Earth augers, Bennett & Briggs, diploma.

Wine and Cider Mill, W C & E E Dickinson.

Shew of gloves, E C Tyrell, diploma.

Corn Sheller, W C & E E Dickinson.

Fanning mill, Kenosha Co., diploma.

Feed and Hay Cutters, W C & E E Dickinson.

Fanning mill, Blake & Elliott, diploma.

Vegetable Cutter, W C & E E Dickinson.

Warehouse mill, Blake & Elliott, diploma.

Crayon Drawing, Mrs Bentley.

Farm mill, Blake & Elliott, diploma.

Soft Soap, J R Loper, diploma.

Bee hive, T Davis, diploma.

Candles, J R Loper, diploma.

Wind mill, Hazen Bros., diploma.

Neats foot oil, J R Loper, diploma.

Champion washer, T McConnell, diploma.

Specimens of wooden work, Parker & Smith, diploma.

Show of chestnuts, P S Bennett, diploma.

Green and dried fruits, T Bailey & Co, diploma.

Stove boards, Hasbrouck & Monroe, diploma.

Corn and vegetables, T Bailey & Co, diploma.

Stump puller, F Parish, diploma.

Products of Egypt, T Bailey & Co, diploma.

Well pump, Ostrander & Clough, diploma.

Dried Groats, T Bailey & Co, diploma.

Fancy cross, Mrs Watner, premium.

Miniature cranberry marsh. H Floyd, diploma and premium recommended.

Pipe organ, Upton & Sandon, diploma and second premium.

Deciduous trees, I J Hoile, diploma.

Log rules, E B Norton, premium.

Deciduous trees, Stickney Bros., diploma.

Nursery trees, J Brainerd, premium.

Deciduous trees, Willey & Woodward, diploma.

Milk deoderizer and cooler, A Phillips, premium.

Deciduous trees, F K Phoenix, diploma.

Stump puller, J Bacon, diploma.

Slipper case, Lida Fulton, premium.

Case of coins, W P Coolbaugh, diploma.

Crayon drawing, Nellie Ostrander, premium.

Earth closet, B H Soper, diploma.

Buckskin, Jno Bushkirk, premium.

ATTRACTIONS AT THE FAIR.

The chief attractions among the independent mowers at the fair was the Wilber Eureka Mower, a machine but newly introduced into this region, and one that is abundantly useful upon the soft marshes in this vicinity. The sickle bar extends from one wheel to the other directly in the path of the horses, and the tongue is attached directly in the center, causing no side draft whatever. In moving, one horse walks in the standing grass, and the other just outside in a path made clear of hay by a divider. Thus the horses do not trample in the hay already cut, but leave it just as it fell, loose and light, so that it can easily dry in the sun. It is easily raised and lowered and possesses many advantages noticed by all who witnessed the trial upon the ground. The company have an agency at Ripon and it will probably be for sale next season in this city. Conrol & Gould, Racine, are agents for Wisconsin. Farmers should send for pamphlet, giving entire description of the machine.

FINE PRINTING.

Among the first premiums awarded at the Northern Fair was one to Allen & Hicks of the DAILY NORTHWESTERN Office for the best display of printing. This office was also awarded the first premium in 1871.

MAP DRAWING.

A map of Wisconsin executed by Flora Hugoboom, a pupil in the Second Ward School, aged eleven, took the first premium. The map was very finely executed and deserved the premium.

EGYPTIAN FRUIT.

Among the several displays of fruit at the fair, that from Southern Illinois is worthy of special mention. Its large size and fine flavor, together with the great number of varieties displayed, rendered it one of the most attractive features of the fair. We hope to welcome the enterprising exhibitors among us another season.

WAUSHARA FRUIT.

The display of apples and grapes from Waushara County was very creditable to Northern Wisconsin; especially considering the lack of rain the past season. It shows conclusively that this section of the country is not excelled ordinarily for fruit raising by any other in the northwest.

VICK'S FLOWERS.

The display of cut flowers, by James Vick, of the Rochester nurseries, was very fine. These flowers had been cut nearly two weeks, and yet retained their freshness remarkably. We understand that Mr. Vick intends to offer special premiums of \$150 for floral displays at our next fair, the flowers to be raised from his seeds and bulbs. This will be an inducement for a larger cultivation of flowers, and a much grander display of products which add so much to the beauty and interest of an exhibition.

HUTCHINSON'S CABINET.

Mr. K. M. Hutchinson has one of the finest private collections of minerals and geological specimens to be found in the northwest, and he favored the Association by entering one case containing some very beautiful pieces. He also had on exhibition two or three cases of butterflies, beetles and other insects arranged in order, showing great care and labor on his part in their preparation.

LAST DAY OF THE FAIR.

The last day of the fair was interesting particularly on account of the races, which occupied all the afternoon. The first race on the programme was one for horses that had never beaten 2:50. There were entered:

Billy Graham, by C. Westbrook; Oshkosh, by D. J. Pulling; Patsey, by J. Holmes; Prince Albert, by Ira Clark; Black Jake, by L. Conner.

Messrs. Holmes, Pulling and Westbrook entered a formal protest against Prince Albert, as he was entered too late.

The first heat of this race was won by Pulling's horse and the second by Billy Graham. In the second heat Pulling's horse overreached and cut himself very badly and was obliged to be taken from the track. This left the field open to Billy Graham who won the race. Time, 2:40 $\frac{1}{4}$, 2:53, and 2:54 $\frac{1}{2}$. Black Jake took second money.

RUNNING RACE.

An extemporized running race was gotten up for a purse of \$35, to the first horse and \$15 to the second; half mile dashes, best two in three. There were entered:

Sorrel King, Shoo Fly, Fire Fly and Brick Dust. This was one of the most exciting races of the day, as two of the horses, Brick Dust and Fire Fly were pretty nearly a tie.

In the first dash Brick Dust came in a neck ahead; time 54 seconds.

In the second heat the fun ran to its highest pitch. From the very starting to the stand Brick Dust and Fire Fly were neck to neck, and not a foot's difference between their noses. As they reached the stand the cheering and yelling was deafening. It was almost a tie, as Fire Fly's nose passed the wire not more than six inches ahead of Brick Dust. But the running on the part of Fire Fly on the home stretch was evidently foul, as she crowded Brick Dust almost into the fence, and kept him off the track into the grass for the last eighth of a mile. Therefore the judges ruled against her in this heat, giving Brick Dust the first money and her the second.

SWEEPSTAKES.

The last race of the day was the sweepstakes, but the entries were but few in number. Entries:

C. Westbrook, by C. Westbrook; Oshkosh, by D. J. Pulling; Badger Girl, by J. S. Rowell. Oshkosh of course did not trot having been injured in a former race. The first three heats were won by the Badger Girl with apparent little difficulty. The last heat, however, was a pretty close thing,

as Westbrook had left off his hop skip and a jump and came down to square trotting for the entire mile. Westbrook kept the lead until on the home stretch, when Badger Girl gradually crept around him and came in a nose ahead; time, 2:41, 2:31 $\frac{1}{4}$, 2:41 $\frac{1}{4}$.

It was now growing dark, and the people gradually left the grounds. Thus closed our third Annual Fair, pronounced by all a perfect success and withal favored by the best weather that could be asked for. Not a clouded sky nor a scorching sun, but beautiful, mild and pleasant weather that was enjoyable and enjoyed by all.

The total receipts from every source will probably reach \$6,000. The expenditures of course, can not now be estimated.

OFFICERS FOR 1873.

A. M. SKEELS, Ripon, *President.*

R. D. TORREY, Oshkosh, *Secretary.*

J. H. JONES, Winchester, *Treasurer.*

Vice-Presidents :

Brown County - - -	J. M. Smith.
Calumet - - -	James Christie.
Door, - - -	J. Harris.
Dodge, - - -	D. J. Pulling.
Fond du Lac, - -	E. S. Hammond.
Green Lake, - - -	J. C. Sherwood.
Manitowoc, - - -	Joseph Vilas.
Marathon, - - -	Mr. Plummer.
Marquette, - - -	C. S. Kelsey.
Outagamie, - - -	H. Turner.
Oconto, - - -	N. Cole.
Racine, - - -	L. S. Blake.
Sauk, - - -	Chas. H. Williams.
Shawano, - - -	C. M. Upham.
Sheboygan, - - -	J. Stoddard.
Winnebago, - - -	J. V. Jones.
Waupaca, - - -	S. A. Oakes.
Waushara, - - -	H. S. Sackett.

ANNUAL MEETING OF 1873.

OFFICE OF THE ASSOCIATION,
OSHKOSH, WIS., Jan. 14, 1873.

President Skeels being absent, on motion Vice-President J. V. Jones was called to the chair.

Motion prevailed to appoint a committee of three on credentials. Committee reported the following named gentlemen as entitled to seats in the convention :

Winnebago County Horticultural Society : I. J. Hoile, R. J. Harney, E. S. Hayden.

Grand Chute Farmers' Club : L. L. Randall, Herman Jones, G. G. Johnson.

Outagamie County Agricultural Society : P. S. Bennett, Z. C. Fairbanks, H. Green.

Outagamie County Bee Keepers' Association : A. H. Hart, A. J. Dickerson, C. P. Palmer.

Winnebago County Stock Growers' Association : J. V. Jones, S. Beckwith, A. C. Austin.

Grand Chute Horticultural Society : D. Huntley, G. W. P. Gerard, M. B. Johnson.

Grenville, Outagamie County Farmers' Club : E. M. Growell, three votes.

Oshkosh Stock Growers' Association : E. W. Viall, R. L. Bigger, R. P. Eighme.

Winnebago County Agricultural Society : J. M. Ball, Eli Stilson, Asher Hubbard.

Fond du Lac County Agricultural Society : E. L. Hammond, E. B. Norton, C. Mattison.

Brown County Agricultural Society : J. M. Smith, three votes.

Oshkosh Horticultural Society : J. P. Roe, three votes.

Motion prevailed to adopt report of committee, and the gentlemen named took their seats.

Motion prevailed to allow delegates to cast the votes of members who might be absent.

The Treasurer, J. H. Jones, made his annual report which was on motion referred to a committee of three, viz : E. W. Viall, E. S. Hammond, L. L. Randall.

The Secretary made his report, which was on motion adopted and ordered printed.

Committee appointed to examine the report of the Treasurer made their report, as follows :

Your committee to whom was referred the report of the Treasurer would respectfully report that they have examined the same and find correct and recommend that the vouchers be burned, report adopted, and vouchers so burned in presence of the meeting.

Committee on By-Laws made their report, which was on motion accepted.

Mr. Stilson offered an amendment to Article 6, and moved its adoption. Said amendment was to strike out "And the acting President, Secretary and Treasurer shall be a quorum to audit all needful expenses, preparatory to or after the fair of each year," and substitute, "And an auditing committee of three shall be elected annually by the executive board to audit all accounts and expenses." Amendment was adopted.

Motion prevailed to add Section 9, as follows :

"These By-Laws may be amended at any annual meeting of the Association by a majority vote.

Motion prevailed to proceed to the election of officers.

For President, A. M. Skeels received twenty-six votes ; J. V. Jones, one vote.

A. M. Skeels declared duly elected.

For Secretary, R. D. Torrey received twenty-eight votes, no opposition.

R. D. Torrey was declared duly elected.

For Treasurer, J. H. Jones received nineteen votes; Eli Stilson, two votes; C. Mattison, three votes; E. W. Viall, one vote.

J. H. Jones declared duly elected.

The following Vice Presidents were declared duly elected: J. V. Jones, Oshkosh, Winnebago County; E. S. Hammond, Fond du Lac, Fond du Lac County; James Christie, Stockbridge, Calumet County; J. Stoddard, Green Bush, Sheboygan County; Joseph Vilas, Manitowoc, Manitowoc County; P. S. Bennett, Appleton, Outagamie County; J. M. Smith, Green Bay, Brown County; S. A. Oakes, Waupaca County; H. S. Sacket, Waushara County; Mr. Plummer, Marathon County; C. M. Upham, Shawano; C. S. Kelsey, Marquette County; J. C. Sherwood, Green Lake County; E. Decker, Kewaunee County; J. Harris, Door County; A. Cole, Oconto County; Chas. H. Williams, Sauk County; D. J. Pulling, Dodge County; L. S. Blake, Racine County.

Motion prevailed to authorize the executive committee to fill any vacancy which may occur in the list of officers. J. V. Jones offered a resolution that the salaries of the officers be as follows: President, \$100; Secretary \$350 and expenses; Treasurer, \$50.

On motion referred to Executive Committee.

Meeting of Executive Board was fixed for first Tuesday in March, 1873, to revise Premium List.

Mr. I. J. Hoile presented a communication from James Vick, of Rochester, New York, offering \$150 in special premiums. Same was on motion accepted and the Secretary was instructed to tender the thanks of the Society to Mr. Vick.

On motion J. V. Jones, I. J. Hoile and A. H. Hart were

chosen delegates to Madison to attend the Agricultural Convention.

Motion prevailed that each Agricultural, Horticultural, Mechanical and Stock Growers' Association be entitled to one vote in revising the premium list.

On motion adjourned.

R. D. TORREY, Secretary.

TREASURER'S REPORT FOR 1872.

RECEIPTS.

To balance on hand from last report,	\$ 463 29
To Errors, - - - - -	7 00
To Gate fees fair 1872, - - -	4,281 76
To Ground Rental, - - - -	295 00
To fees at Grand stand, - - -	153 95
To Entries and per cent. on races,	223 00
	—————\$5,424 00

EXPENDITURES.

By orders paid since last settlement	\$5,046 36
To balancé, - - - - -	377 64
	—————\$5,424 00

SECRETARY'S REPORT.

To the President, Officers and members of the Northern Wisconsin Agricultural and Mechanical Association :

GENTLEMEN:—I have the honor to present to you the condition and progress of this society, at the close of the third year of its existence. I would respectfully submit for your consideration, a few thoughts of general nature. The superiority of the Fox River Valley and adjacent counties, long claimed by residents, is coming to be acknowledged by other portions of the State, and indeed by the West, the recent

completion of important Rail Road connections opening up hitherto unimproved localities, among which might be named the Milwaukee and Northern, the Wisconsin Central, the extension of the Northwestern to Escanaba, and the St. Paul to Oshkosh, are gradually but surely assisting in developing the hidden resources of this portion of the State, while the speedy completion of the Fox and Wisconsin Improvement has now become a fixed fact, and when this and other contemplated public improvements are completed we reasonably expect a rapid advance in all that effects National Wealth and Progress.

While these much acknowledged public improvements have taken place, there is an evident ambition among our farmers and manufacturers "to keep up with the times," nor is this more noticeable anywhere than among the farmers in the raising of stock of the best breeds.

Some who a few years since thought the expense of going into the raising of fine bloods was too great, have discovered that the true policy for successful stock raising, is to start with pure blood of the best breeds and preserve the purity. Also in agriculture we find marked improvements from year to year, there being more intelligent farming done instead of the hap hazard way of doing as formerly, farmers are making a study, and profitably applying the knowledge of agriculture, choosing only the best seeds and that which is best adapted to the soil and climate of this latitude, making a thorough culture of the soil, thereby obtaining far more profitable results than formerly.

In manufactures in almost every village and city there are vast and permanent improvements in every department of mechanical skill.

In view of these improvements so briefly and imperfectly alluded to, it seems there is a necessity for the existence of the society which you represent, that the several and all of the pursuits of industry which go to make up this wealth

and prosperity may be estimated and encouraged to reach perfection, for it cannot be denied that the three fairs of this society have been productive of good in many ways. It has assisted in a laudable ambition to excel in the different departments of industry and skill, and if the right course is pursued there is no reason why this society may not become one of the best.

Allow me to suggest the propriety of endeavoring through the representatives of your several districts to secure an amendment to the law by which County societies draw \$100 from the State Treasury, so that all district societies may have the benefit of the same amount, or more, it would seem but simple justice that societies doing as well this should be assisted from this source.

The fair of 1872 may be set down as a success, the exhibition in all departments being fully up to the expectations of the most sanguine. Financially, also, the fair was a complete success. The gross receipts, including balances from last year, was \$5,078.95. Total disbursements, including premiums paid, repairs on grounds, incidentals, etc., according to the Treasurer's report, were \$4,796.32, for which orders were drawn, leaving balance on hand at this date of \$377.64.

Below you will find the Secretary's Warrant Account. All expenses and premiums were paid by orders drawn on the Treasurer. Bills for each item of expense duly audited and on file and in the office of the Secretary, as also the premium pay roll are the Secretary's vouchers for drawing the same.

There yet remains \$17 unpaid premiums, four of which are protested.

Unpaid bills against the society approximate \$35.

In conclusion permit me to suggest such a revision of the premium list, as shall provide in the future against any misconstruction or misunderstanding.

There is to be an Agricultural Convention at Madison,

the first week of February, under the auspices of the State Agricultural and Horticultural Societies. This association is cordially invited to send three delegates to the same.

SECRETARY'S WARRANT ACCOUNT FOR 1872.

NO. ORDER.	TO WHOM AND FOR WHAT.	AMOUNT.
1	Gilbert Hubbard, flags	\$32 09
2	E F Dunham, premium	9 00
3	D Huntley, do	75 00
4	Mrs H Jones, do	5 00
5	J S Rowell, do	101 50
6	R Barneet, do	12 00
7	Ira Clarke, do	10 00
8	C Westbrook, do	140 00
9	J S Holmes, do	35 00
10	D J Pulling, do	17 00
11	Ira Clarke, do	11 00
12	D Roberts, do	10 00
13	McAfferly, do	75 00
14	R Carey, do	60 00
15	J P Gallup, superintendent bill	56 30
16	D W McAllister, do	18 00
17	M Thompson, premium	12 00
18	Forbes and Derby, gate keepers	40 00
19	James Smith, walking	60 00
20	W J Morgan & Co, diplomas	41 00
21	E Wilson, clerk	30 00
22	Schmidt Bros., premium	3 00
23	J V Jones, lumber	98 50
24	Potter and Semple, buss fares	14 00
25	J M Reynolds, premium	26 00
26	Anna Bears, do	50
27	A H Barnes, do	12 00
28	J H Hancock, pay of marshals	100 00
29	Dodge & Manville, premium	14 00
30	D E Smith, do	3 00
31	Hutchins' Bros., band	140 00
32	Jas. Brainerd, premium	18 00
33	C Vessey, hay	84 24
34	A M Skeels, salary and expenses	110 00
35	Capt. T Marshall, clerk	30 00
36	J V Jones, lumber	241 00
37	Mr Lo'g, premium	2 00
38	H Floyd do	46 00
39	Hay Bros., do	31 73
40	J V Jones, do	10 00

SECRETARY'S WARRANT ACCOUNT FOR 1872.

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NO. ORDER.	TO WHOM AND FOR WHAT.	AMOUNT.
41	W N Casson, premium.....	12 00
42	Eli Stilson, do	337 00
43	W P Coolbaugh, premium	3 00
44	I J Hoile, superintendent bill	69 85
45	Bailey & Co., premium	26 00
46	W T Miles, do	3 00
47	N C Hoyt, do	15 00
48	Mrs K Lindsley, do	13 00
49	J Vick, do	1 00
50	Mrs Hoile, do	2 00
51	Mrs B Kellum, do	1 00
52	C V N Brundage do	3 00
53	H Clemons, do	24 00
54	L S Jones, do	14 00
55	Edgar Brown, do	9 00
56	Foster & Jones, lumber.....	46 12
57	A Konrad, clerk	15 95
58	J R Paddleford, premium	10 00
59	G W Athearn, do	14 00
60	D Huntley, do	6 50
61	F Zentner, gate keeper.....	25 00
62	Mrs A Brown, premium	6 50
63	J S Holmes, do	24 00
64	T Lodge, straw and labor	53 00
65	Gameron & Worden, premium	10 00
66	Mrs Fuller do	1 00
67	Cameron, do	2 90
68	Eli Stilson, do	15 00
69	M Towers, do	12 00
70	F Badger, clerk	18 00
71	J E Austin, premium	2 00
72	Hollister & Sherman, oats	1 00
73	M B Green, premium	10 00
74	Mary Norton, do	1 00
75	C Fowle, do	3 00
76	R Stilson, do	4 00
77	J H Jones, salary and expenses	107 00
78	R D Torrey, do	266 33
79	M Jackeditch, premium	2 00
80	Rand, McNally & Co., stationery ..	1840
81	A L Hart, premium	12 00
82	J Stoddard, superintendent	15 00
83	L M Billings, labor	7 00
84	Fred Jones, premium	6 00
85	D W Fernandez, printing	40 50
86	C McCurdy, gatekeeper	12 62
87	Gertie Torrey, premium	2 00
88	C F Burnham, do	9 00
89	J H Johnson, do	2 00
90	A W Hawley, do	7 00
91	P Dugan, do	3 00

NO. ORDER.	TO WHOM AND FOR WHAT.	AMOUNT.
92	O Watts, labor	6 00
93	Mary Hay, premium	8 00
94	A Rickey, labor	5 25
95	Mrs A Brown, premium	3 00
96	E W Sanders, [do	21 00
97	W W Daggett, do	4 00
98	M Towers, do	11 00
99	E Chase, do	12 00
100	J M Olid, do	10 83
101	J Buskirk do	2 00
102	Mrs D W C Priest, do	8 50
103	J Athearn do	23 00
104	I Kezertee, do	20 00
105	Isaac Miles, do	35 00
106	David Walt, do	6 87
107	Rounds & Morley, printing	58 15
108	J D Ham, labor	4 00
109	Webb, Alberts & Co. premium	2 00
110	A G Cusick, do	12 00
111	E F Dunham, do	40 00
112	E F Jones, do	4 00
113	C M White, do	1 00
114	A B Smith, superintendent	15 00
115	M Snell, premium	19 00
116	J N Hoaglin, do	12 00
117	J O'Brien, do	33 00
118	Mrs H Watner do	3 50
119	Wm Wakeman do	5 00
120	J C Wadleigh, labor	6 25
121	H A Gallup, premium	5 00
122	Allen & Hicks, printing	100 75
123	Mrs Sornberger, premium	2 00
124	Hattie CoX, do	1 00
125	B Dougherty, do	2 00
126	S W Appleton, do	6 00
127	J M Smith, superintendent,	43 00
128	E Humphrey, premium	37 00
129	Mrs C P Houghton, premium	4 50
130	S D Paddleford, do	5 00
131	E Stead, do	12 00
132	H Stiles, do	12 00
133	Thomas Davis, do	42 00
134	E Potter, do	13 00
135	T Lawrence, do	8 00
136	M L Boyd, do	10 00
137	W A Freeborn do	6 00
138	N Johnson, do	35 00
139	J Taylor, do	39 00
140	McFetridge & Co., do	12 50
141	T Koepfer, do	3 00
142	Thomas Franey, do	12 00

SECRETARY'S WARRANT ACCOUNT FOR 1872.

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NO. ORDER.	TO WHOM AND FOR WHAT.	AMOUNT
143	J S Perry, premium	8 00
144	G T Williams, do	6 00
145	Stuart & Baldwin, do	4 00
146	J Robinson, do	6 00
147	W O Hargave, do	6 00
148	L C Booth, premium.....	\$9 00
149	Wm Bell, do	12 00
150	Lida Fulton, do	1 50
151	J Sanderson, do	3 00
152	C Mc—— do	11 00
153	Henry Johnson, premium.....	1 00
154	B H Soper, furniture.....	8 00
155	R J Harney, premium.....	15 00
156	N G Sturtevant, do	20 00
157	J H Sturtevant, do	2 00
158	J W Cross, do	7 00
159	K Fulley, do	2 00
160	R H Bollins, labor.....	13 00
161	Wm Abrams, premium.....	6 00
162	C Matteson, da	89 00
163	T R Goe, do	5 00
164	H A Smith, do	2 00
165	J D Vandoren, do	7 00
166	Mrs C H Root, do	7 00
167	Allen & Hicks, printing.....	2 00
168	A C Austin, assistant superintendent	15 00
169	Mrs Rolph, premium	2 00
170	M D Walker, do	1 12
171	Geo Rogers, do	8 00
172	Nellie Ostrander, premium.....	3 00
173	J D Vandoren, do	10 00
174	G S Church, do	5 00
175	Budd & Holden, do	16 00
176	Eli Stilson, do	26 00
177	J H Hicks, do	3 00
178	Mrs D W C Priest, do	8 00
179	H B Dale, assistant superintendent.....	15 00
180	C Hazen, premium	68 00
181	R S Hayward do	8 00
182	A Richardson do	2 00
183	C P Mallett, livery	6 00
184	J McKean, premium	11 00
185	W C Woolcot, do	4 00
186	K M Hutchinson, premium.....	6 00
187	B Maloney, do	12 00
188	B Town, do	6 00
189	Thos Davis, do	6 00
190	Chas Kellett, do	5 00
191	C Rogers, do	4 50
192	P Breslow, do	1 00
193	H Styles, do	2 00

NO. ORDER.	TO WHOM AND FOR WHAT.	AMOUNT.
194	S Beckwith, premium.....	5 00
195	E B Norton, do	2 00
196	E R Snow, do	2 00
197	J Anthony, do	12 00
198	Mrs H Bentley, do	4 00
199	Mrs Guile, do	50
200	Thos Davis, do	33 00
201	J M Bray, do	12 00
202	J D Vandoren, do	1 00
203	J H Todd, assistant superintendent.....	10 50
204	Job Darlington, premium.....	5 00
205	Hurlburt & Woodhard, premium.....	3 00
206	Neidecken, press and seal.....	6 00
207	Wm Wakeman, premium	5 00
208	D E Pingra, do	10 00
209	J Nelson, do	2 00
210	N Johnson, do	10 00
211	W Hall, do	11 00
212	J H Jones, for paid dinner tickets	145 42

BY LAWS ADOPTED JANUARY 14, 1873.

ARTICLE I. The name of this association shall be the same as heretofore, the Northern Wisconsin Agricultural and Mechanical Association. Its object shall be the promotion of agriculture, and mechanical and household arts.

ART. 2. The Association shall consist of such citizens of the State as shall pay to its Treasurer one dollar and fifty cents annually. The Presidents of Agricultural, Mechanical, Horticultural and Stock Growers' Associations, within the jurisdiction of this Association shall be ex-officio members of it, and any person may become a life member by the payment of ten dollars, without the payment of any annual sum thereafter, and be entitled to free admission to any fair or exhibition forever.

ART. 3. The officers of this society shall be a President, one Vice President in each county of the Northern and Northeastern portion of the State, a Secretary and a Treasurer, who shall be annually elected by ballot. The Executive Committee shall consist of the above officers.

ART. 4. The President shall preside at all meetings of the Society and of the Executive Committee, and exercise a general supervision of the fairs and interests of the Society, performing such duties as are usual for such officers. In the absence or inability of the President to act at any time, one of the Vice Presidents shall perform such duties.

ART. 5. The Secretary shall keep the record of meetings and proceedings of the Association, and have charge of the books and papers pertaining to such office, conduct the correspondence, and perform all duties usually performed by such officers.

ART. 6. The Treasurer shall have charge of the funds of the Association, and pay the same out on the orders of the President countersigned by the Secretary, attend the Fairs to receive the entrance and admission fees, keep correct accounts of receipts and disbursements, and perform all the duties usually performed by such officer, and give bonds for the faithful performance of said duties, in such sum as the Executive Committee may from year to year require.

ART. 7. The Executive Committee shall have power to manage the affairs of the Association, so far as arranging the details of the Fairs, and determining the premiums and expenditures to be made, appointment of Superintendents, Judges and subordinate officers, except such as the General Laws require to be done by the President or acting President; Shall appoint or confirm; any five members of the Executive Committee, including the acting President and Secretary shall constitute a quorum for the transaction of business of a general nature, and an auditing committee of three shall be elected annually by the executive board, to audit all accounts and expenditures.

ART. 8. All orders on the Treasurer are to be drawn by the President and countersigned by the Secretary. The Secretary shall keep a record of all orders drawn each year, and shall file them all in regular order of numbers as vouchers.

ART. 9. The annual meeting of the Association shall be held on the second Tuesday of January in each year, at such place and hour of the day as a quorum of the Executive Committee may direct at such annual meeting. Each Agricultural, Mechanical, Horticultural and Stock Growers' Association, within the jurisdiction of this Association, shall be entitled to three delegates, who shall be allowed to cast one vote each, in the election of officers and transaction of necessary business proper to be done at annual meetings. Notice of annual meetings shall be given as required by Sec. 4, of the act of incorporation, approved March 23, 1871, General Laws.

ART. 10. These By-Laws may be altered or amended at any annual meeting of the Association, by a majority vote. Annual meeting on motion adjourned *sine die*.

Attest :

R. D. TORREY, Secretary.

EXECUTIVE MEETING

held in Oshkosh, March 4, 1873. Members present: Hon. A. M. Skeels, R. D. Torrey, J. H. Jones, P. S. Bennett, J. M. Smith, E. S. Hammond, J. Stoddard. Also Eli Stilson, delegate from Winnebago County Agricultural, and I. J. Hoile, Winnebago County Horticultural Society; the two latter in accordance with a resolution passed at the annual meeting January 14, 1873.

Motion prevailed to fix time for next fair on September 29th and 30th, and October 1st, 2d and 3d. Fixing place was referred to President, Secretary and Vice-President from Brown County, with instructions not to act until after March 20th, 1873.

On motion the resignation of J. V. Jones was accepted as Vice-President from Winnebago County, and Stephen Bowron was duly elected to fill vacancy.

The committee then proceeded to revise the premium list, also electing Marshalls, Superintendents and Judges as appears in the list as published.

On motion the \$150 of James Vick as special premium was incorporated in the list.

On motion adjourned.

R. D. TORREY, Secretary.

OFFICE OF THE N. W. A. & M. ASSOCIATION,
OSHKOSH, April 25, 1873.

To A. C. AUSTIN, ESQ.—*Dear Sir:* You are hereby appointed Chief Marshall with Special Police Powers to act at and during the days of the Fourth Annual Fair of the Northern Wisconsin Agricultural and Mechanical Association to be held in the city of Oshkosh, Sept. 29th to Oct. 3d, inclusive.

A. M. SKEELS,

President of said Association.

Correct copy.

Attest: R. D. TORREY, Secretary.

OFFICE OF THE N. W. A. & M. ASSOCIATION,
OSHKOSH, September 3, 1873.

Executive Board met at 10 A. M. President Skeels in the chair. The following members were present: J. M. Smith, P. S. Bennett, E. S. Hammond, J. H. Jones, S. Bowron.

Motion prevailed that the President, Secretary and one Vice-President shall act as auditing committee until January, 1874.

Motion prevailed to admit Judges free.

Motion prevailed to have music and the Secretary be authorized to secure the same on the best terms possible.

Motion prevailed to build a new hall or building for carriages and machinery.

Motion prevailed to appoint J. V. Jones, S. Bowron, A. C. Austin and R. D. Torrey to supervise the construction of the same.

Motion prevailed to locate machinery south of the buildings.

Motion prevailed to have a speaker on the subject of the Grange, and that J. H. Osborn, J. H. Jones and R. D. Torrey be a committee to secure the same.

On motion Eli Stilson was chosen Superintendent of Watchmen.

Motion prevailed to pay watchmen \$2 per night or day, Laborers \$1.50 and Assistant Superintendent \$2 per day:

R. D. TORREY, Secretary.

Minutes of executive meeting held pursuant to notice at the Beckwith House, Friday evening, October 3d.

Present: J. M. Smith, acting President, E. S. Hammond, P. S. Bennett, J. H. Jones, J. Stoddard, R. D. Torrey.

On motion of E. S. Hammond the pay of the Secretary was fixed at \$400 and necessary expenses.

On motion adjourned to the 22d day of October.

R. D. TORREY, Secretary.

Proceedings of the Executive Meeting held pursuant to adjournment Oct. 22d, at the Court House.

Present: Acting President J. M. Smith, S. Bowron, J. H. Jones, E. S. Hammond, R. D. Torrey.

On motion it was agreed that if the premiums awarded to J. D. Vandoren and Thos. Davis can be arranged satisfactorily to each the Secretary was directed to pay the same.

Motion prevailed to set aside all premiums awarded on new varieties of Potatoes.

The following discretionary premiums were ordered paid: Mrs. Kenfield, \$1.00 for Hop yeast Biscuit; Mrs. Lambert, \$2.00 for egg plant; Sabine Wheel Company, \$3.00. Pay all awards of diplomas, also Mrs. A. G. Turner, O. P. Clinton, Lizzie Montgomery, Nellie Ostrander, Geo. Kellogg, \$5.00, J. Wamdt, \$2.00.

The following disallowed: Cornish & Curtis, Geo. Kellogg on apples, Green & Decker.

Bills of Sarau, \$5.40, Lodge, \$2.63, J. E. Sanders, \$2.63, S. M. Hay, \$38.00, and E. S. Hammond, \$31.00. were allowed and ordered paid.

Motion prevailed that if the County Society would donate \$100 to this society, we would take that much stock in the fair grounds at Oshkosh.

Time for annual meeting was fixed at 11 A. M., second Tuesday in January, 1874.

Adjourned.

R. D. TORREY, Secretary.

FOURTH ANNUAL FAIR.

(Report of the Daily Northwestern, Sept. 30, 1873.)

SECOND DAY.

The weather to-day has been all that could be wished, clear and pleasant, and the attendance both of visitors and exhibitors on the fair grounds has been very large. Trains from every direction have been crowded with people coming to the fair, and the hotels are overflowing. The streets are filled with strangers and all day long there has been a steady flow of vehicles on Main and Jackson streets to the fair-grounds.

THE GATE.

is guarded by three or four special policemen. In the ticket office, the Treasurer, James H. Jones, of Winchester, assisted by three or four clerks, is busily engaged in selling tickets and taking care of the receipts.

IN THE SECRETARY'S OFFICE,

Mr. R. D. Torrey, the Secretary of the Association, is attending to the laborious duties of his office, assisted by a corps of assistants. In an adjoining office, the President *ad interim*, Hon. J. M. Smith, of Green Bay, is also hard at work. Within the enclosure the crowd is moving lively, and in the different departments all is animation and life. Entering the first building we reached we find the

HORTICULTURAL HALL.

The first which meets our eye as we enter the building is the celebrated collection of grains, woods and cereals fur-

nished by the Burlington & Missouri Rail Road Company. They embrace samples of fine wheat, corn, rye, oats, and barley, together with specimens of different wood from the fertile lands of the company in Iowa and Nebraska.

Near by, Daniel Vincent of the town of Algoma, has some of the finest grapes we ever saw. He has 14 varieties, and 12 varieties of apples.

MILES' FLOWERS.

Isaac Miles of this city, occupies nearly half the center row of shelves, with samples of his magnificent flowers. He has 325 different varieties of flowers, varying in beauty and forming a handsome exhibition in itself.

RIPON PICKLE COMPANY.

The Ripon Pickle Company has a large assortment of their wares, embracing catsup, pickled cauliflower, tomatoes, cucumbers, &c. It makes a fine show.

James Brainerd has a fine assortment of grapes and other fruit from his yard in this city.

C. F. Ruggles, of Omro has 30 varieties of apples, many of them very fine.

Eli Stilson has a splendid show of apples, as well as O. P. Clinton.

J. N. Hoaglin of this county, shows some choice cranberries from the Burnett County Marsh, some nice Concord grapes, and 5 varieties of apples. The apples look well.

Edmund Chase, of Omro, an old stand-by of the fair is on hand with 84 different varieties of apples. He has also a large and beautiful collection of flowers.

OSBORN'S FRUIT AND FLOWERS.

J. H. Osborn, of this city, occupies the greater portion of the west end of the center with his fruits and flowers. They make a beautiful display.

E. W. Sanders, of this city, shows some good apples and a large collection of preserved fruit.

There are many other notable and interesting objects in this department, but the crowd sweeps us along, and leaving the others for another visit, we proceed to the

FINE ART HALL,

of which Wm. P. Taylor is superintendent. Entering at the east end, a splendid exhibition of boots and shoes from J. M. Rollins & Co's., store first strikes the eye.

Daniel Vincent has a case of minerals from Lake Superior which attract great attention.

Frank Percey, of this city, shows a fine lot of guns, pistols and sporting paraphernalia generally.

Fancy work of all kinds, interesting enough to the ladies but terribly exasperating and discouraging to a modest individual like the writer, is displayed all around. Beautiful crotchet work, nice little lace and filagree work &c., &c., all of which is pinched and examined by the ladies and passed over in contempt by any one else.

FINE PRINTING.

A case of samples of fancy job printing from the DAILY NORTHWESTERN Job Rooms shows well and attracts considerable attention.

To the right, W. H. H. Robinson, photographer, displays a number of excellent pictures.

B. H. Soper has his usual exhibition of handsome furniture.

G. R. Lampard occupies a large space with samples of his musical goods.

The Oshkosh Business college shows some fine specimens of penmanship and pen drawing.

Mr. K. M. Hutchinson, of this city, has four cases of insects arranged in classes, which would delight the eye of an entomologist. Big bugs, little bugs, beetles and moths, are here stuck up for the edification and instruction of the spectators.

There is a large number of rag carpets, the good old fashioned kind which show that this branch of domestic industry has not yet become a "lost art."

WEBER, THE MILLINER.

A. M. Weber, the irrepressible genius who presides over destinies of the "Temple of Fashion," has a large display of his goods.

The sewing machine men are out in force, nearly all of the principal agencies being represented.

The Racine Woolen Mill has some fine shawls, and other excellent fabrics on exhibition. This mill has a high reputation for good work.

MANUFACTURER'S HALL.

In the last of the three buildings devoted to vegetables, grain and manufactured articles, there is a good display. P. L. Smith & Co., show a large row of fine carriages. Jas. A. Day & Co., have on exhibition samples of their lime, cement and drain tile, and Webster & Lawson, of Menasha, show some of their famous hubs and spokes.

Near the southwest corner is a large collection of large vegetables of several different varieties grown by the President, Hon. J. M. Smith, of Green Bay.

On the opposite side, Geo. D. Johnson, of Appleton, and a number of others in that vicinity, have a collection of large sweet potatoes, some mammoth beets, corn, potatoes, cabbage, &c., all looking remarkably well.

BUTTER AND CHEESE.

E. D. Knapp, of Omro, has some excellent factory cheese and George Rogers and others show some good dairy cheese.

Mrs. Newman, of Vinland, has some excellent butter.

On the adjoining tables, we noticed several samples of good bread and cake, showing that, amid the preparations for the more showy and superficial departments of the fair,

the ladies of Northern Wisconsin have not overlooked the more important articles of every day life.

FINE CATTLE.

The display of cattle is by all means better than at any previous exhibition of the society. A number of fine herds are here and a visit brings us to some animals which may be said to be "worth their weight in gold." Many of these animals are valued at from \$1,000 to \$2,000 apiece and some of them even higher.

ARYSHIRES.

Chester Hazen, proprietor of the celebrated Ladoga Cheese factory in Fond du Lac county, has a herd of nine Ayrshire cattle.

Adjoining, is the fine herd of Ayrshires owned by Jonathan Stoddard, of Green Bush, Sheboygan county, numbering fourteen head.

The Grand Chute Farmers' Club of Appleton, also has a number of fine Ayrshires.

The Ayrshires are valued highly on account of their milking qualities.

SHORT HORNS.

One of the finest lot of cattle on the grounds and one which stands well wherever exhibited, is Eli Stilson's Glendale Herd of this city. Mr. Stilson has thirteen head, many of them exceedingly valuable and all in excellent condition. These cattle have been frequently spoken of in the NORTHWESTERN, and we can only now allude to them in a few words. They are pure Short Horns of established reputation and are worth looking at.

SHERMAN'S CATTLE.

H. B. Sherman's celebrated herd of thoroughbred Short Horns from Spring Brook farm, Burnett Junction, attract great attention. They number seven head; four yearling heifers, one two year old heifer, one four year old heifer and

one two year old bull. All are in excellent condition and show not only their excellent breeding but good care and attention.

JERSEY CATTLE.

H. C. Janes, of Neenah, formerly of this city, has three stalls of Jersey's.

Charles Hazen, of Ladoga, also has a fine Jersey bull.

The other objects of interest in this department we are compelled to pass for the present.

THIRD DAY.

The afternoon of the third day of the Northern Fair passed off in a very interesting manner with an immense attendance at the grounds. In fact the rush was so great at the ticket offices that a perfect jam was the consequence all day long, and the ticket sellers were found much fault with, for the comparative slow manner in which they dealt out tickets and change. A large number of children were obliged to stand nearly half the afternoon, before being able to crowd to the ticket offices.

THE EXHIBITION

has now got fully under way and the surging crowding mass is pouring through the halls and over the grounds eager to see whom they may devour, and bent on viewing the elephant if they don't lay up a cent.

THE ENTRIES.

The total number of entries this year is 4,000. When this is compared with 2,600, the total number of entries last year, it can be judged to what extent the Northern State Fair is growing in strength and popularity.

We once heard a gentleman, resident of another part of the state, say that aside from the display of agricultural implements our fair compared favorably, if it did not exceed, the Milwaukee State Fair, as a whole, and, in some departments, it far excelled it. The attendance, moreover, he re-

marked was equal to the State Fair. With the resources of beautiful farming districts around us there is no reason why our Northern Fair should not in time carry with it more popularity and prove a greater success than even the State Fair—except in the mechanical department.

MORE ABOUT THE FINE ART HALL.

The chief interest among lovers of art and beautiful handiwork is centered in this department. Drapery of bed quilts by the ton hang from overhead and "fancy fixtures" innumerable dangle on every side forming a handsome sight.

Mrs. Wm. Bray exhibits a very fine piece of work in the way of a slipper holder and some fine specimens of embroidery.

Mrs. W. H. H. Robinson shows a very beautiful piece of work in the shape of a worsted dog, worked almost life size and handsomely framed. It attracts immense attention.

W. H. Bodine of Fond du Lac, exhibits some scroll work painting which takes the eye of all painters, and is pronounced an excellent specimen.

Mary Wadleigh makes visitors bow down to pass under an elegant carriage affghan which hangs suspended just in front of the entrance door.

A most charming skeleton wreath made out of some white gauzy material attracted much attention. The writer being of the masculine persuasion will be unable to state the exact material this is made of; but it might be white crape, or tarleton, or musquito netting; but he is positive it ain't a fish net. No name was attached to it, but it was a beautiful piece of work.

Miss Viola Thompson made a success of a fine wreath of wax flowers.

Cameron & Stoppe exhibit a case of specimens of fine groceries. What this had to do with fine arts is a little vague; but we suppose that the art of eating good groceries is one of the fine arts.

A beautiful case of machine knitting is exhibited by Mrs. Frank Kenfield *nec* Miss Francis Tripp. The display was a neat one and took the premium.

Lewie Patton, of Appleton, a boy 13 years old, exhibits a pretty little pen picture of *The Soldier's Dream*. It is very handsome.

Mrs. Alexander Rogers has a fine case of millinery on exhibition.

W. H. Courtney shows an elegant display of fine ladies' furs. The display is very attractive.

A. Scidmore, of Appleton, occupies one corner with his elegant show of photographs and pictures. The corner is a miniature picture gallery in itself and contains some handsome pictures both of citizens of Appleton and scenes in that vicinity.

Too much praise cannot be bestowed upon the exhibition of Penmanship by Prof. W. W. Daggett of the Oshkosh Business College. The specimens are the finest that we have ever seen, and we have seen one or two of those things before. Beautiful birds of perfect symmetry of form and shading, handsome free hand exercises and most perfect letters combine to form an attractive corner to those who can appreciate good penmanship. It seems wonderful that the human hand can be so skilled as to perfect such faultless strokes of the pen. We recommend all students and lovers of the art to enjoy a few moments in this corner.

Some beautiful pictures in oil are displayed by Mrs. A. G. Turner, which attract much attention.

Next to these hangs a cluster of elegant crochet and fancy needle work, a sort of collection made up by general contributions and most tastily arranged. The display has much interest for the ladies.

Mr. J. F. W. Decker has a show case of most beautiful crockery ware, parian statuary and china. It is a very tasty array.

A little piece of inlaid and carved work is displayed by a boy 18 years, named Fuller. It consists of an elegant secretary, furnished with drawers, &c., handily arranged.

Mrs. Dr. Russell exhibits some fine oil paintings, among which a portrait of the late John Fitzgerald hangs prominent.

Mrs. Asa Rogers shows an ingeniously constructed medley of pictures cut out and pasted in a curious manner. It is a curious and interesting picture of pictures.

J. H. Johnson has on exhibition some excellent samples of stencil cutting and handsome door plates and small signs. These door plates are becoming very popular in this city and we noticed Mr. Johnson just cutting orders for signs and stencils.

McKey Bros. & Folds have an elegant display of carpets stretching from floor to ceiling of the hall. It attracts much attention and is very handsome.

THE RACES.

The main interest for horsemen was found on the track. The two races for the day were :

First—Three minute race, best three in five. Purse \$75. First horse, \$40; second horse, \$20; third horse, \$15.

The following is the record of the race :

ENTRIES.

S. B. Lawrence—b. g. Billy—4—dist.

D. J. Pulling—g. m. Rebecca—3-2-2-4.

J. S. Holmes—br. m. Kitty Holmes—5-4-4-2.

Chas. Westbrook—br. m. Wisconsin Maid—2-1-1-1.

O. N. Russell—Lee—distanced.

S. A. Bowe—b. m. Waupun Bell—1-3-3-3.

Time 2:53—2:51—2:54 $\frac{1}{4}$ —2:53.

Pulling took second money and Holmes third money.

In the first heat Lawrence's Bill lit out for all he was worth and kept the lead until the third quarter, when his horse

became unsettled and fell to the rear. On the start Pulling and Westbrook were a length behind; but the judges let them go at Pulling's suggestion, which left the Judge and Westbrook under every disadvantage. They crept up, however, and came in second and third. Lee was distanced in the first heat and Billie in the second. Westbrook took three straight heats.

Second Race—Running race, half mile and repeat. Purse \$75. \$50 to first horse, \$25 to second.

Entries were :

Abner Stembler—Kinnickinnick—1-1.

H. W. McAfferty—Icicle—3-3.

J. S. Holmes—Walter Scott—2-2.

The race was won by Kinnickinnick in two straight heats, Walter Scott coming in second every time. Time: 51-51½.

THE ADDRESSES.

Between the heats of the races the speakers were introduced.

Mr. Morrow who had been advertised to speak has been unable to do so, and his address was postponed until to-day.

Hon. H. Smith of Sheboygan, was first introduced—subject, "The Dairy." Many of Smith's remarks were lost to the audience in a clamor of a band that insisted upon playing for a side show during the speaking. The noise was stopped however, and Mr. Smith began to be heard. His address was marked by common sense, and humor combined, but inclined somewhat to political allusions, which possibly had some reference to butter and cheese but probably not.

The manufacture of dairy products, he said, was now being conducted with as much system and skill as banking or any other business. In view of the increasing importance of the product the study of its best developments was one of interest and profit. It was a product which could be transported with ease and economy to all parts of the country. It was an article the best qualities of which were in eminent

demand. Besides it was the most profitable employment. It necessitated a variety of occupations on the farm. Wheat raising for straw, corn raising for fodder, and the greatest variety of products for feeding the stock; and then came the return to replenish the soil.

There was no more profitable product than dairy products. Dairymen were satisfied with their occupation and were fast increasing the number of their cows. It gave work the whole year round.

The process of aerating milk by floating ice in the top was the true mode of getting the best cream and the choicest butter. The cold milk of the top would settle to the bottom, while the warmer of the bottom would rise to the top, thus keeping the milk in constant circulation. Keeping the bottom of the can in cold water was a wrong principle. It kept the coldest on the bottom and thus stopped all circulation. Customers often spoil milk themselves by misuse, and then laid it to the milkman.

He would not say anything about butter making, as he knew but little of that particular branch. People complained of the scarcity of good butter; but the greatest wonder is that it is no worse.

The farmer's wife often labors under a material disadvantage; forced to put her milk in a dark cellar or a hot pantry, amid the fumes of cooking, without the facilities for scientifically treating milk as it should be. Some women, however, always make good butter, and some never can. The woman who could make good butter and bread was a jewel, and the husband of such a woman was fortunate. As far as he was concerned he was one of those fortunate men. What was handsomer than two long rows of goodly cows, unused to hardships, not accustomed to clubs and poundings, and with their large brown eyes turn up to greet their keeper and tongues ready to lick the hand that feeds them.

Mr. J. H. Foster delivered an able address on agriculture,

but as he read from manuscript we neglected to take notes, expecting to publish his speech in full. Mr. Foster, however, escaped us and left on the morning train for Chicago, and we failed to obtain the address. Perhaps at some future time we will publish it.

SHERMAN'S DISPLAY OF HORSES.

The exhibition of draught horses from Mr. Sherman's Spring Brook farm was one of the finest that it has been our fortune to witness. Few, we expect, have ever seen a finer one. The horses were led out on the track in front of the grand stand, and were the admiration of all. There were ten of them, the two largest being stallions—one a Norman and the other a Clyde. Mammoth, broad backed, large boned, heavy necked, gigantic animals, which put one in mind of so many elephants. Among the number were two two-year olds of most wonderful proportions for their age.

We shall probably allude to Mr. Sherman's stock again at more length. Suffice it to say that to Mr. Sherman is due the credit of the finest display of horses ever brought upon our track. His stock alone would make a fair of itself, and is an important addition to our present exposition.

THURSDAY

Thursday was the Grangers day. The officers of the association tendered the use of the grand stand to the order and all members were admitted to it free, to listen to the address of Hon. M. Anderson of Dane County on the subject of Patrons of Husbandry. At a very early hour in the morning the sky was overcast with clouds and a sort of solitary stillness pervaded the atmosphere which gave evidence of a showery day. Happily, however, the clouds cleared away and the sun came out warm and bright. About 10 o'clock the streets commenced to be filled to overflowing.

Farmers' teams began to assemble from all parts of the country, the arriving trains brought crowds of people and the boats from every direction were crowded with passengers.

The cause of the unusual numbers in the streets and the congregation of the farmers' teams was the

GRAND PROCESSION.

of the Patrons of Husbandry through the city. The programme, as laid out, called for the assembling of all the granges, both of this county and those from other counties who had accepted invitations, at the Court House at 10 o'clock precisely, to form the line of the procession.

Of course as it always is on such occasions it was far towards noon before the procession was in working order.

The dust of the roads had made the farmers' teams and wagons somewhat gray; but with regalia on and the ladies wearing neat little white aprons, and with banners flying, the procession presented quite a pleasing appearance. There were an immense number of carriages and wagons, making the procession a very long one. Indeed when the band wagon, which assumed the lead, reached the fair grounds the last vehicle had not left the center of the city. There were in the procession, representatives from all the granges in the county and from many granges outside the county; but some of them did not come fully organized and were without banners.

The following were some of the banners displayed: Algoma Grange No. 89—We work for all. Fraternity, Equality and Fair Exchange; Fair Play, and Fair Work; Ceres, Goddess of Grain; Pomona, Goddess of Fruit; Flora, Goddess of Flowers; Winnebago Lodge P. H. No. 20; Clemensville Grange No. 29. Nekimi Grange No. 64 bore the motto, United we stand, Divided we fall. Forward Grange No. 5 bore the motto, Equal rights to labor and an Equitable Distribution of the Profits. Neenah Grange No. 109 displayed a painted banner representing a farmer holding a bunch of wheat in his hand. Over him was written, "The hand that holds the Bread." Under the picture was the word

"Monopolies," coupled with a pun on the Latin, in these words, "*Soc Et Tuum.*"

Other banners, such as Industry will be Rewarded, God Speed the Right, &c., &c., were displayed in the procession.

Arriving at the grounds the Patrons hitched their teams and filed in a body to the grand stand. When all things were in readiness, Mayor Jones, from the Judges' stand, introduced the orator of the day, the Hon. Matthew Anderson, of Dane County. Mr. Anderson spoke for a few moments from the stand, but the distance from his audience was too great and the constant commotion too buzzing for him to be heard, and he descended to a carriage drawn nearer to the seats and in a position, where he could be distinctly heard.

If any one had any misgivings as to the immense success and popularity of our Northern State Fair the attendance and exhibition on Thursday afternoon had every effect to dispel such a doubt. The jam at the ticket offices was simply cruel and has proved to the officers of the society the necessity of down town ticket offices to give proper convenience to purchasers. Although there are two ticket offices at the grounds, the number proves exceedingly inadequate. Many ladies were crowded out by the jam and were compelled to wait half the afternoon to get their tickets.

THE SCENE INSIDE.

was one to feast the eyes upon. The crowd was unprecedently large and from a point at the south end of the grand stand the sight was a picturesque one. Nothing but a sea of floating ribbons and moving beings met the eye. The ladies were gaudily arrayed for the occasion, and the different tinted garments presented a grand variegated bouquet of human beings. Carriages filled with people lined both sides of the race course, both south and north of the grand stand to a considerable distance.

MR. ANDERSON'S ADDRESS.

Mr. Anderson, known as the Cross Plains Farmer, addressed the Grangers at the Fair Grounds on Thursday, of which we can only give an abstract. After the usual preliminary remarks he proceeded to define the Grange as follows :

Grange means in plain English a farm with its buildings. Therefore it was thought to be an appropriate name for our organization.

I will state for the information of those who do not belong to our order what constitutes a Subordinate, a State and a National Grange.

Subordinate Granges are composed of farmers, their wives, and their sons over the age of 18 years and daughters over the age of 16 years, duly proposed, elected, and complying with the rules and regulations of the Order. There are nine male and four female officers. Four degrees for males and four for females.

State Granges are composed of Masters of Subordinate Granges and their wives who have taken the degree of matron. Past masters and their wives who are matrons, are honorary members and eligible to office, but not entitled to vote.

The National Grange is composed of masters of State Granges and their wives who have taken the degree of Pomona. Past masters of State Granges, and their wives who have taken said degree of Pomona are honorary members and eligible to office, but not entitled to vote.

Thus it will be seen that we have a local, state and a national organization of farmers, their wives and sons and daughters. This is the only organization of farmers that has been organized with a national existence. We give a pledge of honor to keep secret the secret work of the Order.

The speaker then defended very ably the secrecy of the order in a manner satisfactory to the Grangers at least.

Then followed a statement of what the Grangers propose to accomplish.

The ultimate object of this organization, is for mutual instruction and protection, to lighten labor by diffusing a knowledge of its aim and purposes, expand the mind by tracing the beautiful laws the Great Creator has established in the Universe, and so enlarge our views of creative wisdom and power.

The Grange is a good school for both young and old, in which lessons can be taught relating to our occupation. They also afford the hard-working farmers, their sons and daughters an opportunity to meet together frequently in social meetings, where they can pass a few hours with pleasure and profit.

Self protection is another object of our order.

If our order succeeds in protecting its members from the hordes of middlemen, that like ravenous wolves have been devouring nearly all that the farmers produce, it will have accomplished a good work, and the members will be well paid for the time and money expended in supporting the order.

Combinations of every conceivable kind are formed to speculate upon and purchase our produce at a price below what it would bring in a free open market.

As illustrations the speaker referred to the meetings of the Woolen Manufacturers and the Pork Packers, who attempted to fix the price of wool and pork, and also to the railroads which fix their rates to suit themselves. He condemned the rings formed by manufacturers of farming implements and the system of agencies established.

As a remedy the speaker insisted that all should use their influence to have none but honest and capable men elected to office, and to hold all public officers to a strict accountability.

Among the reforms demanded through legislation are

cheap transportation, and an amendment of the Patent Laws. He referred to the statement of Senator Sherman that it took two bushels of corn to carry one to the market, and to the extortionate price charged for sewing machines which, costing only \$20, are sold at \$60 to \$85. He thought a change in the patent laws necessary and that the farmers should address Congress on the subject. He further made the rather extravagant statement that he believed that "there is not one dollar of the hundreds of millions requisite to run our general government, that is at the present time collected from accumulated wealth," and run in a little demagoguism about the law taking care of the rich and leaving the rich to take care of the poor.

He very sensibly said, in regard to the means of cheap transportation, that "we should try and agree among ourselves as to what we want, and demand of our state legislature and of Congress to pass such laws as we shall decide upon to be essential to afford the needed relief." His idea was that a double-track railroad was better than any water channel. He suggested a convention of the officers of the State Granges of the Northwest to consider the question.

The speaker claimed justly that there should be no conflict between capital and labor, and that capital is essential to carry on any business successfully. He followed this remark by inconsistently condemning associations for building houses, factories, manufacturing boots and shoes and clothing.

The speaker closed with the following exhortation :

Brother farmers, in conclusion I want to impress upon your minds the importance of your occupation.

Agriculture is the foundation on which our nation's prosperity rests. It builds our ships, whose spreading sails whiten the ocean, carrying our products to other climes. It establishes the nation's credit. Our promises to pay depends upon the money value of our products. The value of agri-

cultural products exported during the fiscal year of 1872 was about \$400,000,000; all other exports, not counting gold, was only \$78,000,000. This shows where our national wealth comes from. Nations are like individuals—it is the amount they sell and not the amount they buy that enriches.

Brother farmers, the work we have undertaken is a noble one. Upon our success or failure depends not only our own welfare and prosperity, but also the prosperity of our whole country.

MR. SMITH'S ADDRESS.

At one o'clock Mr. J. M. Smith, of Green Bay, acting President of the Fair, delivered an address in the Horticultural Hall on the subject of Intelligence in Cultivating the Farm and Garden. The address was able, practical and one well worth the attention of farmers.

THE RACES.

The races elicited considerable interest and were witnessed by an immense number. The grand stand was perfectly packed, and the fences lined with people, and it was impossible for four marshals to keep the track clear. The first was a Trotting Race for horses that have never beaten 2:50; best 3 in 5, 3 to enter and 3 to start. Purse \$100; first horse, \$60 second \$25, third \$25.

ENTRIES:

Ira Clark, Prince Albert—3 3 5.

John Lucas, Kitty Lewis—1 1 1.

M. P. Carpenter, Hero—5 6 3.

Chas. Westbrook, Wisconsin Maid—2 2 1.

O. N. Russell, Lee—6 5.

S. A. Bowe, Waupun Belle—4 4 4.

Time—2:50—2:50—2:50½.

Wisconsin Maid second money, and Hero third.

The next race was a Running Race, mile heats, best 3 in 5, 3 to enter and 3 to start; purse \$150; first horse \$90, second \$45, third \$15.

ENTRIES :

Abner Stembler, Kinnickinnick—2 2 3

H. W. McAfferty, Captain Jinks—1 1 1.

J. S. Holmes, Dundee—4th, distanced.

F. L. King, William Sport—3 3 2.

The running race was a fine one in every particular and a very close one. In the first heat Dundee took the lead on the start and Capt. Jinks brought up the rear. Dundee kept several lengths ahead for half a mile and the remarks were loud that he would take the heat if not the race. At the half mile post the horse commenced to close up, and for quarter of a mile the horses were fairly abreast.

The spectators began to get aroused and by the time the horses came under the wire, were perfectly wild with excitement. On the home stretch the gaps between the horses began to widen, Capt. Jinks crawling up to the front and Dundee dropping so far behind that he was distanced, even in the heat he had lead for half a mile. The next two heats Capt. Jinks took by two lengths. The race was a fine one and gave every satisfaction.

PULLING ON THE HORSE.

During the races a very able address on Horses was delivered by Judge Pulling. Mr. S. B. Sherman, for the occasion hitched up four of his fine grey Norman horses to one of the largest open carriages in the city, and inviting Mayor Jones, Mrs. Sherman, and Judge Pulling to take seats, drove the four in hand, magnificent equipage upon the race course. The Judge had the honor of delivering his address from this carriage.

The address was one of great interest to admirers of the horse. The remarks might be classified as follows :

First, description of a perfect horse,—what he should be in form and size, and his various defects in build and movements.

Second—Breeding. There is no trouble in breeding just such a horse as was wanted, either for the road, the farm or for draft. By care and attention breeders were producing a Durham or Devon, a Southdown or Merino; but, in this country, farmers bred from a horse because he was a good one, paying no attention to the fact that in the line of the horses' ancestors were many crosses and that his produce were almost sure set back on some thing besides the sire, nine cases in ten producing a poor offspring. If the farmers would use only horses of a pure pedigree, the like would be seen to be produced. For the road the thoroughbreds, as they are called, for draft the Norman or Clydesdale. Even the half breeds would be a great improvement, and as the process is repeated, you will approach near perfection.

The Judge then spoke of some of the diseases of the horse and the remedies; among them the following recipe for spasmodic colic:

Ether	2 oz.
Tinc. Laudanum	½ oz
Carbonate of Soda	1 oz
Warm water	1 pint.

Mix and shake well; pour down the throat from a bottle. If bloated, double the soda and syringe warm water. If relief is not obtained in from five to ten minutes repeat the dose.

The Judge's remarks were listened to with deep interest and were loudly applauded.

EXHIBITION OF HORSES.

During the races the finest array of horses ever exhibited at the fair was presented on the track. There were nearly a hundred horses in the procession led by Mr. Sherman's stock, followed by a fine stud of horses owned by Mr. Worden, and all the single entries bringing up the rear. The display was the finest it ever befell our lot to see. That monster of equine beauty, Le Grand Monarque, Mr. Sherman's celebra-

ted imported French Percheron stallion, led the van. The noble animal is seven years old, dapple gray, sixteen and one half hands high, and weighs 1,700 pounds. His massive proportions and gigantic neck were the admiration of all. Mr. Sherman's imported English Clydesdale Stallion, Clyde Chief attracted marked attention. This beautiful animal is only three years old, steel grey, sixteen and one-half hands high and weighs 1,700 pounds.

Mr. Wm. Worden, of Minnesota Junction, exhibited nine head of fine horses the get of one horse which was also exhibited with the rest. The result showed the excellent breeding qualities of his stallion. Next came a long line of all sorts of horses entered under different heads, among which a beautiful suckling colt belonging to Mr. C. J. Bean, deserves passing mention. It is a beautiful little animal of fine proportions and looked handsome. Mr. Bean received the premium for the best brood mare with this years colt by her side.

The exhibition of the horses was a perfect sight in itself and worth the whole admission to the grounds.

CURIOUS CATTLE.

Considerable attention is attracted to some stalls at the north end of the cattle row occupied by a queer looking species of cattle. They are queer looking to us natives, but probably not uncommon to the Scotch and English.

The breed of cattle is what is called the Scotch Galloway, and those here on exhibition are owned by Peter Davey of Ashippun, Dodge County.

There is a bull, cow, and several calves from them, ranging from a suckling calf to a three year old. They are perfectly coal black, with occasionally a few white hairs on the bag, have no horns, and in shape somewhat resemble a buffalo, with the exception of the hind quarters. The head is that of a buffalo.

This breed of cattle is raised in Scotland, and is adapted to hilly or mountainous regions, where good fodder is scarce.

We are informed that they are average milkers, but their chief raising is for beef. The stalls were constantly visited by crowds of curiosity seekers.

KANSAS ANTELOPES.

Mr. Newcomb, of this city, exhibits two fine and handsome antelopes from the plains of Kansas.

The sons of Mr. Newcomb brought them from Kansas and they have proved quite a curiosity at the fair. Mr. Newcomb has a rubber nipple on a bottle and feeds them as you would a baby.

 ADDRESS

of Hon. J. M. Smith, delivered at the Northern State Fair, October 3, 1873.

MR. PRESIDENT, LADIES AND GENTLEMEN:—While some have already addressed you, and others will address you upon some favored subject, I stand before you to-day for a few minutes, to plead for a better system of cultivation upon our farms, and in our gardens. Or in other words to plead for more intelligence, for a better practical education among the owners and cultivators of the soil. I have neither the disposition, nor the will to be a croaker, nor even to look upon the blue side of things as a general thing, and I shall not ignore the fact that as a general thing farmers are improving. I know very well that most of you are better farmers to-day, than you were twenty years ago. The man who will look over these fair grounds to-day, and then consider what could have been done twenty years since, what our implements of machinery were then, what our conveniences were as compared with to-day, what our stock was then as compared with to-day, and then say that there is no improvement, must be a fit subject for the Lunatic Asylum, which stands not many miles distant from us. And yet, gentlemen, the great fact stares us all in the face, that we are *not* improving our land as we should do. We are

TOO CARELESS OF OUR SOIL.

Many of us were born and reared upon the sterile soils and among the bleak hills of the Eastern states, where fertilizers of some description were absolutely necessary to the production of good crops. And we were taught that when, if ever, we should come to the great West to live, we should find a soil of exhaustless fertility, one where successive generations might cultivate and harvest their bounteous crops, without manures or fertilizers of any kind, or without fear of any diminution of the annual harvest. And here, gentlemen let me say that I believe that this one idea has been the prolific cause of more damage to our Northwest, than any one thing that can be named. We have come west with that idea and there are some who will still cling to it. But what are the simple facts of the case?

They are substantially as follows :

Each successive term of five or ten years drives the great wheat producing region a little farther west, and the states that formerly produced large crops are producing less than formerly. Though the annual decrease is but very little, still it just as surely demonstrates the fact that our soil is slowly giving out, as if the decrease was ten times as rapid as it is.

In our own state the figures stand about as follows : In the four years, '62, '63, '64, '65, the average yield of our staple crops as shown by the government report is as follows :

Wheat, 14 bushels per acre.

Corn, 34 bushels per acre.

Oats, 34 bushels per acre.

Potatoes, 126 bushels per acre.

Hay, 2800 lbs. per acre.

If we take five years since that time we shall find the figures stand as follows :

Wheat 13 bushels per acre, — a loss of one bushel per acre.

Corn 32 bushels per acre, — a loss of two bushels per acre.

Oats 34 bushels, — holds its own.

Potatoes 91 bushels, — a loss of 35 bushels per acre.

Hay 2500 lbs., — a loss of 300 lbs. per acre.

I have omitted fractions in the above figures, because they would make no difference with the fact that I wish to demonstrate, viz: that as a body, our lands are being worn out. You may say that they will last my life time and more too, and that is very possible. Again, you may say that our state compares very favorably with other Western States. That is true, but does that make it the best way, because a number of states are doing the same thing?

It is a well known fact that as a class the farmers of the Northwest have made but little money during the last three years.

But does the fact that the farmers of Illinois or Iowa are not making money, make it less inconvenient for you to put up with a small income from your farms?

Or to be still more direct, can you afford to raise wheat and only harvest 14 or 15 bushels per acre? Can you afford to raise corn or oats, and have them average only 34 or 35 bushels per acre?

In many respects the farmers of this state are doing nobly. There is stock of different kinds upon this ground to-day, of which as a Wisconsin man, I am proud; and you all doubtless share in the same feelings. And we are justly proud of them. Their owners deserve our sincere thanks, for the energy and patient perseverance, as well as the intelligent industry that they have displayed, in introducing and breeding such stock. Many of our agricultural implements are probably as good as are to be found in any part of the world. Our farm buildings and fences compare favorably with those of any state in the northwest. But in spite of all this the unwelcome fact still remains, that our soil, the very central and foundation stone upon which this prosperity exists, and without which it cannot long continue to exist, is

GRADUALLY GIVING OUT,

or is growing poor. Gentlemen, can you afford to have such a fact as this continue to exist among you? I assure you that I cannot afford it upon the little piece of land that I own. And whatever the faults and mistakes that my sons may lay to my charge after I am gone, they shall not say that Father has been letting his land grow poor, and now we must go to work and restore it to its original fertility, or else sell it and try somewhere else. I cannot afford it financially, for I very well know that a few years hence, poverty would be at my door, and I should not be able to drive it away.

I cannot afford to leave such a reputation behind me; and gentlemen let me be frank with you,

I DON'T BELIEVE THAT YOU CAN AFFORD IT.

Just consider for a moment what we are doing. Here we are occupying our portion of the great northwest, a country which for situation, for its healthy invigorating climate, its advantages of rivers, and lakes, its great area, and its wondrous fertility of soil, and its many natural advantages, is not surpassed, if it is equalled by any spot of equal size upon the face of this earth; and yet we are gradually tureing this great garden spot, this grand northwest with all its beauty and its glory, into a barren waste.

Gentlemen, if I believed that this state of affairs was to continue for a great length of time, I should almost despair of our country. But I have great faith in the good sense of the people, and fully believe that when the evil is once fairly and thoroughly made known you will not be long in searching out and applying the remedy. Now let us look for a few moments at the best method of avoiding the threatened evil.

I do not suppose that any man willingly accepts 15 bushels of wheat per acre, or would content himself with that amount, if he knew how to make 30 bushels grow upon the same ground, and the same rule will hold true with regard

to all his crops. Neither is it a want of industry. As a class you are industrious, many of you, I think, work too hard. Neither is it a want of economy. As a general thing our farmers are economical. Where then, or what is the trouble?

Not long since an old friend of mine and an old man too, was complimenting my sons and myself upon our success, and finally said, "Well, industry and economy is all that is wanted and you are sure to be successful." With due respect to his old age and his gray hairs, I think he made a great mistake. If he had said an *intelligent* industry and economy was sure to be successful, I think he would have uttered a very important truth. And this, gentlemen, is the point that I wish to urge upon your consideration, viz: the importance of a more intelligent culture of the soil, of a better directed system of cultivation. Brain power ever has, and always will control mere brute force and muscle. The ox, or the horse, has much more brute force and muscle than any one of us, yet he lacks the brain power or intelligence to so control that force as to make it provide for the future wants of either himself or others. The uncultivated Indian shows more intelligence in directing his labors, but still not enough to make either the present or the future what we should term even comfortable, while we who stand forth as the representatives of a higher order of civilization, claim the power not only to provide for the present and future wants of ourselves and of those dependent upon us, but to provide somewhat for the welfare of those who shall come after us. And to do this successfully, we need more intelligence upon our farms, and in our gardens; intelligence to so direct the labors of ourselves as well of those about us, that they will result in the gradual improvement of our soils, instead of impoverishing them. To so direct that our crops will show a gradual increase in the yield per acre as the years roll by. And this is what we shall do, and must do, before our agricultural system shall be placed upon a foundation of permanent and lasting prosperity.

To accomplish this desirable end, some

SYSTEM OF MANURING

must not only be adopted, but perseveringly adhered to. Where barn yard and stable manures can be obtained in quantities, and at a moderate price, it is not a difficult matter to keep a farm improving, but I presume—in fact, I know—that most of you are not so situated, and must rely upon some other method. Peruvian Guano, Poudrette and the Superphosphates are all held so high, that it is very doubtful whether you can afford to purchase them in any quantity, except for particular purposes. Gypsum or common land plaster is reasonably cheap and may be obtained in large quantities, and when put upon clover and the clover plowed under, or if the crop is fed out upon the farm and then applied as a manure, its favorable effects are too well known to receive an extended notice here. Wood ashes is a manure of very great value, and should be saved with care and be applied without being mixed with any other fertilizer. One method of enriching our fields which I have seldom seen in use in the west, but which might and ought to be upon nearly every man's farm is the compost heap. But few, if any, except those who have tried it, have any idea of its true value. And but few have an idea of how large and valuable a heap may be made each year until they have tried it. If the straw of the stack is used for bedding and litter, and afterward mixed with the muck from some swamp, the leaves of the forest, the wash of the roadside, the weeds and the refuse from the farm, a heap may be of much more value than you are aware of, until you have tried it. This heap should always be exposed to one winter's frost, and should be worked over until it is decomposed and in as near a fit condition for food for the growing crop as possible.

Mistake is often made in putting manure upon the land. It is sometimes plowed in too deep, and very often turned under in large lumps. A friend of mine made a strawberry

bed some years ago, and manured it very heavily with well rotted stable manure. The manure was in hard dry lumps from the size of a pint to that of a half peck measure. It was dug under quite deep. I watched that bed with much interest. He never had even a fair crop from it, and I sometimes thought the manure put on it only damaged the crop, instead of benefitting it. Indeed, he might almost as well have buried cannon balls beneath his plants. It was simply impossible that they could feed from such solid compact masses. But if the same manure had been worked up as it should have been, and then thoroughly incorporated with the soil, he would have had an immense crop. This is only one of the many cases that I have seen, and that too upon quite an extended scale, where manure was put upon the land in such a way that the crops received but comparatively little benefit from it. It must be remembered that plant food must be reduced to a liquid or gaseous form before it becomes available for their use. Hence the necessity of not only reducing it as fine as possible, but of incorporating it thoroughly with the soil.

And this brings me to another point, viz : the necessity of a more

THOROUGH CULTURE OF THE SOIL.

Gentlemen, in urging the importance of this point, I am not talking at random. Every year's experience tells me the absolute necessity of a more thorough preparation of our soils before planting, as well as a more systematic and thorough culture afterwards. But here I am met again with the, to me, old story : Oh, well, you are gardening, and of course you must raise large crops. But, gentlemen, if it pays me—and it certainly does pay me—to so prepare land and to so cultivate it that 300 or 400 bushels of potatoes will now grow upon an acre of land that a few years since would produce almost nothing, will it not pay you to do the same thing? If it will pay me to make a very large crop of peas

or corn grow upon a soil that a few years since was not worth cultivating, will not the same thing pay you ?

There is a principle which may be laid down here, and you will find it almost as unvarying as the multiplication table. It is this : Let two men go upon farms upon equal footing in every respect, with one exception. A is an average farmer, and raises about the average crops year after year. Occasionally, when the season is peculiarly favorable, he will have large crops ; but upon the whole he gains slowly. He uses no fertilizers of any kind. He thinks they are so costly that they will not pay. B uses no fertilizers, but he is an intelligent and thorough cultivator. His work is always done at the right time, and is well done. He is much more successful than his neighbor. A, simply because he is a better cultivator. Now, let us introduce the third man. C is not only a good cultivator, but he thoroughly prepares his land for cultivation by underdraining or whatever else it may need. He continues some method of fertilizing his soil and doing it in such way as to keep it constantly improving. The result of the whole is that C bears off the palm from both the others, and does it every time, not because he has a larger farm, not because he works harder, but simply because he works more intelligently.

Gentlemen, the truth of the matter is this : Poor farming, or poor gardening, has not paid for some years past. It does not pay now, and I don't believe it ever will pay again, at least in this State. But good, good farming, and good gardening, has paid. It pays now, and it will continue to pay hereafter.

Then let us devote more thought to our work. Let us read more, study more, and work as a general thing not harder, but more intelligently. I am not anxious that you should follow any particular method, and I know very well that you cannot farm exclusively by any person's book ; and yet I do not believe that you can farm successfully without

the useful hints that you will gather from books, and especially from our

AGRICULTURAL PAPERS.

And if there is a single man who hears me to-day that does not take one or more agricultural papers, let me urge you not to return to your homes till you have subscribed for at least one good agricultural paper. It will be the cheapest investment that you ever made in farming. You cannot afford to do without it. And just as certainly as you make the attempt, you will find yourself lagging behind the age, you will be less successful than your more enterprising neighbor, whose table is ever covered with agricultural books, papers and journals. As your sons grow to manhood they will, if they have the life and energy of true born Americans, tire of the dull routine of a farm that is not improving, of a home where the business is unknown, except as it is handed down to them in company with the ignorance and errors of the past age. They can readily see that their home is not a pleasant one, and they can also see that there is no prospect of its becoming a *profitable* one in the future. Simply a life of toil and drudgery, with but little if any chance for success, either mentally or financially. Under such circumstances, I cannot blame them for wishing to seek new homes and a new business. But if, upon the other hand, your home and your farm bears the outward marks of improvement, if there are no unsightly hedges of brush and briars growing along the fences, if the fences themselves are in good condition, if the land is underdrained where that is necessary, and is kept in such a condition that each five years shows a steady improvement in the quantity as well as the quality of the crops, if the Chester White, the Berkshire, or some other of the improved breeds of swine, have taken the place of the ill-looking brutes that inhabited many farms some years since, and, I am sorry to say, are too often found yet; if the noble short-horns, or perhaps some other improved breed of

cattle, are grazing in your field in the summer, and comfortably housed in your stables in the winter, if a noble span of horses and a comfortable carriage has taken the place of the common scrubs and the lumber wagon of a few years since, if a nice garden with a bountiful supply of fruits and vegetables for yourself and your friends, if your flower beds are things of beauty and of pleasure, if a new and more comfortable house has or is to take the place of one that was made to answer while you were making other improvements, and getting your farm in condition to pay for this one, if that home is to be one of comfort and pleasure, a home where the mind as well as the body is to be fed, one where all of the inmates are trained to an intelligent, active and successful industry, instead of the dull routine of a life of daily drudgery, if such be your homes, believe me, gentlemen, your sons will not leave the farm. If they see it year by year growing into a thing of beauty as well as of profit, growing more and more attractive as well as profitable, you need not fear their leaving it. You will not hear your daughters saying,

WELL, I WILL NEVER MARRY A FARMER.

On the contrary, they will look upon the home farm as the dearest spot upon God's green earth, and when your work is done, they will still look back to father's farm as one to be imitated and improved upon, instead of a tiresome place to be got away from and forgotten.

If these things are so, and I believe they are, instead of complaining that farming does not pay, is it not a better way to adopt a better system of farming? one that will gradually improve instead of impoverish the soil?

And to do this requires more knowledge of farming, and a more intelligent method of cultivation, as well as more intelligence in selling crops after they are raised, I cannot touch upon this point at this time, and will only say that the true way is to sell to the consumer if possible, or if that is not

possible, strive to have as few middle men between him and yourself as is within your power. Gentlemen,

KNOWLEDGE IS POWER,

and it is as emphatically so in your employment, as in that of any business that can be named. Then seek and obtain it. I have neither wish nor inclination to dictate in what way. If the Grangers are the best, organize them far and near. If Farmer's Clubs are more available, use them.

Attend the Fairs, the Agricultural Conventions and Societies. Cover your tables at home with Agricultural books, journals and papers. Meet and exchange ideas, with enterprising, intelligent farmers, whenever and wherever it is possible. In short, be no longer the servants of your business, but the thorough and intelligent masters of it.

When you have reached this point, you will find that, you are not in a position to be imposed upon or trifled with, by any man or any set of men. You will find that demagogues and politicians, will be your most obedient servants. Rail Road Corporations and Rail Road Kings will be compelled to listen to your wishes and obey your reasonable commands. You may become not only the ruling power, but what is far better, and it is what our farmers yet will be, not only the ruling power, but the pride and glory of our common country.

REVIEW OF THE FAIR.

(Report of the Oshkosh Times.)

The Fourth Annual Fair of the Northern Wisconsin Agricultural and Mechanical Association, has become a thing of the past, and a matter of history, yet, its memory will live in the minds of thousands upon thousands, as the greatest congregation of the mighty products of the field, and the workshop, ever assembled in Northern Wisconsin. That such an exhibition, such an assemblage of the varied products of labor

educes the most beneficent results ; benefits as lasting as they are great, no one can for a moment doubt. Opinions are interchanged, ideas enlarged ; incorrect theories and practices are corrected by practical lessons from the handiwork of others ; correct ideas are encouraged and strengthened ; and to all, both exhibitors and visitors, is beneficial in the extreme. Such an exhibition as has, like a gorgeons panorama, too beautiful too last — just passed before our eyes, may properly be called — A FEAST OF LABOR.

The toiling millions, who are the slaves of the stern Goddess, and by the sweat of whose brows, the real wealth of this mighty land has been and is being so rapidly developed ; on whose thankless exertions alone, are dependent, our common and individual prosperity, have too long been debarred even a tithe of the reward due them ; and to-day when a faint glimmer of the light of truth commences to enlighten the brains of the thousands who feed upon the spoils, or rather, more properly, is being forced upon their consideration, it is fit that such assemblages of the sons of toil, and products of their handiwork, should thus be made to show the world who it is — That Holds the Bread. A feast of labor, and a kneeling of the non-producing thousands, at its shrine.

During the entire summer, Secretary Torrey, and the executive board, have been steadily, constantly at work, marshalling every force, to the furtherance of the great work they had on hand. Fully determined that the fair of '73 should surpass all its predecessors, as well as its competitors, they went into the field with colors flying [and at last success has perched upon their banner head. To crown all their efforts, Old Probabilities himself had generously come to their support, and the weather was charming with the exception of the last day.

By Wednesday morning, the exhibition had been arranged and opened forth in full blast ; the grounds upon that and the succeeding day, being literally jammed by the countless

multitudes of pleasure seekers, coming from Marquette on the north, to Chicago on the south, and through the entire breadth of the State. To do justice to the 5,000 entries made the majority of them worthy of especial attention, as partaking largely of the rare, the beautiful and useful, would require space far greater than even the capacious columns of the *Times* could accommodate, and the majority of our numerous readers could successfully wade through at one sitting. To give but a hasty summary then, of the leading articles on exhibition, shall alone be our province.

LIVE STOCK.

HORSES.

In this department, H. B. Sherman, of Spring Brook Farm, Burnett Junction, was the leading exhibitor. His fine herd of imported Percherons, was the center of attraction, eliciting much praise for their wonderful size and beauty. Chief among them, was the famous "Le Grand Monarque," a noble fellow of 1,750 lbs. weight, seven years old and standing sixteen and one-half hands high; Mr. Sherman's well known English Clydesdale Stallion, "Clyde Chief," was also the admiration of thousands; this beautiful and powerful beast is steel gray in color, three years old, same height as "Monarque" and weighing 50 lbs. less.

The exhibition of draught horses is generally small at Wisconsin fairs and the sudden introduction of the very cream of such stock among us, created a stir among all, and was the subject of comment and universal admiration.

Wm. Worden of Minnesota Junction, exhibited some fine draught stock; among which, a three year old Percheron mare and an English bay filly, two years old, were worthy of attention.

A fine stallion owned by B. Edwards, Fisk's Corners, was the source of much attraction. Daniel Roberts of Fond du Lac, contributed to the show by the exhibition of a Spanish

Jack of fine braying propensities, together with a collection of jennies and mules. The show of colts was not large, but contained a better class of specimens than is usually seen,

CATTLE.

In the Cattle Department a large and better display than customary was to be seen. Nearly all principal breeds were represented by good specimens, and the interest exhibited by visitors was continual throughout the Fair.

E. F. Dunham, of Clemansville, had on exhibition his well-known Ayrshire bull, "Heather Jock;" this animal has gained many first premiums at Canadian Provincial Fairs, and at this and other State Fairs, during the past few years.

Chester Hazen, of Ladoga, was present with his Jersey herd, a fine looking collection of bovines. The Jersey show, as do the Ayreshires, wonderful propensities as milkers, and Mr. Hazen's animals were models of the breed. The herd raked down many individual premiums.

The Ayrshire herd, owned by Jonathan Stoddard, Greenbush, one of the largest breeders in the State, attracted universal attention. The little fellows, although taken direct from pasture feed, and subjected to a constant siege of travel, in visiting Fairs, for the past three weeks, were in plump condttion, and elicited the admiration of all. As milkers, the Ayrshires are fast coming into favor among dairy men, and the interest evinced in these beautiful specimens, was therefore to be accounted for.

Spring Brook Farm contributed largely to the exhibition, being represented by a herd of Short Horns. These noble animals were the source of great attraction. As beef cattle, the Short Horns are unsurpassed; as milkers, far above the average. One magnificent bull, "Duke Burnett, 12th," was the admiration of all; and a yearling heifer, "Burnie 8th," was one of the prettiest beasts we ever laid eyes upon.

Eli Stilson's Glendale Herd of Short Horns were, as usual,

great favorites. This herd was described in the *Times*, a few weeks since; to which account we refer the curious. The Durham bull, "London Duke 11th," was among the finest on the grounds, and gained unbounded praise. "Baron Airdie," and "Zilda," were also unusually fine animals and gained First Premiums.

H. C. Janes' Jersey herd were well bred animals; this herd was brought from Maine two years ago, and were remarkable for their milking qualities. These animals were sold at auction on the grounds, Thursday afternoon, and brought round figures in cash.

The Grand Chute Club's herd of Ayrshires and grades comprised many valuable animals. The bull "John Bright," took a First Premium; he is an Ayrshire of fine proportions, and one of the finest bulls in this section.

John Cross, of Butte des Morts, exhibited a fine five year old cow, "Leuento," which obtained the First Premium.

J. Scribner, of Rosendale, had a few head of good Ayrshires stock, on which premiums were liberally conferred.

Geo. W. Athearn, of this city, was on hand with his fine herd of grade cattle; prominent among which was a pair of yearling twin steers, so completely matched that it was almost impossible to distinguish them apart.

Mr. Stoll, of the Oak Grove Dairy, exhibited a collection of graded stock, consisting in the main of cows, with sucking calves, or in breeding condition.

Seth J. Perry, of Appleton, exhibited a full-blooded Durham heifer, two years old.

A. Huxley, Neenah, was represented by nearly a dozen head of Devon and Durham grades; they were plump fellows, and quite pretty in their action.

Elihu Hall, of Algoma, was the possessor of a number of fine grades.

B. Edwards, Fisk's Corners, brought out a pair of unusually fine draught oxen, of mammoth proportions.

D. L. Libby and C. N. Paine were also represented by yokes of large oxen.

Perhaps no one entry on the grounds, however, created so great attention, and was the cause of such constant crowds, as was the herd of Scotch Galloways, entered by Peter Davy, of Ashippun, Dodge County. These Galloways are direct descendants of imported animals from the North of Scotland, and possess all the characteristics belonging to this curious breed. The bull, "Duncan," is a splendid specimen of his race. Perfectly hornless, long and massive, covered with long coal-black hair, which on the head and neck is crisp and curly, he closely resembles a buffalo, except in the hinder parts, which are heavier than the bull of the plains. Powerful as he is, and most savage in his appearance, Duncan is, like all members of his family, comparatively peaceful and tame, allowing himself to be fondled, as quietly as a kitten. His master rode him into town, and around the grounds, to the admiration of all. The Galloways have not been fully tried in this country, but it is evident that they are good beef cattle, although giving very rich milk in fair quantities. Our breeders are looking into this matter, and we expect to see more of these animals, than has been our lot in the past.

SHEEP AND SWINE.

The display of sheep was good, but not larger than last year.

Eli Stilson was the principal exhibitor; his mammoth flock of Merinos and Southdowns being fully represented.

A. H. Howard and M. Towers, of Omro, had a few pens of black-faced Southdowns, all in plump condition. The balance of the pens contained various breeds, but the exhibitors thereof were extremely careful to keep out of the way, probably not to get their names in print; if this were their object, in discarding signs of ownership or breeds, they succeeded admirably.

Among the swine, the fine young Berkshire boar, "Young Oshkosh," presented by the Grand Chute Club to Eli Stilson, of this city, was prominent.

In the adjoining pen, a blooded Chester White sow with 11 sucking pigs, also the property of Mr. Stilson, attracted considerable attention.

N. G. Sturtevant was the possessor of some fine Chesters and Berkshires.

Spring Brook Farm, sent some fine Berkshire boars, and breeding sows, with litters.

Other specimens of Berkshire were brought by A. B. Wade, of Algoma; A. H. Howard, Omro; Geo. W. Athearn, Oshkosh; Tom Davis, Algoma; and others.

John Llewelyn, Woodlawn Farm, Utica, had on exhibition a large Suffolk sow, with litters.

Two specimens of short-faced Lancasters, created considerable attention, for their peculiarly neat and plump appearance, resembling a ball, when lying down; the nose is nearly sunk into a little, fat face, having a most quizzical appearance.

M. Thompson, of Stockbridge, had three pens of Poland-Chinas; all good specimens.

HORTICULTURAL HALL.

Perhaps never, in the history of the Northern Association Fairs, has Horticultural Hall been so replete with specimens of the fruit and flower garden, or arrayed throughout with such admirable taste, on the part of officers and exhibitors, as during the present Exhibition.

Henry Floyd, of Berlin, exhibited 81 varieties of apples, 6 of pears, and 2 of peaches, all grown on his place. Mr. Floyd has had considerable success in growing peaches, but the past winter has been quite destructive to his trees, the majority having been killed in the root; last year, he picked something over 30 bushels of the luscious fruit, but this season, the crop was most sensibly lessened. A bunch of cran-

berry vines, with fruit thereon, in thick clusters, was quite pretty and attractive. Mr. Floyd raked down many First Premiums on his display.

C. F. Rogers, of Rosendale, was present with 33 varieties of apples, among which were some new winter seedlings, worthy of attention. A plate of egg plums, in Mr. Rogers' collection, had been ingeniously covered by a layer of wax, representing a perfect shell; a number of visitors were duped by the clever trick, and actually believed that these plums "grew with shells on."

Edmund Chase, town of Omro, had as usual, a very fine display. Mr. Chase has, in his extensive orchard of 6,000 trees, about 124 grafted varieties; 84 of these were on exhibition, together with some choice seedlings.

Smith & Noyes, Wild Marsh, Jackson County, sent a few plates of wild cranberries, the largest and hardest on exhibition.

A lady from Burnett County also had a few cranberries, from a native marsh, together with a fine show of grapes, apples, and preserved fruit.

O. P. Clinton, of Menasha, displayed 21 varieties of apples, and 4 of grapes; his specimens of Rogers' No. 15 being unusually large.

Eli Stilson, of Oshkosh, was represented in this department by a large collection of apples, grapes, preserved fruits, jellies, pickles, etc.

Dr. Ira Kezertee, had a neat display of 19 varieties of grapes; the specimens of Iona and Rogers' Hybrids were particularly fine.

James Brainerd, was represented by a fine exhibition of grapes and grape vines, comprising 13 varieties of the former, and 3 of the latter. The specimens of fruit were large and in good condition.

D. W. Vincent's display of grapes and apples was one of finest in the building; 14 varieties of grapes and 12 of apples.

The collection of grapes, comprised noble specimens of the best varieties known to this climate. One bunch of Rogers' 19, weighed one and a half pounds; a bunch of No. 22, or Salem, was nearly as large, while the Adirondacks, Walters and Ionas, were among the best we ever saw. One short stem of a young Diana vine, with 11 large bunches attached thereto, attracted the admiration of visitors. Mr. Vincent seems to be remarkably successful in the culture of the grape.

E. W. Sanders held forth in the south-east corner of the Hall, with a large and varied collection of apples, wines and preserved fruits. Of the apples there were 15 distinct species tastily arrayed. Some excellent pie-plant wine in this collection, deceived even some of the judges, who mistook it for grape.

The large jars of Pickles, sent by the Ripon Packing Co., were neatly arranged on a pyramidal rack, surrounded by kegs of gerkins, in most pleasing harmony. The display was one of the neatest on the grounds.

R. B. Ferris had a cage of pretty little canary birds, which chirped and sung as if highly delighted. The appearance of the little fellows, surrounded by fruit and flowers on every hand was quite attractive. Geo. J. Kellogg, of Janesville, displayed a collection of 35 different kind of apples, all grown on one tree. It proved a curiosity indeed.

Prominent among all, however, was James Vick's display of cut flowers, grown at Rochester, N. Y. This magnificent collection has been exhibited at several western fairs this fall, and everywhere attracted unbounded admiration. There were Gladioli in all their varied hues; Tritomas, Tuberoses, Hyacinths, etc., in jars of water; an endless variety of dahlias, phlox, clematis, Japanese coxcombs, perennial phlox, etc., embedded in moist sand, and a number of fine plants growing in pots. Vick's enterprise is commendable, and was universally appreciated by all who observed this great and rare display.

J. H. Osborn's greenhouse and fruit gardens were well represented, particularly the former department. The endless variety of double and single geraniums, fuschias, calla lillies, ferns, roses, etc., contributed largely to the general exhibition, and reflected great credit on the exhibitor.

Isaac Miles had a very pretty collection of roses, cacti and general green house plants. Edmund Chase, of Omro, also added materially to the show, by an exhibition of everlasting flowers and asters, arranged in table and flat bouquets. His display of ten week's stock, was quite large and pretty. By far one of the most attractive entries on the grounds, however, was the famous collection of woods, cereals and minerals to be found on the lands of the B. & M. R. R'y Co. This exhibition attracted constant attention, and were the objects of the closest scrutiny by all.

PRODUCERS HALL.

The hall devoted to the productions of Field, Garden, Dairy, Work-Shop and Household, was well filled with many fine specimens.

FARM PRODUCE.

E. W. Sanders' display was among the principal attractions. One entire corner and end was devoted to specimens from his garden, among which was every conceivable variety of vegetables, from spring radishes to mammoth squashes. In this collection were seven varieties of squash, three of carrots, five of onions, ten of potatoes, three of parsnips, and many distinct kinds of less important species. Among the many 1st premiums received, one on the best seedling potato, one for best sweet corn, another for Early Vermont potatoes, and still another on white flint corn. The show of lima beans and corn was particularly complete.

Lyman Jones, Algoma, was represented by a very creditable show of corn and vegetables; had it been placed in a better position, a far nicer appearance could have been made.

J. M. Smith, of Green Bay, had also a fine lot of garden

products in rich profusion, and all in the very best condition. Some mammoth squashes were curiosities in that line; the cauliflowers, parsnips and onions were also worthy of special attention. Mr. Smith was awarded about twenty-five 1st premiums and a score of second.

Among others, J. D. Vandoren, of Utica, made a good display of grass seed and grain, together with a full line of vegetables. Rufus Robie was also a prominent exhibitor of grain, potatoes and corn. Geo. Johnston, of Appleton, had some fine sweet potatoes and mammoth cabbage, that attracted their share of popular admiration.

CHEESE.

Geo. Rogers, of this city, Mr. Ellsworth, of Welaunee, E. Knapp, town of Omro, and others, combined to render the display of cheese quite large and interesting.

The show of

BUTTER

was somewhat larger than last year's, many excellent jars being on exhibition. In this department, A. W. Hawley, Utica, Mrs. Chas. Newman, of Vinland, and two or three others, were the principal exhibitors.

In the

HONEY

line, there were but two exhibitors. Geo. S. Church, of Vinland, entered five boxes of superior comb honey, and few jars of strained, on the former winning the first premium. A. J. Hart, the Stockbridge bee-hive man, had two jars of the extracted article, together with a hive of working bees.

MISCELLANEOUS MANUFACTURES.

Eben B. Norton, the Algoma rule manufacturer, was present with a full line of superior board, log and wood rules, and yard sticks, making a good display.

Parker & Smith of this city were also represented by a collection of board and log rules, of good quality and fine finish.

A few specimens of ornamental iron fencing were presented by John Morse of the Union Iron Works of this city, also by the Menasha Iron Works.

P. L. Smith was on hand as usual, with a fine number of carriages; Richardson & Clapp, of Fond du Lac, were also, prominent competitors in this line.

Webster & Lawson, of Menasha, displayed fine specimens of hubs, spokes and shafts; and the lime, brick and tile trade was represented by a well selected assortment from the lime kilns of J. A. Day & Co., of this city.

And then there were churns; dash churns, rectangular churns, barrel churns, box churns, and every conceivable variety of the genus churn; and washing machines too were represented in all imaginable forms and sizes, and built on every principle from the crank to the lever, known to modern science. To enumerate the thousand and one devices for the benefit of housekeepers and gardeners, such as patent clothes lines, clothes pins, and even clothes posts; patent ironing machines and patent crimpers, patent hoes and garden cultivators, patent spades, shovels and fertilizers, etc., all of which found a roosting place in this wonderful haven, would require a volume at the size of which the unphilosophical reader would gaze in dismay.

FINE ART HALL.

The building dedicated to the "Arts and Sciences," was, above all others, the center of attraction, and at any hour of the regular fair days, multitude of humanity, young and old, male and female—but particularly 'the sex'—swarmed the railings and counters in one mad, indiscriminate heap, viewing with envious eyes, and exclamations of delight, the wondrous products of the drawing room, school room, and studio, there presented in almost endless profusion.

PENMANSHIP.

Prof. Daggett, of the Oshkosh Business College, was pres

ent with a large number of fine specimens of pen drawing, writing and flourishing, all of which attracted around the genial Professor, a constant crowd of admiring youth,—and gray beards too, for that matter. Charles J. Faber and others, were also competitors in this line, but on a smaller scale.

A few specimens of pen drawing and writing, by pupils of Lawrence University, Appleton, were worthy of special notice. Two well-drawn pictures, representing a view of the University, and the "Soldier's Dream," by a boy thirteen years of age, attracted more than ordinary attention.

ENTOMOLOGICAL.

M. M. Hutchinson's beautiful entomological collection stood in close proximity to the man of pens and ink, and was composed of two cases of moths and butterflies, two cases of beetles, (among which was a special assortment injurious to grain) and one case of fancy butterflies, worked into a very pretty wreath.

OIL PAINTINGS.

Mrs. A. G. Turner, of this city, presented a collection of oil and pastel paintings, mainly representing mountain scenery; portraits of Raphael and Beatrice, and a scene entitled "Sunset in California," were particularly attractive, and elicited considerable praise.

Lizzie Montgomery, a little girl twelve years of age, had on exhibition a case of well made worsted flowers.

Mrs. J. H. Osborn's beautiful wool picture, representing a familiar scriptural scene, Joseph's presenting of David to King Pharaoh, attracted considerable attention among the ladies. This prodigy in the wool picture line, was worked by Mrs. Osborn when she was but nine years of age.

A very pretty wreath of wax flowers was shown by Miss Viola Thompson; while next in line, Miss Francis A. Tripp, had quite a full assortment of ornamental and fancy work in worsted and thread.

Worsted tidies, worsted mats, and worsted everything were there, also some pretty cases of skeleton leaves, worthy of a passing note.

The collection of wax fruit was not large, but flowers made of this plastic material, were to be seen in great quantities.

Bed quilts made of worsted, patch work, whole cloth, etc., were lying around in endless profusion, strung on clothes lines, spread out upon railings and counters, they met the wearied eye, wherever it glanced, and then of course there were stockings, and endless specimens of fancy darning, and embroidery and tatting, and crochet, and all those thousand and one articles, in the manufacture of which, the female portion of humanity so delight to engage.

MILLINERY.

A. M. Weber, the famous man milliner presided over the entire west end of the central stand, where was collected a truly magnificent collection of such bonnets and corsets and shawls, and scores of ribbons and furbelows, as only could be found in the Temple of Fashion.

Mrs. A. Rogers displayed a small case of rich and well made bonnets, which looked quite attractive.

Miss Kitty Neis was also a competitor in the millinery line, having a very pretty show case of bonnets and worsted work.

BOOTS AND SHOES.

In this department J. M. Rollins & Co., were the principal exhibitors. Besides a large and handsome case of ladies' and gentlemens' walking shoes and slippers among which the famous "Burt," shone forth most prominently, was a full counter case of fancy kid drawing-room slippers, and shoes worked up in the best style known to the art.

George Moreton displayed a case of ladies' and gents' walking shoes, in the manufacture of which, great care and skill had evidently been expended.

CLOCKS.

Irving G. Hatch, the popular jeweler, was well represented by some beautiful clocks, of every imaginable variety, from the alarm to the eighth day, and fancy mantel-piece time-keeper.

MINERALOGY.

A very pretty case of ores, and petrifications, mainly from the Lake Superior region, exhibited by D. W. Vincent, attracted much interest among those of a scientific turn. A large piece of petrified moss, weighing many pounds, was among the leading specimens in the collection.

MUSICAL.

Of course the irrepressible Lampard was there; he is always on hand at an exposition of this character, and always one of the centres of attraction. A case of musical instruments, from the mouth harmonica, so common among the youth of the land, to the more expensive and complicated German accordeon. The two Simmons & Clough organs, one of them a mammoth cabinet, were models of construction and tone.

Prof. F. A. Beckel, agent for the Mathushek piano, had one of his best, at the east end of the central stand; this magnificent piano was played from morning to night, by an experienced operator, and was a source of constant joy to the thousands who listened to its melodious strains.

MISCELLANEOUS.

The sewing machine interest was, as usual, well represented; the Howe, Remington, Victor, Domestic, and other leading machines being present, in full operation.

Pratt & Son, the Otis Spring Bed men, were there with one of their famous springs, the delight of all. The Otis is a cheap spring in price, but one of the best in the market; being durable, noiseless and comfortable. This famous invention is selling at an unprecedented rate in this section, a fact which speaks well for its excellency.

Cameron & Stoppe, of the Silver Grocery Store, ever enterprising, showed a large case of samples, containing 72 specimens of articles in their line; an attractive feature in the exhibition.

The Racine Woolen Mills, displayed a full assortment of Woolen Cloths, which were much admired.

Johnson, the stencil cutter, loomed up prominently with stencils, seals, stamps, door plates, etc., in endless profusion.

Wm. H. Courtney, the hatter, was the proprietor of a large case of ladies' furs, which adorned the north side of the Hall, and on the examination of which, the ladies were enthusiastic in praise.

A. Scidmore, Appleton, displayed some well-executed Photographic scenes of Appleton, and its surroundings; while Robinson, our own Art Gallery man, was likewise profuse in portraits of Oshkosh people, and Oshkosh life.

In Crockery, the palm was carried off by J. F. W. Decker, whose cases of samples were particularly fine, and drew many First Premiums. One case of parian marble vases, and a finely-executed "Greek slave" were certainly very attractive. His assortment of gold-banded china sets, plated ware, Britannia, table and pocket cutlery, etc., made up one of the finest displays in the building.

McKey Bro. & Folds occupied a prominent station, with their magnificent rolls of Brussels and oil carpeting; in the best of patterns, and tastily arranged.

The enterprising young gunsmith, Frank Percey, exhibited a large counter case, of the most improved patterns of fire-arms and weapons, offensive and defensive. The display of fancy guns was good, and proved a source of much admiration among lovers of the sports of the lake and woods.

C. V. N. Brundige, of Ripon, was the leading competitor in the tanning line, having over 140 samples of dressed furs,

of his own finish. Mr. Brundige's system of tanning seems to be quite complete, giving the skins a soft, delicate finish, yet as strong as cow-hide itself. His robes, of squirrel and other skins were really beautiful specimens and formed a leading feature in this department.

And last, but by no means least, B. H. Soper, the man of furniture, occupied a large inclosure, with some black walnut bedroom sets, and easy chairs, got up in a superior manner, together with a large writing desk, on entirely new and approved principles.

POULTRY.

The poultry show was without exception, the largest and choicest that was ever seen in this city, indeed excelling the show at the State Fair at Milwaukee, the week before.

John O'Brien, Nekimi, was the leading exhibitor in this department. In his assortments were comprised some noble specimens of the feathered tribe; his game fowls especially being in our opinion the best on the grounds. The following were among the breeds exhibited in this collection; Houdans, Golden Seabright Bantams, Golden Polands, English and Derby Games, Silver Spangled Hamburgs, Buff Cochins, Black African, White English, and Golden Spangled Bantams, Leghorns, and dark Brahmas; among the ducks were Rouen, Aylesbury, White Crested, Black Cayuga and African.

A trio of large turkeys attracted great attention, the cock was extremely large, weighing about 40 pounds. Mr. O'Brien has fully established his reputation as being one of the leading breeders in this section.

E. W. Sanders, of this city, exhibited a number of coops of very fine Hamburgs, among which were the Black, Golden Spanish, Silver Spangled, Pencilled and White Varieties. Coops of Dominiques, White Dorkings, and Black Spanish, were prodigies in those breeds. Mr. Saunders obtained ten premiums on his feathered stock.

Mr. McKeen, of Omro, had a few coops of birds and rabbits, making quite an attractive display. His birds embraced Black Spanish, Dominiques, White Leghorns and Guinea Fowls.

Cunningham, the Neenah chicken man, was there with a few coops of fancy breeds, among which we noticed the following leading varieties: Silver Poland, Houdans, (really excellent), Brown Leghorns, Partridge Cochins, White Cochins (a new and quite pretty breed,) and Duck-winged game and Blood red game Bantams.

Goe and Smith of this city, exhibited a coop of Plymouth Rock, drawing first premium, and others of Buff Cochins, on which premiums were also drawn. Geo. Lambert, in an adjoining coop, showed some very fine Black Javas, on which first premium was bestowed.

W. B. Newcomb was the possessor of a pair of young Rocky Mountain antelopes, captured by his sons on the plains of Kansas, early this summer, when the former were suckling fawns. The little fellows are six months old, and as tame and playful as a pair of kittens. They were the source of much attention among all who visited this department.

Cameron and Worden exhibited a pair of bronze turkeys of unusual size. M. Towers, Omro, was the possessor of a few coops of Aylesbury ducks. The balance of the department was filled with numerous specimens of the following breeds, owned by numerous competitors in this city and neighboring section; Derby, Black Tartar, Blue Pilers, English Derby and Tartar Games, light and dark Brahmas, buff and Partridge Cochins and Hamburgs of every variety.

AGRICULTURAL MACHINERY.

In the machinery department, the display was fully as good as at any former fair, and comprised most of the leading machines in the country. Prominent among all, the following were worthy of a passing notice:

Van Brunt's Seeder; Marsh Harvester; O. P. Clinton's

new farm gate, on a new and approved principle, preventing the "sag" so common to ordinary gates; Eagle Mower & Reaper; Champion self-raker; Buckeye combined machines with Miller's improved table rake; Tompkin's & Co's, wheel rake; Raynor's Milwaukee seeder; Pioneer stump puller; Williams' light mower, a pretty machine for light work on level land; Williams' combined Reaper and Mower; Burdick Roberts & Co's. Oshkosh Rotary Harrow; Furst & Bradley's (Chicago) Garden City Clipper Plows; T. Putman's Iron Plow; Geo. O. Bergstrom's Neenah Plow. A shifting bottom wagon for the speedy unloading of grain or manure, was something new in that line, and of course attracted considerable attention.

THE RACES.

Wednesday—FIRST RACE.

Eight entries, viz: Winnebago Chief, Billy, Rebecca Buckskin, Kitty Holmes, Wisconsin Maid, Lee, Waupun Bell. Race taken by Wisconsin Maid; time, 2:53, 2:51, 2:51, 2:53. Waupun Bell second, Rebecca third. Purse \$40, \$20 and \$15.

RUNNING RACE.

Four entries, viz: Kinnikinick, Icicle, Walter Scott, Firefly. Half mile and repeat. Taken by Kinnikinick; time 51 and 51½ seconds. Purse \$50 and \$25.

Thursday—TROTting RACE.

Nine entries, viz: Prince Albert, Kitty Lewis, Winnebago Chief, Hero, Rebecca, Buckskin, Wisconsin Maid, Lee, Waupun Bell. Three in five. Taken by Kitty Lewis; time 2:50, 2:50, 2:50½. Purse \$60, \$25, \$15.

RUNNING RACE.

Four entries; (mile heats, three in five), viz: Kinnikinick, Captain Jinks, Dunolle, Williamsport. Taken by Captain Jinks, time 1:50, 1:48, 1:48½. Purse \$90, \$45, \$15.

Friday—TROTting RACE.

Five entries. Three in five. Princeton Boy, Flora, Re-

becca, Billy Mason, Lady Franklin. Taken by Princeton Boy; time, 2:51, 2:57, 2:48½. Purse \$95, \$50, \$35.

SWEEPSTAKES TROTTING.

Four entries, viz: Rebecca, Charley Westbrook, Princeton Boy, Lady Franklin. Taken by Westbrook; time 2:45, 2:47, 2:48. Purse \$140, \$75, \$35.

Wednesday—LADIES EQUESTRIANISM.

Two entries, viz: Miss Clarce Randall and Miss Lillie Randall. Miss Clarce Randall took the first premium.

GRANGE CELEBRATION.

The patrons of this section had been looking forward to a general rendezvous of the fraternity, which would be an indication to the outside world of their numerical strength for many a long day; and when the officers of the Northern Fair kindly volunteered to furnish a speaker, a band, tables on the grounds, for the harvest feast, and other considerations, a general movement was at once made to celebrate Thursday of Fair week in good old fashioned style.

At the hour of ten o'clock, Thursday morning, the procession formed at the Court House, under the skillful supervision of chief marshal Brainerd, and at halfpast that hour were fully under way. The procession marched in the order of their charter numbers, all the granges from this, and several from Fond du Lac county, being represented. A delegation of about 60 Patrons come over in the Sheldon from Stockbridge Grange in time to join in the great throng.

The sight was one the thousands of those who witnessed its passing on the streets never gazed upon before. The Patrons, nearly 2,000 in number, were decked in the neat regalia of the order, and presented a magnificent display. As far as the eye could reach, wagons and buggies could be seen in endless quantity, loaded down with enthusiastic Patrons whose cheerful faces were indicative of the pleasure and interest they felt in that day's parade. The following were among the many mottoes carried in the procession.

"The Rights of Labor, and the Equitable Distribution of its Profits."—Forward No. 5, organized Jan. 31, 1871.

"Industry will be rewarded. God speed the Plow."—Utica, No. 26, organized Aug. 20, 1872.

"The hand that holds the Bread. Monopolies *Soc et Tuum*."—Nesnah No. 109.

"We work for all."—Algoma, No. 86.

"Ceres, goddess of grain. Pomona, goddess of fruit. Flora goddess of flowers."—Winnebago, No. 28, organized Aug. 19, 1872.

"We feed the World."—Liberty, No. 42.

"Railroads are Public Highways. Becoming Patrons we cease to be Partizans. Fair Pay for Fair Work. Tax on Distribution is Tax on Consumption."—Forward, No. 5.

An idea may be formed of the length of the procession, when we state that when the band wagon arrived at the grounds, the last wagon in the throng was in front of Guitau's drug store, a distance of about one and a half miles. A full hour was occupied in unloading and seating a portion of the great gathering in the grand stand.

At precisely a quarter to twelve Mayor Jones opened with a short address of welcome, and introduced Hon. Matthew Anderson, of Middleton Grange, the orator of the day. After the address, which was listened to with marked attention and is here to appended, the vast company retired to dinner in the grove, where ample provision had been made to seat about 1,300 people at once, and provisions in endless quantities had been brought. Space forbids as complete a description of the many pleasant scenes which made Thursday one of the bright days in the history of the order, as we should like to give. The address in full will be found following :

ADDRESS

OF MATTHEW ANDERSON, THE "CROSS PLAINS FARMER," DELIVERED AT THE
NORTHERN STATE FAIR.

Mr. President and Brother Farmers:—I have been requested by your worthy secretary to address you upon the subject of the Grange. I confess that I feel my inability to do justice to the subject. But I hope every farmer that is present knows how difficult it is for a working farmer to prepare and deliver an address, therefore I hope it will not be expected that I shall make any display of oratory, for farmers are seldom public speakers, in fact farmers have seldom been expected or supposed to have the ability to deliver addresses, even at Agricultural Fairs.

The names upon our posters generally have the prefix of Professor, Judge, or General, to their names; but seldom if ever do you see the prefix of Farmer in large capitals to the name of the orator of the day.

Does this not indicate that we farmers do not believe that we are worthy of being heard, or that farmers do not wish to listen to those engaged in their occupation? Is this not one of the ways that we farmers have of belittling our profession? If we have not confidence in, and respect for each other, how can we expect others to respect us.

But just now a change of sentiment pervades the land, and the word Husbandman has a meaning and a sweeter sound (even to the professional politician) than ever before. So the farmers may look forward to the time when they will take a higher station in society.

The intelligent high minded farmers have long felt that we as farmers have not had that position or influence in society that our useful occupation and number should command, and therefore will hail with delight the dawn of a new era, that forebodes a brighter and more useful future to the farmer.

The Grange should be looked upon as the star in the East

to guide wise husbandmen on their way to a higher station among their fellow men, and to a more prosperous future.

I will consider first what is a Grange? secondly what they are intended to accomplish. Thirdly what reforms farmers through the Grange ought to demand. Fourthly how can the Grange accomplish those reforms.

I will as briefly as I can, give my views on those subjects. But I wish it to be distinctly understood that the order is in no way responsible for what I shall say upon this occasion. Grange, means in plain English, a farm with its buildings, therefore it was thought to be an appropriate name for our organization.

I will state for the information of those who do not belong to our order what constitutes a Subordinate, a State and a National Grange.

Subordinate Granges are composed of farmers and their wives, and their sons over the age of 18 years, duly proposed, elected and complying with the rules and regulations of the Order. There are nine male and four female officers. Four degrees for male and four for females.

State Granges are composed of Masters of Subordinate Granges and their wives, who have taken the degree of Matron. Past Masters and their wives who are Matrons, are honorary members and eligible to office, but not entitled to vote.

The National Grange is composed of Masters of State Granges and their wives who have taken the degree of Pomona. Past Masters of State Granges, and their wives, who have taken said degree of Pomona, are honorary members and eligible to office, but not entitled to vote.

Thus it will seem that we have a local, a State and a National organization composed of farmers, their wives and sons and daughters. This is the first organization of farmers that has ever been organized with a National existence. We give a pledge of honor to keep secret the secret work of the

Order. Some very good kind of people think that the word "secret" means mischief or a plotting against those outside of the Order. But I wish to remind those conscientious people, that we have some of the best men and women in our state, members of the Grange, and that it is worse than foolish to think that harm is intended by our secrecy. Ask any intelligent members of the Order whether there is anything wrong in the secrets, or lectures of the Grange. They will tell you that the lectures in all the degrees are instructive of a high moral tone, and relate only to our occupation as farmers.

I wish to remind those opposed to the secrecy of our order, that secrecy is essential to many other important undertakings as well as ours. Our Declaration of Independence and the great Magna Charta of English Liberty, were concocted and brought forth in secret; our National Government has its secret cabinet-meetings, and its secret service; secrecy is essential to our existence as a society and to our cohesiveness; would any intelligent farmer wish to destroy an organization destined to do him so much good, because of his prejudice to its secrecy; if there is such a farmer he is a bigot; nearly all the monopoly rings have their secret meetings; we must fight them with their own weapons; secrecy is what binds us as a band of brothers, without it there is no cohesiveness; hence we have a ceremony of initiation, which binds us in mutual fraternity as with a band of iron. But although its influence is so powerful, its application is as gentle as that of the silken thread that binds a wreath of flowers.

I have said this much to inform those without the gate, what constitutes a Grange of the Patrons of Husbandry.

THE OBJECTS OF THE ORDER.

Secondly, what are the Granges intended to accomplish? I will first quote from the preamble in the constitution of the National Grange. "Human happiness is the acme of earthly

ambition. Individual happiness depends upon general prosperity. The prosperity of a nation is in proportion to the value of its production. The soil is the source from whence we derive all that constitutes wealth; without it we could have no agriculture, no manufactures, no commerce. Of all the material gifts of the Creator, the various productions of the vegetable world, are of the first importance. The art of agriculture is the parent and precursor of all arts, and its products the foundation of all wealth.

The productions of the earth are subject to the influence of natural laws, invariable and indisputable; the amount produced will consequently be in proportion to the intelligence of the producer, and success will depend upon his knowledge of the action of these laws, and the proper application of their principles. Hence knowledge is the foundation of happiness.

The ultimate object of this organization is for mutual instruction and protection, to lighten labor by diffusing a knowledge of its aims and purposes, expand the mind by tracing the beautiful laws the great Creator has established in the universe, and to enlarge our views of creative wisdom and power. To those who read aright, history proves that in all ages, society is fragmentary, and successful results of general welfare can be secured only by general effort. Unity of action cannot be acquired without discipline, and discipline cannot be enforced without significant organization."

The Grange is a good school for both young and old, in which lessons can be taught relating to our occupation. They also afford the hard-working farmers, their sons and daughters an opportunity to meet together frequently in social meetings where they can pass a few hours with pleasure and profit. This social feature of our Order cannot be too highly estimated, when we consider the isolation of the western farmers who have no places of amusement, and very little recreation. The conferring of degrees affords some

amusement and much instruction, and teaches some valuable moral lessons. It will in this way educate and elevate its members and assist in preparing them to take a position in society that their useful and honorable calling entitles them.

Self protection is another object of our Order. If our Order succeeds in protecting its members from the hordes of Middlemen that, like ravenous wolves have been devouring nearly all that the farmers produce, it will have accomplished a good work, and the members will be well paid for the time and money expended in supporting the Order. There is no other class of men who have been imposed upon so much, or who have been swindled, defrauded and robbed so badly, as the western farmers. Combinations of every conceivable kind, are formed to speculate upon, and purchase our produce at a price below what it would bring in a free and open market. Woolen manufacturers held a secret meeting this year, and agreed among themselves, what they would pay us for wool, and we were compelled to let them have it at their own price, which was below the actual cost of production; at the same time wool was high in the English market. Pork Packers met last year in Cincinnati, this year in Chicago, to agree what in their generosity they would pay us for cattle and hogs, of course ignoring our right to be heard, as one of the party to the contract. The old saying, that it required two to make a bargain is played out; we are never asked how much we will take for our wheat or other produce, we very humbly ask what they will pay. If we wish to buy we have to ask what they will take; we have to take what is offered, and pay, what is asked. The Packers' ring last year robbed the farmers of the Mississippi Valley out of millions of dollars, by paying for our live stock less than it cost us to raise it. When they had the bulk of the crop in their possession, they put the prices of pork up 40 to 50 per cent.

How is it with railroad rings, who put freight up, when we

are ready to market our crops? There is no law in our state to prevent railroad companies from charging what they choose, or to prevent them from ruling against any town or station, and favoring another. I think there ought to be a change both in the legislatton, and the legislators, of our state. If our organization can protect farmers, from these and other methods of robbing them of nearly all the profits of our labor, what farmer who is not a fool or a bigot would not bid us God speed, in the good work we have begun.

I have named but a few of the ways that western farmers are defrauded by combinations. I have not mentioned the rings formed by the manufacturers of, and the special agents who sell farm implements, and machinery, who compel us to pay from 50 to 100 per cent. more than we would have to pay, if there were no combinations, or special agencies, and the market free for every one to buy and sell. I have only time to mention a few of the reforms that the order of the Patrons of Husbandry, is intended to accomplish. But I have said enough on this subject to show all of us, that we have plenty of work to do. There is another great work, which I believe our organization is intended to do, and ought to accomplish. We must use our influence and votes to have honest, capable men elected to every office, from the lowest office in your town, up to the President of the United States. It is our duty to punish rascality and extravagance; we must teach lessons of honesty, and hold our public servants to a strict accountability.

If the new departure doctrine is to be held as true, that parties are not accountable for the acts of those they elect to office, we farmers ought to see to it, and hold parties and their representatives both accountable for squandering our money, and public lands and for creating *Great Railroad Corporations*, with unlimited power to extort from the people, cut-throat rates of freight. I know that our order does not permit political questions, to be discussed within the Grange,

which is a wise provision, as it would lead to discord and weaken the order. But the Order cannot accomplish all the necessary reforms the farmers require, unless we use our influence and votes to have unjust laws repealed, and laws enacted which will protect us in our occupation, and from all monopolies and combinations, that are robbing labor of what is justly its due.

These are a few of the objects and reforms that I believe our order is intended to accomplish. I have not time to mention all that I think it can accomplish, it will remain for our officers and members to suggest and prepare new work, as in their united wisdom to them seemeth good.

* Thirdly, what reforms we ought to demand, should be understood by every member of our Order, so that we can make an united effort to obtain them.

I will name a few reforms which I believe we ought to unite our influence to demand and which I believe is essential to the well fare of the western farmer.

First among these I will name *Cheap Transportation*, from the Mississippi valley to the Atlantic seaboard. Every intelligent farmer has felt indignant at the way we are taxed by railroad and steamboat companies for carrying our produce to market. Senator Sherman said at, Montreal, that it took two bushels of grain, to carry one to market. In some portions of the western states, corn has been burned for fuel, when at the same time the poor men in the New England States, were paying from seventy-five cents to one dollar per bushel for corn.

We pay from \$1.40 to \$1.54 per car freight on live stock from Chicago to New York, which can be carried for \$.50 per car leaving the \$1.00 in the pockets of the farmers. This is one of the great reforms that the Order of Patrons must demand.

OUR PATENT LAWS

are another source whereby we are annually robbed out of

millions of dollars. Capitalists can and do spend large sums of money in having Congress extend their patents, thereby enabling them to rob the people. I will mention only one patent to illustrate this (although there are hundreds of extensions.) The patentees on Sewing Machines, applied to Congress for an extension of their patents; there were seven of the leading companies united to carry it through Congress. It was ascertained by the committee who investigated their claim, that by their own showing they had realized over \$37,000,000, yet they were not satisfied, but wished to be permitted to rob poor women seven years longer. With what contempt ought we to treat one of these agents who ask \$85,00 for a machine that cost less than \$20 to manufacture.

We ought to demand of Congress an entire change of our

PATENT LAWS.

I would change the present law so that the manufacture of every article, patent or no patent, would be free for any one to engage in by paying the patentee a royalty, said royalty to be a certain per cent. upon the cost of the article. Some radical change ought to be demanded of our next Congress in the patent laws, as the farmers use more patent machinery than any other class; we therefore are the greatest sufferers. I will next mention another reform that we ought to demand.

ACCUMULATED WEALTH

ought to be taxed. In justice to ourselves we ought to demand this. I believe there is not one dollar of the hundreds of millions required to run our general government that is at the present time collected from accumulated wealth. A man worth millions contributes only upon his individual and household expenses. The income tax was the only tax that reached wealth, and that has been abolished. It stand thus in relation to general government taxes, and it is equally as bad in state and county affairs. Farmers' property is all in sight and is thoroughly assessed, while capital assesses itself,

gives in what it pleases, and what is worse, most of it is exempt from taxation. It was in olden times considered to be sound orthodox, to pray God to take care of the king, and the king would take care of the people. This was no less absurd than what we now do, by passing laws to protect the rich, and leave them to take care of the poor. We should unite in demanding a reform, so as to require wealth to pay its just share of the taxes collected of the people.

I have only named a few of the reforms that I think our organization ought to demand. I will next consider how I believe these wrongs can be remedied or in other words,

HOW TO ACCOMPLISH THE MUCH NEEDED REFORMS.

We can nearly all agree about what is the object of our association, and what it can accomplish if wisely managed. But when you approach the question of how to accomplish our object, there will be found, as might be expected, a great diversity of opinion. For instance, whether we should build through freight lines of railroads, from the Mississippi river to the Atlantic seaboard, or depend upon improving the water courses, is a question that has been discussed pro and con, and should be discussed until we at least agree among ourselves with some show of unanimity.

There is one thing that all intelligent men in the West and Northwest agree upon. It is this, that we must have greater facilities for transporting the vast and rapidly increasing products of the West and Northwest, to the Atlantic. There are no greater facilities now than there was a dozen years ago, when our products were less than half what they are at present. Therefore we ought to try and agree among ourselves as to what we want, and demand of our state legislatures, to pass such laws as we shall decide upon to be essential, to afford the much needed relief.

I believe that a

DOUBLE TRACK RAILROAD

laid with steel rails from Chicago to New York, for carrying,

freight alone, would be of greater benefit to the Northwest, and afford more immediate relief, than any improvements that we can have by the St. Lawrence river or Erie canal. At present farmers in the Northwestern states are compelled to thresh and market their crops in the months of September and October, or else the lake navigation will be closed, and freights go up and prices of grain go down. These are the months when the farmer ought to be plowing and gathering his corn. If we had as low rates in winter as in summer, we could thresh and market our wheat late in the fall or in the winter, when there is but little work to do, and receive as high a price as at any other time in the year.

In this latitude navigation is closed nearly one-half of the year, and at the time of the year when it is most convenient for us to market our crops. But if the products of the West increase as fast for the next ten years as they have for the last ten, it will require several double track freight railways, and all the water course improvements that can be made to carry it to market. So long as we have to depend upon water transportation to carry our crops of grain to market, our grain will be bundled into elevators, and remain there for capitalists to grumble on for six months in the year. Another evil consequence of storing grain for such a length of time, is that it keeps such large sums of money invested in grain, out of circulation one-half of the year, which frequently creates a stringency in the money market, which lowers the prices of all that we have to sell, and injures every branch of trade. If our organization can remedy this by obtaining cheaper transportation, it will have rendered the farmers of the West a greater service and more substantial and lasting benefits, than has been done by all the political parties that ever existed. I believe that our Order in the Western and Northwestern states, ought to hold a convention, composed of the officers of the State Granges, to consider and make recommendations to Congress upon this

question of cheap transportation. This is the great question of the time. If we fail to accomplish this essential reform, our organization and the farmers' movement will be looked upon by many, both within and without our Order, as having failed to accomplish that in which the whole people are most interested.

Brother farmers and Patrons, I want to warn you not to neglect this golden opportunity, but act, and that speedily, or we will be left to the tender mercies of the soulless railroad corporations who are grinding the people as between the upper and nether millstones.

If we want to change the patent laws, we must unite in requesting Congress for the change. There is no other class of men who would be benefitted more than the farmers, by a proper change. Capitalists have bought up the most useful inventions, and monopolies the manufacture and sale of nearly every useful implement, and extort from us such prices as they choose to ask. If our laws were changed in the way that I have before suggested, it would save us millions of dollars every year. The sale of sewing machines as returned by the different manufacturers last year, in round numbers 800,000 each, would amount to \$60,000,000. The profits on percentage was about \$40,000,000. The agents and middlemen have extorted from the laboring classes, (as sewing machines are not bought by the wealthy) this large sum, the most of which is taken out of the pockets of poor women. Is it not a wonder that there has not arisen an army of women in rebellion against

THIS MIGHTY WRONG.

What ought to be the thoughts of men who will not make an effort to prevent such wholesale robbery of the poor hard working women of our country! Our organization can and should fight this cruel oppression, and when we succeed, as succeed we must, if we do our duty, in bringing down the price to what it should be, we will not only have the approval

of our own conscience in being benefactors of the poor, but we will also receive the thanks of every maid and matron.

THE OPPRESSION OF CAPITAL.

How capital oppresses labor and what action our Order ought to take, is a subject worthy of being considered by our organization. If we can protect the farmers from its cruel extortions, it is our duty to do so. There should be no conflict between labor and capital; they should work together as partners; capital is essential to carry on any business successfully.

But when it is used to oppress the working men, or to corrupt and control legislation, we must object to and denounce those who use it for such purposes.

Capitalists contract for and build houses, build factories and manufacture boots and shoes, and clothing, and enter into nearly every trade. They employ men and women by the week, and work them in gangs with overseers over them. Capital thus deprives the mechanic of that independence and control of himself and his trade, which he formerly enjoyed; capital has in this way reduced the formerly independent freeman, to a state bordering on white slavery, with overseers over them who can discharge them at pleasure.

Nearly all the laws both State and National, are now and always have been made in the interest of capital and against labor; is it not time that we change this? I think capital is able to take care of itself without special legislation in its favor. How to remedy this is what we ought to know. I think that much of the wrongs we have been made to suffer, have been caused by legislation, and can be remedied by the same. To do this we must invite the professional politicians to step back, tell them that their services are not wanted any longer; that we intend to have men who are identified with us, and whose interests are ours, to make our laws, both State and National. Brother farmers, this is

THE REMEDY OF REMEDIES.

It is the Philosopher's Stone, that will heal all our political complaints. Farmers take notice and govern yourselves accordingly.

Brother farmers, in conclusion I want to impress upon your minds the importance of your occupation. Agriculture is the foundation on which our nation's prosperity rests. It builds our ships, whose spreading sails whiten the ocean, carrying our products to other climes. It establishes the nation's credit. Our promises to pay depend upon the monied value of our products. The value of agricultural products exported during the fiscal year of 1872 was about \$400,000,000, all other exports not counting gold, was only \$78,000,000. This shows where our National wealth comes from. Nations are like individuals, it is the amount they sell, and not the amount they buy, that enriches.

Brother farmers, the work we have undertaken is a noble work, upon our success or failure depends not only our own welfare and prosperity, but also the prosperity of our whole country.

If we fail to control the great corporate monopolies, and allow them as heretofore to use us as their slaves, we will deserve the execrations of future generations. I, therefore, implore you to arise, gird on our armors and go forth to battle against these latter day Kings, whose reign has been one of continued oppression. When you have subdued them and made them the people's servants, instead of being as heretofore your masters, then will future generations rise up and call you blessed!

SUMMARY.

We are informed by the secretary, R. D. Torrey, that the entire receipts amount to \$6,061. The gross expenditures will foot up inside of \$5,000, of which \$3,000 will be paid in cash premiums.

Special premiums having been offered to those making the

greatest number of entries, the following persons carried off the palm:

C. V. N. Brundige, Ripon, 140 entries; Mrs. C. H. Root, Ripon, 130 entries; Mrs. K. Lindsley, Ripon, 126 entries; Eli Stilson, Oshkosh, 120 entries.

CLOSING DAY OF THE FAIR.

[(Report of the Daily Northwestern.)]

The morning of Friday dawned cloudy and foreboding and before nine o'clock the drizzling rain commenced to fall, just enough to dampen things and still not sufficient to give up all hopes of the day's proceedings. Of course Thursday was the "big day" of the week, and no one at the best expected more than a general clearing up on Friday afternoon; the sweepstakes race engrossing every one's attention as the only feature of any importance.

Until afternoon the hazy, half sprinkling uncertain weather held out and then stopped raining. The sky, however, refused to clear up and a cold raw, east wind persisted in blowing all the afternoon. Exhibitors feeling there was going to be little interest in their departments on account of the weather, commenced to remove their articles and stock, and by dark, the grounds were pretty well stripped of the contents.

THE RACES,

however, were the main speculation. Although the rain had somewhat ruffled up ordinary roads, the track did not suffer so much, being packed hard and solid. There was a little surface mud, however, which was not considered sufficient to stop the trotting.

For a little time the mud flew considerably from the sulky wheels, but after two or three heats the track got in a tolerably fair condition although a little slippery. Considering the threatening state of the weather the crowd was thankful for as good a track as was allotted them on this occasion.

There was a pretty good attendance after all. A large number of carriages were arrayed along the track. There were ladies present who seemed to be willing to face the wind and withstand the cold, cheerless breeze, in order to witness the races. All present felt as if they did not care a cent, and went in strong for all the fun that could be made out of the occasion. And lots of fun and frolic was indulged in. Among exciting accidents and a slight commotion which nearly resulted in a row, the crowd enjoyed themselves hugely. Anything to keep warm and enliven the occasion was the order of the day.

Finally the races began :

First race. — For trotting horses that have never beaten 2:40, best 3 in 5, 3 to enter and 3 to start; purse \$150, first horse \$75, second \$50, third \$25.

ENTRIES.

G. W. Loomis — Princeton Boy, 1 1 1.

M. P. Carpenter — Flora. 4 3.

Chas. Westbrook — Billy Mason. 3 3 4.

J. S. Holmes — Lady Franklin. 2 2 2.

Time : 2:51; 2:57; 2:48½.

Lady Franklin took second money.

During this race a very

EXCITING INCIDENT

took place. It happened on the second heat, just after the horses passed under the wire, on the start. Mr. Austin, marshal of the day, was riding along the track, keeping the crowd back, and was at the time riding close to the grand stand in a direction to meet the coming horses in the race.

Just as Mr. Austin got opposite Flora, his horse swung around, striking the wheel of Flora's sulky. The tire struck Mr. Austin on the right leg just above the ankle inflicting a severe bruise and tearing a large hole in his pants. The concussion was so great as to throw up the wheel which almost

passed over the horse's rump. This of course threw the weight of the driver all on the other wheel which doubled under, breaking the axletree almost at right angles. The other wheel was also bent back by the force of the blow thus completely disabling the sulky and throwing the driver to the ground. The Judges did not call the other horses back and they went on around claiming that they had a right to the heat. Flora's friends claimed that it was no heat and wanted it declared off. Others thought Flora had ought to be declared distanced.

This created considerable excited discussion. The judges retired and looked over authorities. They finally came to the decision that under the old rules Flora would be declared distanced, but under the new rules she had a right to trot on the next heat. The present heat was decided valid. A new sulky was obtained and Flora came in third on the next heat.

A SLIGHT UNPLEASANTNESS

occurred during the race which, for a time threatened to assume the features of a row. After the accident, the marshals decided to clear the track entirely. Dr. Dale, assistant marshal, attempted to order a young man named Wm. Davis, of Algomo, off the track, when Davis clutched Dale's bridle. Mr. Dale struck him over the head with a cane. Davis clutched the bridle a second time and Dale struck him again. This time Davis fell to the ground. Whether he tripped up or fell from the force of the blow was difficult to determine. Friends of Davis rushed to his assistance and a row was imminent. A man named Stanard, of Berlin, became very wrathly and pounded the wind so furiously that Marshal A. B. Smith collared him and sent him down to the lock-up. When Stanard's blood got cooled off a little he was allowed to apart. Loud threats against Dr. Dale were indulged in by Davis' friends, but whether they will be carried out remains to be seen.

ON WITH THE RACE.

Second Race—Grand sweepstakes, free to all, best 3 in 5, 3 to enter and 3 to start; purse \$250; first horse, \$140, second, \$75, third, \$35.

ENTRIES :

Charles Westbrook, Charles Westbrook—1 1 1.

C. Loomis, Princeton Boy—2 2 2.

J. S. Holmes, Lady Franklin—3 3 3.

Time—2:45—2:48—2:48.

This race was the most interesting one of the day. Charlie Westbrook was the favorite from the start and well kept up the confidence of his friends, winning three straight heats.

Lady Franklin proved herself of pretty good metal and trotted excellently. She is a good mare and will yet make a mark. She is owned by Al. Hobart, of this city, and has been under training by John Holmes for some time.

SALE OF BLOODED CATTLE.

On Thursday afternoon an auction sale of Jersey cattle, owned by H. C. Janes, of Neenah, took place on the grounds. The prices were exceedingly low owing to a limited knowledge of the sale, and considerably more had been offered previous to that, at private sale.

The three year old cow Fannie, was purchased by Mr. H. C. Jewell, of Algoma, for \$100. The two year old cow Flora, was bid off by L. D. Harmon, of Oshkosh, for \$70. The yearling heifer Josie, was bought by D. L. Libby, of Oshkosh, for \$53. These prices were considered about one-third their true value. Mr. Edgar Sawyer subsequently purchased a this year's heifer calf at private sale for \$50. Mr. Janes' reason for selling, was that having purchased some lots on Doty's Island, he wished to build and did not desire to keep them, especially as he has been renting a whole farm just for the pasturing of these cattle.

THE BAND.

Before we close, we cannot resist the temptation to pay a

compliment to the band which furnished the music on this occasion. The band was from Fond du Lac, and led by the renowned Hutchins Bros., late of Waupun. Messrs. Hutchins have removed to Fond du Lac under a contract with the citizens of that city, to take charge of the band and give a public concert at least twice a week when the weather permitted. This was the same arrangement that these gentlemen desired last year to enter into with us here in Oshkosh, but the citizens let the thing fall through without any determined effort. Messrs. Hutchins are the best players in this part of the country, and Fond du Lac is to be congratulated on her acquisition. At the Fair the band gave unbounded satisfaction, and their playing on the grand stand was generally followed by loud applause.

AS A WHOLE

the Fair was an unbounded success in every particular. The displays were unusually fine in every particular, and in every department far exceeded the display at the State Fair. We are informed that the gentleman who took the first premiums on grapes at the State Fair, selected his finest specimens and brought them here. He was confident in taking the first premium, but on arriving, conceded that he was entirely beaten in every respect, and was enthusiastic in his praise of our display of the fruits of the vineyard. He expressed his entire satisfaction, and promises to take an actual interest in our Northern Fair. Thus it was in many of our departments, and those who have never been here before declared their entire satisfaction, and promise to come again.

Thus it is one by one, visitors become more and more pleased with our exhibitions, until our Northern State Fair is becoming the most popular in the Country. Mr. H. B. Sherman, we understand, was also enthusiastic in his praise of our northern institution, and was well suited with the manner he was treated. This was his first visit to the Fair, and his exhibition of stock was among the most interesting features

of the occasion. In horses he carried off the palm of victory in the minds of the people. Not anticipating such a display of horses, the Association had not arranged the premium list for the competition of such excellent stock, and thus Mr. Sherman did not receive the remuneration in premiums he deserved.

The general public likewise was on tip toe of delight over the success of the Fair, and crowds who came to stay but a day remained a week. The weather, fortunately, was more than could have been hoped for, until the last day, which was really the least important of them all. Thursday the grand day of the Fair, was perfect in every respect, and more delightful weather could not have been prayed for.

THE RECEIPTS.

The receipts of the Fair amount to \$6000, and from all sources will probably amount to much more than this.

A fine exhibition of carriages and sleighs was presented at the fair by Wm. Servis, of Sheboygan Falls. Mr. Servis took the first premium on a two seated sleigh and also on the single cutter. Both were of extraordinary build and fine finish. Mr. Servis expresses his intention to open an agency in this city before long for the sale of his work, and in the meantime all orders addressed to him by mail will be promptly attended to. He keeps on hand a large stock of carriages and sleighs and also manufactures to order.

THE REAPER DEPARTMENT.

In this department the Buckeye reaper and mower, manufactured by C. Aultman & Co., Canton, Ohio, is represented by R. D. Davies, of Berlin, Wisconsin. The Buckeye is an old standard machine, and by long use has proven to be a success in every particular. Last year the demand had so largely increased that 3,000 more machines could have been sold than were manufactured. This firm has also on the ground the Buckeye dropper, and the Buckeye mower and

the Buckeye reaper with Miller's improved table rake. The mower continues to be the favorite with agriculturists and is so well known that little need be said concerning its excellence. The Buckeye reaper and mower was on exhibition at Vienna and came off with two medals of merit awarded after actual trials in the field. As meritorious as is the general mechanism of the machine, the addition of Miller's celebrated table rake for the past two years has so greatly improved it that farmers from actual use pronounce it superior to any other in the market, saying it delivers grain much better for the binders than any other machine. The Buckeye was much "interviewed" during the fair, and received the praise of every farmer who examined it. Mr. J. H. Mears is the local agent for this machine in Oshkosh.

SEED SOWER.

The new force feed broadcast seed sower and cultivator manufactured by Van Brunt & Davis, of Horicon, came out once more victorious at the Northern State Fair. This machine has taken either a premium, diploma or honorable mention at every fair it has been. At the Northern Fair this week, it took the highest award offered for the best broadcast seed sower and cultivator combined, and also for the best broadcast seed sower, making a clean sweep of the entire field. Among its competitors were some of the leading machines manufactured in the State. The machine was exhibited by Mr. Brunt himself, who was at dinner when the judges called him away, and he was obliged to sacrifice his meal to his awards in the field.

Among the recommendations of superiority upon which the award of judges was based were the following :

Adjustable Force-Feed, complicated arrangement of gearing entirely dispensed with. No other Seeder ever attained this valuable and indispensable feature. Sows all kinds of grain and seed, Wheat, Rye, Oats, Barley, Buckwheat, Corn, Peas, and Flax and Hemp seed, Clover, Red-top, Orchard

Millet and Hungarian Grass seed. A perfectly accurate feed guage. A wind-proof Scatterer. A Grass Seed attachment. A perfectly accurate land measure. New and valuable Gear Shifter. New Cultivator Bar Fastening. New and easy Lifting arrangement. The old fashioned Lifting Bar on top, or under the Cultivator Bars, entirely dispensed with. Every Cultivator Bar with Tooth independent. Patent Slip Tooth (fully licensed.) Great improvement in the shape of Teeth. A support for Seed Box cover when open. New combination of Sand Proof Axle. Large Wheels with broad Tires. Adjustable Hinge to Seed Box. Seed Box cover Self Fastening. Points of excellence and superiority found in no other Seeder, all of which must exist in a Machine to make it successful to the farmer, in the manner of sowing grain, lessening the expense of grain raising, improving the quality of the grain raised, and increasing the profit.

THE SHORT HORN HERD OF ELI STILSON.

This splendid herd has lately been shown at Ripon and Fond du Lac and the State Fair at Milwaukee and the Northern Fair at Oshkosh, and has met with great success for such a young herd, having taken forty-eight prizes, five of which were herd prizes and eight were sweepstakes. At the State Fair this herd met the celebrated herd of George Murray, Esq., of Racine, now one of the most valuable in America. Murray's herd took the first premium on aged herds, and Mr. Stilson's herd took the second. Mr. Murray's herd took the first on young herds, and Mr. Stilson's young herd took the second premium. The famous young bull, London Duke 11th, swept all before him in the two year ring everywhere, and took second in general sweepstakes of bulls of all ages, at the State Fair, Mr. Murray's three year old bull Mayflower, taking the first. At the Northern Fair Mr. Stilson's took first in herds and first in sweepstakes.

NORTHERN STATE FAIR.

PREMIUMS AWARDED—1873.

THOROUGHBRED HORSES.

Best stallion, 4 years old or over, J S Holmes. Second best, A Stembler.

HORSES FOR ALL WORK.

Best stallion 4 years old or over, T Fancy.
Second best, J Anton.

Best stallion 3 yrs. and under 4 S D Paddleford
Second best, Chris. Sage.

Best stallion 2 yrs. and under 3, H B Sherman.
Second best, G W Worden.

Best stallion, 1 year and under 2, J Phillips.
Best foal, E F Dunham.

Best pair of matched horses, mares or geldings 4 years old or over, speed, size, style and fitness of farm work to be the points, H B Sherman.

Second best, L C Booth.

Best brood mare with this years colt by her side, C J Bean.

Second best, S M Wagstaff.

Best mare or gelding, 4 years old or over, H B Sherman.

Second best, H B Sherman.

Best filly 3 years and under 4, O N Jones.

Best filly 2 years and under 3, G W Worden.
Second best, N G Sturtevant.

ROADSTERS AND CARRIAGE HORSES.

Stallion 4 years old and over, J V Sweeting.

Stallion 3 years old and under 4, R T Graves.

Second, T C Wells.

Best Mare or gelding 4 years or over, J Lucas.

Second best E P Finch.

Best mare or gelding 3 yrs. and under 4 L A Briggs,

Second best, Thad. Lawrence.

Best pair matched horses, O N Russell.

Second best, L A Bishop.

DRAUGHT HORSES.

Best draught stallion over 4 years, H B Sherman.

Second best, Cameron & Worlen.

Best pair of draught horses over 4 years, H B Sherman.

Second best, H B Sherman.

JACKS AND MULES.

Best Jack kept in the state 3 months previous to exhibition, D Roberts.

Second best, J H Matteson.

Best pair mules, W D Lawrence.

Second best, J H Matteson.

LADIES EQUESTRIANISM.

Best, Lillie Randall.

Second best, Clara Randall.

SHORTHORNED CATTLE—THOROUGHBREDS.

Best bull 4 years old or over, W Cross.

Second best, F T Davis.

Best bull 2 yrs. old and under 3, Eli Stilson.

Second best, H B Sherman.

Best heifer 2 years old, Eli Stilson.

Second best, H B Sherman.

Best heifer 1 year old, H B Sherman.

Second best, Eli Stilson.

- Best bull 1 year old under 2, H B Sherman. Best heifer calf over 6 mo's old, Eli Stilson.
 Second best, S D Perry. Best heifer calf under 6 mo's, Eli Stilson.
 Best cow 3 years and under 4, H B Sherman, Best bull of any age, Eli Stilson.
 Second best, Eli Stilson. Best Cow of any age, H B Sherman.

AYRSHIRES THOROUGHBREDS.

- Best bull 4 yrs. old and over, E F Dunham. Best cow or heifer 2 yrs. old, J Stoddard.
 Second best, Grand Chute Club. Second best, J Stoddard.
 Best bull 3 years old, Grand Chute Club. Best heifer 2 years old, C Hazen.
 Second best, J Stoddard. Second best, J Stoddard.
 Best bull 2 years old, J Scribner. Best heifer 1 year old, J Stoddard.
 Best 1 year old, C Hazen. Second best, D Huntley.
 Second best, D Huntley. Best heifer calf, C Hazen.
 Best bull calf, J Stoddard. Second best, J Stoddard.
 Second best, C Hazen. Best bull of any age, J Stoddard.
 Best cow 4 years old and over, C Hazen. Best cow of any age, C Hazen.
 Second best, J Stoddard.

DEVON THOROUGHBREDS.

- Best cow or heifer of any age, M. Snell.

JERSEYS OR ALDERNEYS,—THOROUGHBREDS.

- Best bull 3 years old and over, H C Janes. Second best, H C Janes.
 Second best, G Worden. Best heifer 2 years old, H C Janes.
 Best bull 1 year old, C Hazen. Best heifer year old, R T Wyman.
 Best cow or heifer 3 yrs. or over. R T Wyman. Second best, H C Janes.

SWEEPSTAKES AND HERD PREMIUMS.

- Best bull over 1 year of age, Eli Stilson. of any one breed, Eli Stilson.
 Best cow or heifer over 1 year of age, E Stilson. Second best, C Hazen.
 Best bull calf, D Huntley. Third best, J Stoddard.
 Best heifer, E Stilson. Best milch cow of any one breed, C Hazen.
 Best bull and four cows or heifers, over 1 year

SHEEP—SPANISH MERINOS.

- Best buck 2 years old and over, Eli Stilson. Best pen 3 ewes 2 yrs. old and over E Stilson
 Second best, Eli Stilson. Second best, Eli Stilson.
 Best buck 1 year old, Eli Stilson. Best pen 3 ewes 1 year old, Eli Stilson.
 Second best, Eli Stilson. Second best, Eli Stilson.
 Best pen of buck lambs, Eli Stilson. Best pen 3 ewe lambs, Eli Stilson.
 Second best, Eli Stilson. Second best, Eli Stilson.

COTSWOLD SHEEP.

- Best buck 2 yrs. old or over, G W Keyes. Best pen 3 ewes 3 yrs old or over G Keyes.
 Second best, D McAllister. Second best, G Keyes.
 Best buck 1 year old, G Keyes. Best pen 3 ewe lambs, G Keyes.
 Second best, J B Pue. Second best, G Keyes.
 Best pen 3 buck lambs, G Keyes.

LEICESTER AND OTHER LONG WOOLS.

- Best buck 2 years old and over, N Hoaglin. Best pen 3 ewes 1 year old or over, J O'Brien
 Best 3 buck lambs, J O'Brien. Best pen 3 ewe lambs, J O'Brien.
 Best pen 3 ewes 2 years old or over, J O'Brien. Second best, L S Jones.
 Second best, J O'Brien. Best buck of any age, J O'Brien.

SOUTHDOWN AND OTHER MIDDLE WOOL SHEEP.

Best buck 2 yrs. old and over, Howard & Towers.
 Second best, T Davis.
 Best buck 1 year old, Howard & Towers.
 Best pen 3 buck lambs, Howard & Towers.
 Best pen 3 ewes 2 years old or over, T Davis.

Second best, Howard & Towers.
 Best pen 3 ewe lambs, Howard & Towers.
 Second best, T Davis.
 Best buck of any age, Howard & Towers.
 Best ewe of any age, Howard & Towers.

GRADES FROM FINE WOOL BUCKS.

Best ram 2 years old and over, E Stilson.
 Second best, E Stilson.
 Best ram 1 year old, E R Martin.
 Second best, E Stilson.
 Best pen of 3 ram lambs, E R Martin.
 Best pen 3 ewes 2 yrs old or over, E R Martin.

Second best, E Stilson.
 Best pen 3 ewes 1 year old, E Stilson.
 Second best, E Stilson.
 Best pen 3 ewe lambs, A B Wade.
 Second best, E Stilson.

GRADES FROM LONG WOOL BUCKS.

Best pen 2 ewes 2 years old and over, A B Wade.

*SWINE—BERKSHIRE.

Best boar 2 years old and over, J Athearn.
 Second best, Howard & Towers.
 Best boar 1 year old, A B Wade.
 Second best, Howard & Towers.
 Best boar pig over 6 months old, E Stilson.
 Second best, H B Sherman.
 Best boar pig under 6 months old, Grand Chute Club.
 Second best, Howard & Towers.
 Best breeding sow 2 years old, J Athearn.

Second best, E Stilson.
 Best breeding sow 1 year old, E Stilson.
 Second best, N Sturtevant.
 Best sow pig over 6 months old, J Athearn.
 Second best, E Stilson.
 Best sow pig under 6 months old, E Hall.
 Second best, E Stilson
 Best breeding sow with litter of pigs not less than four, H B Sherman.
 Second best, Howard & Towers.

POLAND CHINAS.

Best boar 2 years old and over, M M Thompson.

SWINE—CHESTER WHITE, CHESHIRE, LANCASHIRE AND OTHER LARGE BREEDS.

Best boar pig over 6 months old, J T Llewlyn
 Best boar pig under 6 months old, N G Sturtevant.
 Second best, N Huxley.
 Best breeding sow over 2 years old, Lancashire, T Davis.
 Best breeding sow over 2 years old Chester,

N G Sturtevant.
 Best sow pig over 6 months old, J T Llewlyn
 Best sow pig under 6 months, A Huxley.
 Second best, A Huxley.
 Best breeding sow with litter of pigs not less than 4, N G Sturtevant.
 Second best, H Green.

SWINE—ESSEX, SUFFOLK AND OTHER SMALL BREEDS.

Best boar 2 years old or over, T Davis.
 Best boar 1 year old or over, T Davis.
 Best boar pig over 6 months old, J D Vandoren.
 Second best, J Vandoren.
 Best boar pig under 6 months old, J Vandoren.

Best breeding sow 1 year old, T Davis.
 Second best, J Vandoren.
 Best sow pig over 6 months, J Vandoren.
 Best breeding sow with litter of pigs not less than 4, T Davis.
 Second best, L S Jones.

POULTRY.

Best pair bantams, G A Canningham.
 Second best, J McKean.
 Best pair game, C Murray.

Second best, E W Sanders.
 Best pair silvct spangled hamburgs, E W Sanders.

- Second best, W Bradley.
 Best pair Spanish, J McKean.
 Second best, E W Sanders.
 Best pair white brahmas, A Richardson.
 Second best, J McKean.
 Best pair dark brahmas, A Richardson.
 Second best, J McKean.
 Best pair cochins, A Richardson.
 Second best, H A Smith.
 Best pair houdans, G A Cunningham.
 Second best, Z C Fairbanks.
 Best pair white leghorns, J McKean.
 Second best, J O'Brien.
 Best pair brown leghorns, G A Cunningham.
 Second best, G A Cunningham.
 Best pair silver Polands, G A Cunningham.
 Second best, J O'Brien.
 Best pair white dorkings, E W Sanders.
 Best pair dominiques, J McKean.
- Second best, A Richardson.
 Best pencil hamburg, E W Sanders.
 Second best, E W Sanders.
 Best golden spangled hamburgs, E W Sanders.
 Second best, J O'Brien.
 Best Plymouth Rock, H A Smith.
 Best pair bronze turkeys, Cameron & Worden.
 Second best, J O'Brien.
 Best pair common geese, J O'Brien.
 Best pair bremen geese, J O'Brien.
 Best pair African or China geese, J O'Brien.
 Best pair black Cayuga ducks, J O'Brien.
 Best pair Aylesbury ducks.
 Second best, M Towers.
 Best Ronen ducks, J O'Brien.
 Best pair common ducks, M Towers.
 Second best, J O'Brien.
 Best pair white Guinea fowls, J McKean.

FIELD, GARDEN, DAIRY AND HOUSEHOLD PRODUCTS.

GRAIN.

- Best bushel of barley, T Davis.
 Best navy beans, E Hall.
 Second best, E Nye.
 Best bushel any other variety, Utter, Rogers & Co.
 Best bushel buckwheat, D Huntley.
 Second best, H Styles.
 Best bushel white dent corn, E Hall.
 Second best, A F Robie.
 Best bushel yellow dent corn, J Vandoren.
 Second best, A Quick.
 Best bushel white flint corn, E W Sanders.
 Second best, H Jones.
 Best bushel white dutton corn, S Jones.
 Best bushel any other variety flint corn, E Nye.
 Second best, E Hall.
 Best bushel white oats, Utter, Rogers & Co.
 Second best, C Ross.
 Best bushel black oats, T Davis.
 Second best, A F Roby & Co.
 Best bushel field peas, T Davis.
 Best bushel rye, T Davis.
 Second best, N Hoaglin.
 Best bushel clover seed, H Styles.
 Second best, H Jones.
 Best bushel timothy seed, Utter, Rogers & Co.
 Second best, T Davis.
 Best bushel club wheat, T Davis.
 Second best, W A Boyd.
- Best bushel any other variety spring wheat
 A F Roby & Co.
 Second best, Geo Clements.
 Best bushel winter wheat, Geo Clements.
 Second best, H Styles.
 Best bushel any other variety winter wheat
 Geo Clements.
 Best collection by one exhibitor, T Davis.
 Second best, L S Jones.
 Best jar or tub of butter, C F Rogers.
 Second best, Mrs H Jones.
 Third best, W D Roberts.
 Best three farm dairy cheese, Geo Rogers.
 Second best, S A Oakes.
 Best three factory cheese, C Hazen.
 Second best, E D Knapp.
 Best milk yeast bread, L Hah.
 Second best, Eliza Wade.
 Best hop yeast bread, Mrs J N Hoaglin.
 Second best, A G Casick.
 Best brown bread, Mrs C P Houghton.
 Second best, Mrs F Foster.
 Best graham bread, Mrs N Osborne.
 Second best, Z C Fairbanks.
 Best show of cake, Mrs A Lindsey.
 Second best, L S Jones.
 Best spring wheat flour, L S Jones.
 Best sample box honey, G S Church.
 Second best, A H Hart.
 Best sample extracted honey, A H Hart.

Best bushel five wheat, T Davis.
 Second best, C Whiting.
 Best Rio Grande wheat, A W Hawley.
 Second best, C Ross.

Second best, D Huntley.
 Best bee and honey exhibition, A H Hart.
 Special premium by Cornish & Curtis—Mrs
 C P Houghton.

VEGETABLES.

Best 2 quarts lima beans, J D Vandoren.
 Second best, E W Sanders.
 Best one-half bushel blood turnip beets, J M
 Smith.
 Second best, D Huntley.
 Best one-half bushel long blood beets, J D
 Vandoren.
 Second best, E W Sanders.
 Best one-half bushel Egyptian beets, J M
 Smith.
 Second best, D Huntley.
 Best one-half bushel Orange Globe, J D Van-
 doren.
 Second best, D Huntley.
 Best mangel wurtzel, B Myers.
 Second best, A W Hawley.
 Best Drumhead cabbage of any variety, J M
 Smith.
 Second best, L S Jones.
 Best winningstadt, D Huntley.
 Second best, R B Ferris.
 Best one half bushel early horn carrots, E W
 Sanders.
 Second best, J Nelson.
 Best one-half bushel scarlet horn carrots, R
 B Ferris.
 Second best, J D Vandoren.
 Best one-half bushel long orange carrots, R
 B Ferris.
 Second best, L S Jones.
 Best cauliflower, W H P Bogen.
 Second best, J M Smith.
 Best dwarf celery, J M Smith.
 Best early sweet corn, E W Sanders.
 Second best, J D Vandoren.
 Best evergreen sweet corn, S W Appleton.
 Second best, J D Vandoren.
 Best eggplant, J Nelson.
 Best citron melon, J M Smith.
 Second best, E W Sanders.
 Best muskmelon of any variety, E W San-
 ders.
 Second best, D Huntley.
 Best watermelon, E Matteson.
 Second best, D Huntley.
 Best one-half bushel red onions, L S Chase.

Second best, W H Bogan.
 Best one-half bushel yellow danvers onions?
 R B Ferris.
 Second best, J Nelson.
 Best one-half bushel of parsnips, J M Smith.
 Second best, R B Ferris.
 Best show of large red pepper, J M Smith.
 Best show of seedling potatoes, E W Sanders.
 Best one-half bushel of early rose potatoes, D
 Huntley.
 Second best, Stephen Bowron.
 Best one-half bushel excelsior potatoes, J M
 Smith.
 Second best, E W Sanders.
 Best one-half bushel fluke potatoes, W A
 Boyd.
 Second best, E W Sanders.
 Best one-half bushel peach blow potatoes, J
 M Smith.
 Second best, S W Appleton.
 Best one-half bushel peerless potatoes, J M
 Smith.
 Second best, S W Appleton.
 Best one-half bushel new variety, J M Smith
 Second best, J D Vandoren.
 Best one-half bushel early yellow nansemound-
 sweet potatoes, J M Smith.
 Second best, G J Johnson.
 Best one-half bushel white brazilian, J M
 Smith.
 Second best, G J Johnson.
 Best salsify or vegetable oysters, J M Smith
 Best hubbard squash, J M Smith.
 Second best, S T Derby.
 Best fall squash, J M Smith.
 Second best, E W Sanders.
 Best largest squash of any variety, E Hall.
 Second best, S T Derby.
 Best one-half bushel tomatoes, J D Vandoren
 Second best, J M Smith.
 Best one-half bushel flat turnips, J M Smith-
 Second best, C Randall.
 Best one-half bushel rutabagas, L S Jones.
 Second best, J M Smith.
 Best show by one exhibitor, not less than 20
 varieties, J M Smith.

Second best, J M Smith.

Second best, E W Sanders.

Best one-half bushel white onions, L S Chase.

FRUITS, WINES ETC.—APPLES.

Best and greatest variety, E Chase.

Best show of autumn apples, E Chase.

Second best, H Floyd.

Second best, H Floyd.

Best ten varieties adapted to the Northwest,
E Stilson.

Best show of winter apples, H Floyd.

Second best, E W Sanders.

Second best, O P Clinton.

Best five varieties adapted to the Northwest,
D Huntley.

Best seedling specimens, E Nye.

Second best, Eli Stilson.

Best fifteen varieties, H Floyd.

Second best, J Woodworth.

PEARS.

Best greatest variety, J Woodworth.

Second best, H Floyd.

Second best, Mrs Priest.

Best single variety, Eli Stilson.

Best three varieties adapted to the North-
west, J Woodworth.

Second best, J Woodworth.

PLUMS.

Best plums, J L Fish.

GRAPES.

Best exhibition, D W Vincent.

Best five varieties, D W Vincent.

Second best, I Kezertee.

Second best, N Christensen.

Best ten varieties, D W Vincent.

Best single variety, W M Stuart.

Second best, J Brainerd.

Second best, Mrs Priest.

WINES.

Best bottle grape wine, R J Harney.

Best bottle currant wine, G J Johnson.

DELICACIES, PRESERVES, ETC.

Best collection of preserved fruits, Mrs Priest.

Best crab apples, E W Sanders.

Best sample preserved pears, Mrs Priest.

Best tomatoes, Mrs A Lindsey.

Best peaches, Mrs Priest.

Best collection of jellies, Mrs Priest.

Best plums, Mrs C H Root.

Best specimen of currant jelly, Mrs Root.

Best cherries, D Huntley.

Best apple jelly, Mrs Root.

Best strawberries, D Huntley.

Best crab apple jelly, Mrs A Lindsey.

Best raspberries, D Huntley.

Best grape jelly, N Hoaglin.

Best blackberries, Mrs Priest.

Best raspberry jelly, D Huntley.

Best currants, E W Sanders.

Best blackberry jelly, Mrs Root.

Best gooseberries, Mrs Priest.

Best sample apple butter, Mrs Root.

Best grapes, D Huntley.

CANNED FRUIT.

Best collection canned fruits, Eli Stilson.

Best raspberries, Mrs Root.

Best sample canned apples, Mrs A Lindsey.

Best blackberries, Mrs Priest.

Best pears, Mrs Root.

Best gooseberries, Mrs Lindsey.

Best pared peaches, Mrs Root.

Best currants, Mrs Priest.

Best whole peaches, Mrs Root.

Best grapes, N Hoaglin.

Best plums, Eli Stilson.

Best tomatoes, Mrs Priest.

Best cherries, Mrs Root.

Best corn, Mrs Root.

Best crabapples, Mrs A Lindsey.

Best peas, Mrs Priest.

Best strawberries, E Stilson.

PICKLES.

Greatest and best variety, D Huntley.

Second best, Ripon Pickle Company.

PLANTS AND FLOWERS.

- Best display of green house plants in variety
J Miles.
Second best, J Osborne.
Best display of house plants exhibited by amateurs, Mrs Moulton.
Second best, Mrs A Browne.
Best show of oleanders in bloom, J Miles.
Best display of Pelargoniums, J Miles.
Best display of geraniums in variety, D W Vincent.
Second best, J Osborne.
Largest variety of fuschias in bloom, J Osborne.
Best and largest display of roses, J Osborne.
Best 6 named varieties of roses in bloom, J Osborne.
Largest display of petunias in bloom, J Osborne.
Largest display of hanging baskets and grow-

- ing plants, D Huntley.
Second best, D W Vincent.
Best and greatest display of cactus in bloom
J Miles.
Best single cactus, Mrs A Browne.
Best general assortment of ornamental foliage
plants, J Miles.
Second best, Mrs Browne.
Best display of begonias in variety, J Miles.
Best single specimen of begonia raised by
amateur, Mrs Browne.
Best single specimen of house plant any variety
by amateur, Mrs Moulton.
Second best, Mrs Browne.
Best 3 house plants by young lady under 16
years, Miss Moulton.
Best and largest display of asters in bloom
Mrs R Styles.

CUT FLOWERS.

- Most artistically arranged floral design, J
Miles.
Second best, E Chase.
Best pair round bouquets, J Miles.
Best flat bouquets, D Huntley.
Most tastefully arranged basket bouquet, D
Huntley.
Best arranged and finest display of phlox
drummonos, D Huntley.
Best show of asters in variety and quality
D Huntley.
Largest show of verbenas, J Miles

VICK'S SPECIAL FLORAL PRIZES.

- Best and finest collection of cut flowers, Miss
Kate Pepper,
Best phlox drummondii, E Smith.
Best asters, D Huntley.
Best dianthus family, Miss Pepper.
Best pansies, Mrs D Huntley.
Best stocks, Miss Huntley.
Best gladiolus, Miss Pepper.
Best everlasting flowers and grasses, Mrs
Christensen.

FOR FLOWERS GROWN BY PERSONS UNDER 12 YEARS OF AGE.

- Best and finest collection of cut flowers, Miss S
Miles.
Best phlox drummondii, Miss S Miles.
Best asters, Miss R Styles.
Best balsams, Marion Miles.
Best Pansies, Miss E Smith.
Best stocks, Mrs E T Smith.

DOMESTIC MANUFACTURING AND FINE ARTS.

- Best Flannel, D Morrison.
Best rag carpet, Mrs E Giddings.
Second best, Miss H Stearns.
Best woolen blanket, Miss H Stearns.
Best white quilt, Mrs C H Root.
Second best, Mrs A Lindsey.
Best cotton patch work quilt, Mrs R Rogers,
Second best, J L Fish.
Best worsted patch quilt, F Brown
Second best, Mrs A E Coffy.
Best crochet tidy, V Randall.
Second best, Mrs Root.
Best knit breakfast shawl, Mrs Priest.
Best knit hood, E A Taylor.
Best worsted embroidery Mrs W H Robinson.
Second best, Melissa Graves.
Best floss embroidery, Mrs S Bowron.
Second best, Miss S Taylor.
Best wax fruit, Miss V Thompson.
Second best, Miss V Thompson.

- Best quilt of any quilt of any material not mentioned, Miss O White.
 Second best, J H Sturtevant.
 Best woolen yarn, Utter Rogers & Co.
 Best men's socks, Mrs C F Rogers.
 Second best, Mrs L Spore.
 Best ladies stockings, D Morrison.
 Second best, Utter Rogers & Co.
 Best woolen mittens, Miss R Bennett.
 Second best, Mrs C F Rogers.
 Best worsted tidy, unknown.
 Second best, H M Bray.
 Best cotton tidy, Mrs A Lindsey.
 Second best, Mrs S Bowron.
 Best crochet work, Mrs Moulton.
 Second best, Mrs Root.
 Best rug, C Curtis.
 Second best, McKey, Bro & Folds.
 Best Afghan blanket, Mary Wadleigh.
 Best wool scarf, Mrs C Priest.
 Best ottoman cover Mrs C H Root
 Second best, A M Weber.
 Best knit bed spread, G S Putnam.
 Best tatted collar, Miss Root.
 Second best, Miss Root.
- Best wax flowers, Mrs Root.
 Second best, Miss V Thompson.
 Best work in wax other than those mentioned, Miss V Thompson.
 Second best, Miss V Thompson,
 Best work in hair, Mrs A Rogers.
 Best Moss work, Mrs H Smith
 Second best, D W Vincent.
 Best work in shells, Mrs A Lindsey
 Second best, Mrs A Brown
 Best work in beads Mrs W B Stickney
 Second best, Mrs M Mahlman
 Best dried grass and flowers, Mrs C H Root
 Best lace work, Mrs A Lindsey
 Best display of millinery, A M Weber
 Second best, Mrs A Rogers
 Best fancy basket Mrs Root
 Second best J H Sturtevant
 Best worked lamp mat Mrs R W Drew
 Second best L A Williams
 Best specimen of plain sewing by a girl under 15 years, Miss Annie Jones
 Finest collection of ornamental work of any kind, Mrs A Browne
 Best 5 fancy door mats, McKey Bro & Folds

NATURAL HISTORY.

- Collection in natural history K M Hutchinson. Entomology K M Hutchinson.
 Mineralogy D W Vincent

WORKS OF ART, ETC.

- Original painting in oil of Wisconsin landscape, Mrs O D Bentley.
 Best of any landscape, Mrs A G Turner.
 Second best, H T Cook.
 Best original painting in water colors, A Ostrander.
 Second best, Mrs Lindsey.
 Best pen and ink drawing, W W Daggett.
 Second best, Mrs J N Hoaglin.
 Best specimens of penmanship, W W Daggett.
 Second best, C J Faber.
 Best pencil drawing, O D Bentley.
 Second best, L Patten.
- Best map drawn by a boy or girl under 15 years of age, map of Wisconsin, R E Rogers.
 Second best, E Abrams.
 Best oil portrait, Mrs Dr Russell.
 Second best, Mrs Dr Russell.
 Best cone work, C Houghton.
 Second best, Mrs A Rogers.
 Best specimen stencil cutting, J H Johnson
 Best exhibition sun pictures, A Scidmore.
 Best portrait in crayon, Mrs A G Turner.
 Best photograph in india ink, C J Faber.
 Best exhibition of printing in variety, Allen & Hicks.

MANUFACTURES OF IRON, STONE AND CLAY.

- Ornamental cast iron vase of pedestal, E A Harris.
 Cast iron gate, Howard & Schubert.
 Cast iron fence, Howard & Schubert.
- Specimen of brick, Day & Co.
 Collection of drain tile, Day & Co.
 Wooden beating furnace, P B Williams.
 Parlor stove, P Z Wilson.

TEXTILE FABRICS, CLOTHING, ETC.

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| Cassimere, Blake & Co. | Display of woolen goods, Blake & Co. |
| Lady's blanket shawl, Blake & Co. | Exhibition of fur and fur goods, C V N Brundage. |
| Assortment machinery knit goods, Mrs Kenfield. | |

LEATHER AND LEATHER MANUFACTURES.

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|---|--|
| Traveling trunk, Smith Bros. | Ladies' slippers, J M Rollins & Co. |
| Ladies satchel, Smith Bros. | Double carriage harness, P L Smith. |
| Pair of gent's summer boots, J M Rollins & Co. | Single or buggy harness, J M Bray. |
| Winter boots, J M Rollins & Co. | Sole leather, C V N Brundage. |
| Cowhide boots, J M Rollins & Co. | Calfskin, C V N Brundage. |
| Ladies' summer walking boots, J M Rollins & Co. | Other kinds of leather, C V N Brundage. |
| Ladies winter shoes, Geo Moreton. | Display of boots and shoes of all kinds, J M Rollins & Co. |
| Gent's slippers, J M Rollins & Co. | Fancy buffalo robes, C V N Brundage. |

MACHINERY AND FARM IMPLEMENTS.

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|---|---|
| Plow for turning sod land, M K Dahl. | Corn sheller, J H Mears. |
| Turning under stubble, Geo O Bergstrom. | Seed sower and cultivator combined, Van Brunt & Davis. |
| Steel plow, Fox Lake Manufacturing Co. | Grass seed sower, W C Raynor. |
| Implement or machine adapted to harrow work, Brown & Vosburg. | Combined mower and reaper with or without self raking attachment, W C Raynor. |
| Wheel cultivator for fallow, Brown & Vosburg. | Mowing machine, J Walker. |
| Two-horse cultivator, Van Brunt & Davis. | Horse pitchfork, Van Brunt & Davis. |
| Straw and stalk cutter, J H Mears. | |

MANUFACTURES OF WOOD.

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|---|--|
| Display of wagon timber, Webster & Lawson. | Best Phaeton, P L Smith. |
| Single article of wagon timber, Webster & Lawson. | Second best, — Wilson. |
| Best display of carriages, P L Smith. | Best open buggy, McLean & Haas. |
| Second best, — Nelson. | Second best, P L Smith. |
| Best double top carriage, Richardson & Gallup. | Best lumber wagon, Streich Bros. |
| Second best, P L Smith. | Second best, Streich Bros. |
| Best single top carriage, P L Smith. | Best double sleigh, Wm Servis. |
| Second best, P L Smith. | Best single sleigh, Valier & Clements. |
| Best open single buggy, McLean & Haas. | Bunch of shingles, Webb, Alberts & Co. |
| Second best, Wm Servis. | Set chamber furniture, B H Soper. |
| | Office desk, B H Soper. |
| | Easy chair, B H Soper. |

MISCELLANEOUS.

- | | |
|--|---|
| Premiums recommended on articles not mentioned in the above classes: | Rabbits, J McKean. |
| Lumbering sled, J Gillingham. | Cranberries, T T Smith. |
| Carriage wheel, Sabine & Co. | Cranberries, Foot & Rounds. |
| Sash balance, H N Greene. | Show of grapes, G J Kellogg. |
| Window blind, J S Lests & Co. | Pair of antelopes, W B Newcomb. |
| Writing desk, E D Fuller. | Display of groceries, Cameron & Stoppe. |
| Pastel painting, Mrs A G Turner. | Washing machine, G W Green. |
| Rubber stamp, J H Johnson. | Otis spring bed, H Pratt & Son. |
| Balance hinge, O P Clinton. | Picture medley, Mrs Asa Rogers. |
| | Specimens of china ware, J F W Decker. |

- Show of guns and pistols, Frank Percy.
 Sign and ornamental painting, W H Bodine.
 Baby cabs, E H Hed.
 Lamb knitting machine, E A Taylor.
 Double barrel shot gun, Whitney Arms Co.
 Rectangular churn, Cornish & Curtis.
 Dry hop yeast, Ath Yeast Co.
 Domestic sewing machine, A G Turner.
 Clocks, I G Hatch.
 Board inlaid work, E D Fuller.
 Worsted fruit work, Lizzie Montgomery.
 Cabinet organ, G R Lampard.
 Display of musical instruments, G R Lampard.
 Remington sewing machine, J H Barr & Co.
 Remington sewing work, J H Barr & Co.
 Cranberries, Badger, Bugbee & Co.
 35 variety of apples all grown on one tree,
 G J Kellogg.
 Onion seed, E W Saunders.
- Specimens of stamping, Mrs Kenfield.
 Worsted and feather work, Mrs A Rogers.
 Patent oil can, C A Folsom & Son.
 Sand ejector, M Christensen.
 Wagon box, N Gondson.
 Brackets, F S Parker.
 Earth auger, C S Barto.
 Fanning mill, E S Blake.
 Crayon drawing, N Ostrander.
 Pump, W Clough.
 Stump puller, C N Green.
 Swivel plow brace, G D Wyman.
 Skeleton work, Mrs H B Knapp.
 Bracket, B H Soper.
 Chromos, B H Soper.
 Bed spring, B H Soper.
 Cabinet sewing machine and work, W S Sandon.
 Set of wheels, Streich Bros.
 Board and log rules, Parker & Smith.

OFFICERS FOR 1874.

J. M. SMITH, Green Bay, *President.*
 R. D. TORREY, Oshkosh, *Secretary.*
 J. H. JONES, Winchester, *Treasurer.*

Vice-Presidents :

Brown County	-	-	-	Wm. M. Stuart.
Calumet	-	-	-	C. Thurston.
Door	-	-	-	L. M. Wright.
Dodge,	-	-	-	D. J. Pulling.
Fond du Lac,	-	-	-	D. C. Lamb.
Green Lake,	-	-	-	J. C. Sherwood.
Kewaunee	-	-	-	Edward Bach.
Manitowoc,	-	-	-	Henry Baetz.
Marathon,	-	-	-	Mr. Plummer.
Marquette,	-	-	-	S. A. Pease.
Outagamie,	-	-	-	P. S. Bennett.
Oconto,	-	-	-	Augustus Cole.
Racine,	-	-	-	L. S. Blake.
Sheboygan,	-	-	-	J. Stoddard.
Shawano,	-	-	-	M. H. McCord.
Sauk,	-	-	-	Chas. H. Williams.
Waupaca,	-	-	-	S. A. Oakes.
Waushara,	-	-	-	E. L. Daniels.
Winnebago,	-	-	-	S. Bowron.
Waukesha,	-	-	-	P. Peffin.

ANNUAL MEETING OF 1874.

OFFICE OF THE N. W. A. & M. ASSOCIATION,
OSHKOSH, Jan. 12, 1874.

REPORT AND ELECTION OF OFFICERS.

The annual meeting of the Northern Wisconsin Agricultural and Mechanical Association met at the Court House on Tuesday morning at 10 o'clock. President Skeels absent. J. M. Smith of Green Bay was chosen President *pro tem*. Eli. Stilson, E. S. Hammond, D. S. Bennett, S. Marshall and Stephen Bowron were appointed committee on credentials.

The committee reported the following delegates entitled to seats:

Ripon Agricultural Association: A. M. Skeels, T. Marshall, H. S. Town.

Green Bay Agricultural Association: J. M. Smith, A. C. Robinson, M. P. Lindsley.

Outagamie Agricultural Association: A. P. Lewis, L. L. Randall, E. Saxton.

Fond du Lac Agricultural Association: E. D. Norton, D. C. Lamb, E. S. Hammond.

Winnebago County Agricultural Association: R. D. Torrey, Tom. Wall, S. Bowron.

Oshkosh Stock Growers' Association: Eli. Stilson, R. L. Bigger, J. Ball.

Fond du Lac Stock Growers' Association: D. C. Lamb
3 votes.

Outagamie Stock Growers' Association: M. H. Lyon, E. C. Goff, B. Douglas.

Appleton Horticultural Association: D. Huntley, P. S. Bennett, W. T. Gurner.

Winnebago Horticultural Association: I. J. Hoile, J. O'Brien, E. S. Hayden.

Oshkosh Horticultural Association: Ira Kerzertee, J. P. Roe, R. C. Thwaites.

Grand Chute Club: H. Jones, J. K. Vanderboget, H. Green.

Outagamie County Bee Keepers: A. H. Hart, Z. C. Fairbanks, Mr. Palmer.

Western Wisconsin Poultry Association: E. W. Sanders, B. Dougherty, W. J. Morris.

Dr. Huntley moved that the constitution be so amended as to admit County Councils of the P. of H. to a full delegation. The motion prevailed, after much discussion and some warm opposition.

An amendment to the constitution was made on motion of Mr. Hayden, to the effect that no society or organization will be entitled to representation in the Association unless it has had an organization of at least six months standing, before the annual meeting of their association, and has a working practical existence.

The report of J. H. Jones, Treasurer, was then read and referred to a committee, which reported his accounts all correct. Secretary Torrey then submitted the following—

R E P O R T.

To the President and Members of the Northern Wisconsin Mechanical Association:

GENTLEMEN:—With pleasure I present you this, the Secretary's, fifth annual report, showing the condition of the Society at the close of the fiscal year ending to-day.

From the first organization there has been a steady growth and every year a healthy advance, and as you meet to transact the business of the fifth annual meeting, you do so under the most favorable circumstances; and I can but think that we should fully appreciate the fact that this is no longer an experiment, but one of the fixed associations of the

State, so that in your deliberations you shall so plan and determine, that the execution of your plans can result only in continued success.

The success that has so far attended the association cannot be attributed to the efforts of any one of the officers, or to all combined, though they may have done what they could, but rather the hearty co-operation of all. Farmers, manufacturers and all classes of industry have given their most cordial support, manifesting their interest, not only in being present at the fairs, but in inducing all with whom they meet to do the same. Your legislation to-day should be such as to more firmly unite these interests and bring in more,

The wisdom of originators of the society in bringing together representatives from the various industrial societies as ex-officio members of this, and committing its business to them, is each year more and more apparent; and it is hoped it will be continued, as it is undoubtedly a bar to the possibility of any given locality or interest gaining possession of the society, to the exclusion of other equally important interests. It might, perhaps, be so modified, that a society to be entitled to representation, should have an existence of some definite length of time, say eight months or one year, prior to the annual meeting in each year, of this association.

FINANCIALLY.

The total receipts, from all sources for the year, have been \$6206.01, which, after paying all demands, leaves a balance of \$451.57, which added to the balance on hand from previous year makes \$677.79.

The Winnebago County Agricultural Society has donated to this association \$100, on condition that we purchase two shares of stock in the Oshkosh Fair Grounds. The money was accepted and the investment made, and we have the certificate of stock.

The amount of premiums were increased for the last year \$700 over those of the previous year. The Executive Committee in making this increase did so with some reluctance, and fear as to the result; yet it has proven wise, and instead of running behind we have gained, and still have a balance in the treasury.

I desire to thank the officers and members of the association, as well as all with whom I have met in course of official duty, for the universal kindness and courtesy shown me. In conclusion, I would say that all money paid out by the Treasurer has been done on orders drawn as per the regulations, and I herewith present the stubs of all orders drawn, as well as my vouchers for drawing the same, for your examination.

Respectfully submitted.

R. D. TORREY, Secretary.

AFTERNOON SESSION.

The Association met at 1:30 P. M. J. M. Smith in the chair. A motion prevailed allowing E. R. Martin to cast one vote for Omro. A motion also prevailed that when there were absent delegates, those present should cast the full vote.

The matter of a general agricultural convention under the auspices of this association was discussed at length, when a motion was carried to appoint a committee of one from Brown, Outagamie, Winnebago, Fond du Lac, and Green Lake counties, with discretionary powers to arrange for such a convention. J. M. Smith, R. D. Torrey, L. L. Randall, D. C. Lamb, S. A. Oaks, and J. C. Sherwood were appointed that committee.

Vick's special premium was accepted for next year, with thanks, and referred to the Committee on Premiums.

The Association then proceeded to the election of officers for the ensuing year. The first ballot was informal. Whole number of votes 44. The informal ballot for President stood—

J. M. Smith, 15; E. S. Hammond, 8; A. M. Skeels, 18
P. S. Bennett, 3.

J. M. Smith was elected after 7 ballotings, which stood as follows:

Ballots—	-	1	2	3	4	5	6	7
Smith,	-	16	17	19	19	21	21	24
Skeels,	-	8	9	9	3	21	21	19
Hammond,	-	16	16	14	20.			
Bennett,	-	3.						

Mr. Smith's election was then declared unanimous.

For Secretary R. D. Torrey was elected on the first ballot by a unanimous vote.

For Treasurer the ballot stood—

J. H. Jones, 31.

D. C. Lamb, 5.

Mr. Jones was declared elected.

The following Vice-Presidents were then elected:

William M. Stuart, Brown County; C. Thurston, Calumet County; L. M. Wright, Door County; D. J. Pulling, Dodge County; D. C. Lamb, Fond du Lac County; J. Sherwood, Green Lake County; Edward Bach, Kewaunee County; Henry Baetz, Manitowoc County; Mr. Plummer, Marathon County; S. A. Pease, Marquette County; P. S. Bennett, Outagamie County; Augustus Cole, Oconto County; L. S. Blake, Racine County; John Stoddard, Sheboygan County; M. H. McCord, Shawano County; Chas. H. Williams, Sauk County; L. A. Oaks, Waupaca County; E. L. Daniels, Waushara County; Stephen Bowron, Winnebago Co.; P. Peffer, Waukesha Co.

The time and place for holding the next annual exhibition was referred to the Executive Committee.

The Convention then adjourned *sine die*.

TREASURER'S REPORT FOR 1873.

RECEIPTS.

To balance on hand from last report,	\$ 377 64
To Receipts from Tickets,	4996 56
“ “ “ Seats. - - -	286 35
“ “ “ Rents, - - -	448 10
“ “ “ Races and Entries, -	330
“ “ “ Life Members, -	10
“ “ “ Jas. Vick's Premium,	135
	<hr/> \$6583 65

EXPENDITURES.

By Paid Orders—see warrant of Secretary for items, - - -	\$5905 86
Balance on hand, - - -	677 79
	<hr/> \$6583 65

SECRETARY'S WARRANT ACCOUNT FOR 1873.

DATE	NO. ORDER.	TO WHOM AND WHAT FOR.	AMOUNT.
1873.			
October 4,	1	J V Sweeting, premium	\$12 00
do	2	C U Loomis, do	150 00
do	3	Thos Marshal, clerk,	35 00
do	4	O U Russell, premium,	12 00
do	5	Fernandez & O'Bryan, printing	56 50
do	6	J Woodruff, printing	14 00
do	7	Mrs C H Root, premium	26 50
do	8	C V N Brundige, do	18 00
do	8½	Mrs K Lindsey, do	16 00
do	9	S A Brown, do	20 00
do	10	J S Holmes, do	122 00
do	11	A Rogers, do	2 00
do	12	C H Merrill, do	50
do	13	C Murray, do	2 00
do	14	Wm Bradley, do	1 00
do	15	Howard & Towers do	35 00
do	16	R T Wyman, do	14 00
do	17	D Roberts, do	10 00
do	18	W D Roberts, do	2 00
do	19	H W McAfferty, do	90 00
do	20	G Kruger, do	1 75
do	21	J Stoddard, do	54 00

DATE. 1873.	NO. ORDER.	TO WHOM AND FOR WHAT.	AMOUNT.
October 4,	22	C Russ Premium.....	3 00
do	23	Allen & Hicks, printing.....	161 05
do	24	C E Westbrook, premium.....	240 00
do	25	A Muller, premium.....	1 00
do	25½	M Towers, watch.....	5 90
do	26	D Rogers, premium.....	3 00
do	27	Eli Stilson, superintendent.....	18 00
do	28	C Whiting, premium,.....	1 50
do	29	E Wilson, clerk.....	20 00
do	30	— Stembler, premium.....	71 00
do	31	W W Lake, ticket seller.....	12 00
do	32	Chas McCammond, premium.....	85 65
do	33	P Z Wilson, hardware.....	11 72
do	34½	Jenkins & Co lumber.....	37 55
do	34	E Nettleton premium.....	2 00
do	35	E W Saunders, do.....	39 00
do	36	L A Williams do.....	50
do	37	J O'Brien do.....	65 50
do	38	J E Saunders, labor.....	17 00
do	37	A B Wade premium.....	12 00
do	40	Valier & Clemens premium.....	2 00
do	41	C J Faber premium.....	1 00
do	42	J F Stroud do.....	2 00
do	43	Barna Haskell labor.....	10 00
do	44	J Knisely watch.....	8 00
do	45	S Lodge straw and labor.....	111 50
do	46	J M Smith premium.....	77 00
do	47	Curtis & Hobart livery.....	12 50
do	48	S Bewron, superintendent.....	18 00
do	49	Arthur Bowron, assistant superintendent.....	10 00
do	50	Bowron, premium.....	2 50
do	51	H Oertel, drayage.....	1 00
6,	52	Elihu Hall, premium.....	15 50
do	53	E Wallace, do.....	6 25
do	54	Ira Kezertee, do.....	4 00
do	55	Eli Stilson, do.....	328 00
do	56	R T Graves, do.....	12 00
do	57	T Brown, do.....	2 00
do	58	A C Austin, marshal.....	25 00
do	59	H B Dale, marshal.....	25 00
do	60	G R Lambert, premium.....	10 00
do	61	J H Matteson, do.....	10 00
do	62	J H Osborn, do.....	9 50
do	63	P Z Wilson, use of bell.....	1 05
do	64	P Z Wilson, premium.....	2 00
do	65	R D Torrey, salary and cash paid out.....	489 20
do	66	Henry Shipley, premium.....	2 00
do	67	Waupun Band, music.....	140 00
do	68	H C Janes, premium.....	23 00
do	69	F Badger, clerk.....	21 00
do	70	F Zentner, gate keeper.....	30 00

SECRETARY'S WARRANT ACCOUNT FOR 1873.

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DATE.	NO.	ORDER.	TO WHOM AND FOR WHAT.	AMOUNT.
1873.				
October 6,	71		J Athearn, premium	31 00
do	72		A W Hawley, hay	114 20
do	72½		A W Hawley, premium	1 00
do	73		David Morrison, do	3 00
do	74		M Snell do	22 00
do	75		C Curtis, do	1 00
7,	76		Eastman, stationery	55
do	77		Isaac Miles, premium	14 00
do	78		J Howard, watchman	12 00
do	79		S P Gary, premium	2 00
do	80		O E Carrier and wife, assistant superintendents	20 60
do	81		H Conrad, clerk	13 00
do	82		Mrs H Stearns, premium	3 00
do	83		J F Lewellen, do	8 00
do	84		Eli Stilson, do	4 00
do	85		Isaac miles, do	1 00
do	86		D Huntley and G C Club, premium	75 50
do	87		L S Jones, premium	21 00
do	88		H Stiles, do	6 00
October 7,	89		Thompson & Hayward, premium	10 00
do	90		Chas Griffin, gate keeper	20 00
do	91		A B Smith, marshal	25 00
do	92		A Hubbard, gate keeper	20 00
do	93		N G Sturtevant, premium	23 00
do	94		John Lucas do	70 00
do	95		R D Torrey, ribbon and seals	1 10
do	96		Ira Clark, premium	16 00
8,	97		M M Thompson, premium	6 00
do	98		J H Pugh, do	4 00
do	99		Mrs R W Drew, do	1 00
do	100		Mrs H B Knapp, do	2 00
do	101		Joseph Harness, watchman	8 00
do	102		L L Randall, premium	26 00
do	103		J H Jones, salary and expense	103 00
do	104		J M Rollins, premium	6 00
9,	105		D L Libby do	4 00
do	106		Jas Brainerd do	3 00
do	107		Geo Meerton do	1 00
do	108		B Edwards do	6 00
do	109		J Stoddard do	58 00
do	110		B Edwards do	1 50
do	111		C N Paine & Co, do	8 00
do	112		H A Smith do	4 00
do	113		L A Briggs do	10 00
do	114		P S Bennett, superintendent	15 00
do	115		L A Briggs, assistant superintendent	8 00
do	116		W W Daggett, premium	4 00
do	117		Mrs E Giddings, premium	2 00
10,	118		J N Hoaglin do	12 50
do	119		Kohlman Bro, printing	16 50

DATE. 1873.	NO. ORDER.	TO WHOM AND FOR WHAT.	AMOUNT.
October 10,	120	G R Lamert, premium.....	2 00
do	121	S O Carlton, labor.....	12 50
do	122	Owen Jones, premium.....	10 00
do	123	J Merritt do	27 00
do	124	Mrs D Huntley, assistant superintendent.....	6 00
do	125	Mrs E Bennett, premium.....	1 00
do	126	A Richardson do	6 00
do	127	Mrs Russell do	6 00
do	128	Mrs Markham do	1 50
do	129	J Nelson do	4 00
do	130	E and L S Chase do	17 00
do	131	L A Briggs do	1 25
do	132	P S Bennett, bill	7 05
do	133	B H Soper, premium.....	9 50
do	134	N F Roby & Co do	6 00
do	135	E F Dunham do	21 60
do	136	W W Utter, labor.....	6 25
11,	137	Miss C White, premium.....	2 00
do	138	V Randall do	1 00
do	139	S D Paddleford do	12 00
do	140	Allen & Hicks do	2 00
do	141	L C Booth do	12 00
do	142	Valier & Clemons premium	8 50
13,	143	G J Bean, do	12 00
do	144	A B Smith, bill.....	8 65
do	145	J D Vandoren premium	33 50
do	146	Thad Lawrence do	5 00
do	147	Day & Cook do	4 00
do	148	E Nye do	8 50
do	149	J V Jones lumber	64 55
do	150	I J Hoile, bill	1 40
14,	151	P Baker, labor.....	13 00
do	152	E Baker do	15 00
do	153	J Phillips do	8 00
do	154	P Zentner, gate keeper.....	20 00
do	155	Mrs D W C Priest, premium	19 00
do	156	F L King do	45 00
do	157	Viola Thompson do	1 50
do	158	R E Rogers do	2 00
do	159	Mrs R Rogers do	3 00
do	160	J H John do	2 00
do	161	K M Hutchinson do	6 00
do	162	W D Lawrence do	10 00
do	163	N Christeuson do	2 00
15,	164	Mrs A Brown do	7 00
do	165	R B Ferris do	8 00
do	166	S M Wagstaff do	6 00
do	167	D McAllister do	13 00
do	168	T Davis do	77 00
do	169	P L Smith & Co do	24 00
do	170	E J Harney do	2 00

SECRETARY'S WARRANT ACCOUNT FOR 1873. 203

DATE.	NO. ORDER	TO WHOM AND FOR WHAT.	AMOUNT.
1873.			
October 15,	171	Streich Bros do	5 00
do	172	ST Derby do	2 00
do	173	E D Knapp do	3 00
do	174	H Floyd do	22 00
do	175	Isaac Miles do	2 50
do	176	W A Boyd do	3 50
16,	177	H B Sherman do	128 50
do	178	Wm Storey do	10 50
do	176	Mrs Moulton do	8 00
do	180	Miss A Jones do	2 00
18,	181	F Gillingham do	10 00
do	182	P A Dalde, assistant marshal	25 00
do	183	W L Caldwell do	25 00
do	184	D W Vincent premium	19 00
do	185	Elmer Hawes do	2 00
do	181½	J McKean do	11 00
do	182½	Lizzie Montgomery premium	2 00
do	183½	D J Palling do	7 50
20,	184½	C H Boynton do	3 00
do	185½	A Cusick do	1 50
October 21,	186	Charles Curtis, brooms and pails	3 60
do	187	T Patton, premium	3 00
do	188	W H Patton, do	3 00
do	189	Richardson & Gallup, premium	5 00
do	190	A W Hawley, premium	3 00
do	191	Mary J Hamilton, do	1 00
do	192	Wm Worden, do	20 00
do	193	G W Worden, do	23 00
do	194	G A Cunningham, do	9 00
do	195	Mrs C P Houghton, premium	4 00
October 22,	196	Nellie Ostrander, do	3 00
do	197	E S Hammond, expenses and superintendent	31 00
do	198	Mrs Lambert, premium	2 00
do	199	* Error—not drawn	
do	200	J Cross, premium	15 00
23,	201	S Lodge, labor	2 63
do	202	J H Hammond, premium	5 00
21,	203	E A Taylor, do	1 00
do	204	E Abrams, do	1 00
25,	205	J E Sanders, labor	2 63
do	206	Geo S Clemons, premium	7 50
do	207	J H Osborne, do	2 00
do	208	Mrs Kenfield, do	2 00
27,	203	S J Perry, premium	8 00
do	210	G S Putnam, do	1 00
do	211	H Jones, do	4 50
do	212	Wm Servis, do	5 00
28,	213	A E Coffin, do	1 00
do	214	Ed Finney, bill	4 50
do	215	J H Sturtevant, premium	1 50

DATE.	NO. ORDER.	TO WHOM AND FOR WHAT.	AMOUNT.
1873.			
Oct. 28,	216	Mrs C Rogers, do	2 00
do	217	A Rogers, premium.....	1 50
29,	218	Cameron & Worden, premium	13 00
do	219	Mrs O D Bentley, premium	4 00
30,	220	Mrs A G Turner, do	10 00
do	221	E R Martin, premium	9 00
do	222	Saurau & Weidner, posting bills	5 40
November 1,	223	Amelia Rollins, care of ladies' reception room.....	12 00
do	224	G S Church, premium	2 00
do	225	Geo Rogers, do	5 00
3,	226	H Chatmar, bill	2 00
do	227	A H Hart, premium	9 00
5,	228	G J Johnson, do	4 00
do	229	J Scribner, premium	15 00
do	230	Miss Mary Wadleigh, premium	1 00
do	231	L A Bishop, premium.....	6 00
7,	232	H Green and G C F Club, premium	8 00
8,	233	J P W Decker, premium	5 50
do	234	Miss Taylor, do	50
do	235	Mrs W B Stickney, premium.....	1 00
14,	236	Utter, Rogers & Co, do	15 50
24,	237	Thos H Framy, premium.....	12 00
do	238	McLean & Haas, do	8 00
do	239	S W Appleton, do	4 00
25,	240	Howard & Schubert, premium	4 00
do	241	C Hazen, premium	126 00
do	242	Wm M Stuart, do	2 00
28,	243	Geo Keyes, do	37 00
do	244	C Hazen, premium	5 00
do	245	G J Kellogg, do	5 00
29,	246	Roberts, use of stove	75
do	247	H E Huxley, premium and superintendent.....	21 00
December 1,	248	Mrs D W C Priest, premium.....	4 00
10,	249	P R Williams, premium.....	2 00
do	250	Mrs A Brown, do	1 00
11,	251	S M Hay & Bro, hardware.....	38 11
do	252	Mrs D Huntley, premium.....	30 00
do	253	E & E T Smith, do	20 00
do	254	Miss Kate Peffer, do	40 00
do	255	Miss M Miles, do	15 00
do	256	Miss S Miles, do	15 00
do	257	Mrs Christenson, do	10 00
do	258	Mrs R Styles, do	5 00
12,	259	J H Jones, bill.....	1 80
do	260	Watrous, Ketchum & Co, printing	3 30
do	261	Isaac Anthony, premium	6 00
do	262	J C Wells, premium	12 00
do	263	A Huxley, do	12 00
do	264	S A Oakee, do	3 00
do	265	Rev O P Clinton, premium.....	6 50

SECRETARY'S WARRANT ACCOUNT FOR 1873.

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DATE.	NO. ORDER.	TO WHOM AND FOR WHAT.	AMOUNT.
1873.			
Dec. 12,	266	A G Cusick, premium	1 00
do	267	Webster & Lawson, premium	4 00
13,	268	Mr and Mrs H M Bray, do	3 50
26,	269	J C Fairbanks, premium.....	2 00
30,	270	A M Skeels, salary	100 00
January 2,	271	Francis Foster and Mrs N Osborne, premium.....	3 00
8,	272	A M Weber, premium	2 00

ESSAYS AND ADDRESSES.

GEOGRAPHICAL CONDITIONS IN AGRICULTURE.

BY COL. C. D. ROBINSON.

GREEN BAY, July 13, 1874.

JOHN M. SMITH, ESQ.,—*President Northern Wisconsin Agricultural and Mechanical Association:*

DEAR SIR:—I presume, sir, when you invited me to contribute a paper for your forthcoming volume, that you did not expect a treatise upon agriculture. Before I was spoiled for a more useful farmer's life by being placed in a printing office, my career did indeed promise something. I count those as my brilliant years when, as a farmer's boy, I could rake and bind, and ride the horse to plow, and harvest the corn with the old-fashioned sickle, with perhaps as good promise as any of that time—and it was a time when patent reapers and mowers, and seeders and sowers, and new-fangledments of all degrees, had not yet begun to despoil the simplicity of old-time farming, and thereafter to make "gentlemen" and politicians of the honest yeomanry of the country. But, sir, a life of a quarter of a century in Northern Wisconsin, with sympathies allied to all our industries, and with habits of close observation, have allowed me to learn a great many things which are a necessity to one who tries to intelligently discharge the duties of an editor.

When I landed in Green Bay in the summer of 1846, and shortly after made a journey through the Fox river country, as far south as Oshkosh and Fond du Lac, I thought I dis-

covered a marked similarity between this region and the far famed Genessee Valley, in Western New York, where my boyhood years had been spent. Not alone the genial climate with its appropriate complement of rain and shine in summer, and its protecting and fructifying snows in winter; its grand river, with abundant water powers; and its wealth of soil, admirably adjusted to all classes of husbandry — not these alone, which could be found equally well grouped in so many quarters of the Union, but its admirable completeness in timber of every useful kind.

The Genessee Valley, from its falls near Rochester, stretches upward through the finest grain lands in the world, interspersed with all the valuable hard woods, until as if Providence had foreseen the wants of its children, it suddenly enters upon vast forests of pine, equally necessary to man, and equally adapted to the comfort and wealth of its inhabitants. The Fox River Valley, though differing slightly in the order of the arrangement, has precisely the same elements of wealth. It has the unending water powers, the broad and enduring grain lands, the adaptation of seasons, the protecting and wealth-giving snows, and the happy complement of timber lands and plains.

When the new settler opens a clearing amid these heavy forests of Northeastern Wisconsin, it is not surprising if his first sensations shall be a feeling of something like dismay at the task which unrolls its dimensions before him. The immense trees which cover his proposed farm block the way in forbidding proportions; and without doubt he has his hours of lamenting over the difference between his fortunes, and those of his neighbor of the prairie lands, who has only to put his plow, the first year, into the waiting sod and get an ample crop. But these hours of doubt are only fleeting ones. He finds that his crop of timber, already grown for him, is quite as valuable as if it were a waving sea of golden wheat. He can market his oak, or pine, or maple, or even

his bass wood and poplar, to his neighbor the lumberman, or the manufactnrer of wagon material, furniture, staves and so on, and while he is preparing his lands for its ultimate crops of grain, the very interval is bringing him riches. So, on the other hand, with the settler on the prairie lands. He, too, has had his hours of regret. His eye runs over the expanse of open fields, hungry for the sight of standing timber wherewith to build his houses, barns and fences; and to him, too, come the times of envy over his neighbor of the woodland, who has more than he needs. But his compensations also come in good time. His wheat and oats, and root crops, his cattle which have been fattening on those broad plains, and his every pound of surplus products, need not to be sent long journeys at disastrous cost, to eastern markets, but find quick purchasers at high prices among his next door neighbors, the lumberman and the manufacturer. And when winter comes, instead of feeding out his accumulated stores of hay and grain, and withdrawing himself into a long season of inactivity and non-production, like the farmers farther south and east, he can take his sons and teams into the piner-ies near by, and find pleasant and lucrative employment until the time comes again for work at home. These are some of the equivalentes and balances of Northern Wisconsin.

They operate not only to make a wealthy and prosperous people, with all the accessions of comfortable and happy homes but they make a people of large capabilities, of diverse industries, of superior attainments in practical knowledge, and of such ready judgments in all emergencies, that it is almost impossible for any reverses to come upon them with lasting effect. The storms may come, and the torrents descend, but it shall not wash away their foundationss, which are laid upon the everlasting rock.

The relations of geographical conditions to agriculture seem to me to be worth attention in recounting the adaptedness of this region to diverse farming. The broad waters of

Lake Michigan, Green Bay and Lake Winnebago, evidently have other uses than the missions of commerce. The peninsula for instance on which is located the County of Door and part of Kewaunee, extends northward nearly to the latitude of Mackinac, and would be supposed to have so inhospitable a climate as to forbid the growth of some of the grains and of most fruits. Yet the modifying influences of the waters, on each side of it give it so equitable an atmosphere as to prevent the early and late frosts which beset more inland regions, and make even the culture of grapes and most fruits a certain success. It is probable that these influences have a favorable bearing upon the growth of winter wheat, as Door County already has the reputation of not being excelled in that line by any in the State; and as Calumet County has a similar reputation, it is fair to presume that her relations to Lake Winnebago are of a like nature.

What these peculiarities will develop, when they are tested by intelligent cultivation, is difficult now to say, as our farmers have hitherto contented themselves with the cultivation of such crops as were most in demand — which I may generally state as wheat, oats, potatoes, rye, barley, and the more hardy varieties of corn. The potatoes of these northern counties are already famous, probably on account of some special adaption of the sandy loam which prevails there.

My farmer friends inform me that the Dutton, as well as nearly all varieties of Flint corn do well in this range of counties. Grass and hay are favorite crops with nearly all farmers, especially in the neighborhood of the lumber districts, where hay always finds a prompt and lucrative market. Indeed, the local supply never equals the demand, and large shipments are annually required from Fond du Lac, Dodge, Marquette and other counties southward, which send heavy amounts annually as far north as Lake Superior. The annu-

ally increasing growth of the dairy productions is also adding to the importance of the hay crop of this region.

Fruit of all kinds adapted to our climate does better near these waters than in the interior portions of the State, even in the same latitude. Grape culture is yet in its infancy, yet enough has been to show that some standard varieties, such as Delaware, Concord, Hartford, Prolific, Diana, some classes of Rogers' Hybrids, and in fact many others are perfectly at home in the Fox River Valley. One grower who has had vines in bearing ten years, tells me that he has lost but one crop in that time. Strawberries do remarkably well. One grower, who has been cultivating the Wilson for fifteen years, has failed to have at least a paying crop but once in that time. Several seasons his crop has yielded at the rate of two hundred and fifty bushels per acre, and some times even more than that. The Wilson has come into the market at various dates in June—as early as the sixth and as late as the twenty-sixth.

The early Kent pea, has been marketed here once within the last ten years as early as the fifth of June, and every year during that month.

Sweet corn is always ready for the table in July, and Asparagus is generally ready to "force the season" by the end of April or beginning of May.

These are some few practical facts which I offer you in proof that though our climate may be called a vigorous one, it is prompt in its changes and rapid in its developments. It has reminded me of the shifting of scenes at a theatre, when winter, with its ice and snows has been rolled off and followed instantly with a panorama of running streams and springing flowers and grassy landscapes. Indeed, the all beneficent hand of Providence seems not to have forgotten the little economies so needed to be practiced by the toilers of these rash "lumber woods" as our great pineries are wont to be called. When the snows finally give way, which seems

to be done reluctantly, late in March, or even sometimes extending into April, there is no long waiting for the spring to come; and the lumbermen after the logging season is ended, do not leave their camps high up on the streams, for a relaxation among the settlements—but have barely time for a brief rest before the Spring opens; the streams burst into action and they are called upon to escort their winter crops of logs down these torrent highways to their destinations at the mills.

The same sudden transformation marks the lapse of Fall into Winter. Who shall describe in adequate language the glories of a Northern Wisconsin autumn. The harvests have come and gone. The orchards have given up their stores of fruits. The traveling threshing machines, making progresses and halts through the country, have left behind them great stores of golden grain, either in the bins or on the way to market.

The Summer's work is fairly ended, and in other climates it would be appropriate to get ready the defences for the Winter's crusade of storms and frosts. But in this latitude, not so yet. Through October, and sometimes even to the end of November, the most delightful season of all the year is to prevail. The long, bland, delightful days, when outdoor work is a luxury, and every breath of the delicious atmosphere is like an inspiring wine. Now comes the anniversary of fall ploughing—the farmer's boys themselves trooping into the fields with pomp and gaiety, as if it were some delightful campaign. Now comes the time for building fences, for laying out roads through the woods for winter work, for building new barns and bridges, for hauling produce to market, and all the other things to be done before the coming of winter. It is more like a prolonged festival than a prolonged labor. The thrifty Wisconsin farmer goes through it with light heart and hand, and when old Winter, with his grim visaged front, finally arrives, he has surprised

nor disappointed nobody, for everything is ready for him.

Perhaps, Sir, in this brief paper I have given you very little—perhaps really nothing—of value for the practical operations of farming in Northern Wisconsin. Indeed I would be surprised myself if I had done such a thing. But I have tried to do [something which I fancy is of relative importance, which is to set forth the great capabilities of climate, geographical position, atmospheric influences and advantages for the interchange of products in this region. These versatilities of agriculture, if I may so name them, make a people independent, educated, social, polite, accomplished.

The man who dreams his life away amid a perennial summer, and for whom earth produces its fruits unasked and without labor, lives and dies without having contributed a particle to the happiness or advancement of the world around him, or to the glory of the Maker who has set all these capabilities before him. The world is no better nor perhaps no worse for his having come and gone. A wave in the distant Pacific might flow its brief moment, lift its tiny crest and fall back again into the vast sea with the same result. But the Northern farmer, who makes ready for the coming and going seasons with ample preparations, who grapples with the mighty forest and makes the land laugh with harvests where before it was a desolate solitude, who plants the school and the church at every cross road, who rears his children to become intelligent and honorable citizens, exalts his own profession, and can always be counted upon as one of the solid pillars of the country, and a strength instead of a weakness in its perpetuation.

HORTICULTURAL.

Meeting of the Brown County Horticultural Society—Interesting Papers and Discussions—Fruit Trees that will and will not Thrive.

GREEN BAY, March 20, 1874.

Society met. President Smith presiding. The Secretary being absent, M. P. Lindsley was appointed such temporarily.

The minutes of last meeting read and approved.

J. W. Arndt, of Depere, then read a very interesting and instructive paper on the best modes of transplanting fruit trees.

Col. A. H. Eastman, by request, read Bryant's beautiful poem on the Apple-tree, also a short poem on the same subject prepared years ago by himself.

On motion, ordered that the papers read be offered to, and the papers of the county requested to publish them.

A short discussion on fruits generally, followed.

Mr. Arndt stated he had a northern spy apple tree, 14 years old, hitherto healthy and prolific, die this winter, which fact accords with the experience of the best horticulturalists of the State touching that variety. It will not live here. Col. Eastman gave similar testimony from his experience with that fruit.

President Smith said that the best pear trees he had seen in the county are half dwarf and half standard, planted on the Deckner farm, two miles east of this city, about 1862. Last fall they were loaded with choice fruit, and had borne bountifully, as he was informed, for several years past. Soil, gravel and clay, with southern exposure on side hill; drainage perfect.

Mr. Bennett moved that Mr. Arndt be requested to prepare a paper on Raspberry Culture for next meeting, which was agreed to.

Col. A. H. Eastman, of Green Bay, and John Platten, of Fort Howard, were enrolled as members of the society.

Adjourned to the first Friday in April.

M. P. LINDSLEY, Secretary *pro tem*.

TRANSPLANTING FRUIT TREES.

BY J. W. ARNDT, ESQ.

The first essential in tree-planting is the location and preparation of the soil. An apple tree will grow almost anywhere, and in almost any soil, with the proper care and attention.

The land should be well and deeply drained, so that no water remains about the roots or on the surface, thoroughly worked and cultivated to the depth of at least fifteen inches or more.

The best results perhaps obtained are on elevations, with a light sandy loam, with lime stone or gravel subsoil, protected if possible, from the south-west and north winds. Yet I am of the opinion that clay loam, or even clay, if well and properly prepared, will give equally good results, and perhaps produce a more durable and lasting tree.

A soil that is rich enough to raise good corn, is sufficient for the apple. For the first three or four years a too rapid growth does not conduce to its early bearing or durability.

We cannot always choose, but yet must have the apple. So bring your land to the best condition possible and go ahead. Bear in mind, that on any and every soil there must be deep and thorough cultivation, so that the roots of the young and growing tree may spread and permeate the whole soil in search of its natural food, carrying to its head the healthy sap, ramifying and vivifying the whole superstructure, until there is produced one of the most beautiful things in nature, an apple tree loaded with its rich and luscious fruit. It is

the Eureka of your toil, the reward of your patience and the justification of your faith.

The next step to be taken is to procure the tree. Do not plant an inferior or imperfect tree if you can help it. If you have had no experience yourself, the nursery man will tell you what kinds will suit your locality best. They are, I believe, generally honest, whatever the *peddlers* may be.

The tree should be grown as near the same parallel as possible. Choose the stocky with well grown heads, well developed roots—fibrous roots and many of them; it should be from four to six feet high, two or three years old, healthy and sound in all its parts. It is not the largest tree that is the best.

Here I wish to make a point. Take three trees, two, three and four years old, plant at the same time, in the same soil, and give them the same care.

The four year old may have the first apples, but the other will have the first barrel of apples. This is a fact attested by all the best nurserymen and fruit growers.

The simple reason is, that the difficulty and danger of transplanting increases with the age of plant and tree.

In raising a young tree from the nursery rows, we get all, or most all the small fibrous roots; they start from or near the collar of the tree, while in older or larger trees they grow from or near the extremities, which are cut and destroyed in lifting them from the rows.

Hence, while the young or small tree has all its appendages necessary for its growth unimpaired, the other one has been deprived of them, and two or three years must intervene before it regains its original vigor, if it ever does.

It will always show the marks of its mutilation by flat places on the side whence the roots were cut, the circulation becomes uneven, more on one side than the other, the evaporation is greater than the supply from the roots, the wood contracts—the whole structure is disorganized and decay follows.

While your large tree that was so fine above ground is now a wreck—a home for the grubs, a failure and disappointment, your small tree, scarce as high as your shoulder nor larger than your finger, has thrown out its vigorous arms to the sunlight, wooing and gathering the gases that nourish, distilling and elaborating the sap as it is pumped from the roots which now spread in all directions, searching for the food necessary for this fruit producing machine. Thus it grows on in its youthful vigor, spreading farther its well formed head, and sending its roots far and near, until in due time behold that thing of beauty—a bearing tree, strong—vigorous—healthy.

We have prepared the soil, procured the tree; let us plant it.

As it takes two to make a bargain, so it takes two to set a tree. The best time to set in our climate, is in the spring as soon as the ground is settled and dry enough to handle without balling or sticking to the hand. Never plant a tree in the mud. Choose a cloudy but dry day, keep the roots carefully covered from the sun and wind; twenty minutes exposure will do more harm than you can correct in a year.

Persons purchasing trees are not careful enough. They ~~throw~~ ~~them~~ into their wagons without sufficient protection from bruising and ~~div-~~ ~~breaking~~; expose them to the sun for several hours, and when they get home, neglect them for the next day or two, or until they get time or inclination to set them. The deed is done, the murder is committed, notwithstanding the caution of the nurseryman.

Before you set the tree, cut with a sharp, keen knife all those roots that are bruised or injured; cut smooth and at an angle.

Have a bucket of water, and soak one tree while you are setting another.

Twenty feet is judged the best distance to set with us; 100 to the acre.

Line and stake so as to have your trees in straight rows, both for the beauty of the thing and its convenience.

At the point where the tree is to set, remove the earth for a space (not a hole) large enough to admit the roots; six or eight inches deep at its outer edge, and a little higher in the middle, so that the roots may incline from it.

Let one hold the tree in its proper position, while the other carefully spreads out its roots, lightly filling in the dirt with his hands, raising the roots and fibres to their natural position, as the filling progresses.

Do not get in a hurry and dump in a whole shovel full of dirt at a time. Do it slowly and do it well. Let the fine dirt fill all the space not occupied by the roots—fill up to the collar. Apply a little water, sufficient to settle the dirt compactly around the roots. Do not jerk and work the tree that breaks the fibres.

Now fill in the soil an inch or two above the collar, gently pressing it down. Let this extend three or four feet from and around the tree, inclining sufficiently to carry off the water.

Use no manure, but mulch heavily with partly decayed straw or litter of any kind that will retain the moisture. Throw a little dirt upon it to keep it in its place.

On this, much of your future success may depend. Never remove the mulch, but increase it from year to year. It will not only retain the necessary moisture and keep the soil in good order, but will generally supply enough food for the young tree until it begins to bear.

Now trim the tree—it may take you all summer to do it. First, remove all broken or injured limbs. Cut out the central upper limb. See that your tree is in balance by cutting off the point of a limb here and there. If you leave more on one side than on the other, let it be on the south side.

Three or four limbs are enough for the head. Let the first limb be about four feet from the ground; the others should

have abundance of room to grow without crowding. Avoid crotches, as they split and make a bad wound, disfigure the tree and eventually destroy it.

Watch the tree during its growth. It will want something done to it every little while, a bud to be pinched, a sprout to be cut, or the point of some limb to be stopped that is getting ahead of the others.

If the tree should show any signs of failing, from drouih, or excessive heat, causing a too great evaporation, bind the trunk with a straw rope and frequently wet it, or set up a thin board on the south and west, secured with a wire and don't forget the water; wet the whole tree. I think we should do this in all cases; it protects the trunk from the drying southwest wind which is very trying [to young trees. The same directions transplanting for an apple tree will apply to all others, the same law that governs the one, governs the others.

A deep and thorough preparation and cultivation for the soil: The choice of strong, healthy trees, of hardy varieties, careful and judicious planting, and the arrest of a too rapid evaporation from the tree while growing, will generally insure success in planting any and all trees.

In the selection of varieties you will have to depend upon the nurseryman, or the experience of your neighbors, which is perhaps better. Above all do not forget to use good common sense; it is the foundation of all practical success.

Thus step by step, little by little, you will get complete control, and instead of a sickly, lop-sided, ungainly tree, you will have a beautiful, well balanced one. It requires care and attention; care at the right time to grow a tree, shrub or plant with success. The directions are few and easily followed.

It will not take you as long to plant a tree as it has taken me to tell you. Do your part well and faithfully, and I assure

you nature will do hers. Violate her laws and sooner or later she will be revenged.

An apple tree is not a thing of to-day or to-morrow—of this year, or the next. It will live on long after you have passed away, and your children and your children's children will pluck and eat of its fruit, remembering and blessing the hand that planted it. No gorgeous tomb may enclose your remains, nor stately column mark the spot, no costly marble record your deeds, yet there stands that graceful tree, a living monument, a growing record.

I say to you plant the apple tree, plant it for pleasure, plant it for profit. It is the rich man's necessity, the poor man's luxury ; plant it in the garden, plant it in the field, on the hillside and on the level. Plant it to-day, that while yet in the full vigor of manhood you may enjoy it. It will add much to the comfort of your declining years, be a solace to you in your old age, and when you are called from this to another world, leave a rich inheritance, a lasting memento to your children. Do this, for more than this you cannot do.

Published by request of the Brown County Horticultural Society.

SONG OF THE APPLE SEED.

BY TAG.

Within this shell of bronze I hold
 O, maiden sweet and fair !
 Gems costlier than pearls and gold
 And perfumes rich and rare ;
 But hide me in the loosened mould
 And nourish me with care,
 Give me to feel the breath of spring,
 And summer dews and air ;
 And sapphire shoot and emerald blade
 Shall hence anon appear
 And lengthened sprig and sturdy stem
 Arise and flourish there ;

And shade and shelter shall afford
 And fruit and fragrance bear,
 And spicy flagons for the board
 And garlands for your hair.

Queens of a hundred flowery Mays,
 Shall seek me year by year,
 To weave their brilliant coronals
 And deck their gala gear.

Bird cradles shall be neatly swung
 —When summer songsters pair—
 In leafy bower on bough and branch
 With wondrous craft and care.

And bird and bee and butterfly,
 Here find their noontide lair
 And toil and song and beauty join.
 In joyous concert there.

And laughing girls with sunny curls,
 To this loved tryst repair,
 And ruddy apples pluck and part
 To each fair self a share.

With timid hope and nimble haste,
 Then all shall cut and pare ;
 And loving thoughts and loved-one's names
 The numbered seeds declare.

And men from over seas shall send
 Their messengers to bear,
 Treasures of golden meed to win,
 A luxury so rare.

Not Ceylon's groves, nor Scio's vine
 Shall offer gifts so fair ;
 Nor golden fruitage of the line,
 The palm of victory share.

But years and travel shall at last,
 My force and beauty wear—
 —As human strength and human zest
 By human toil and care—

Yet may thy happy life and mine,
 O, maiden sweet and fair !

In compensation and in years,
 In good extent compare.
 And dying may thy memory live
 For many an after year,
 Like rapture after melody,
 Or solace after prayer.

AFTER THOUGHT.

One word of heed I offer Thee,
 O, maiden sweet and fair!
 Life hath no safer sentiment,
 Than this:—"enjoy but spare."
 Pluck not, with wasteful hands, my gems
 To decorate your hair,
 Lest when you seek for fruit withal
 You find my branches bare.

 * PROCEEDINGS

Of the First Agricultural Convention of the Northern Wisconsin Agricultural and Mechanical Association, held at the city of Appleton, March 4th and 5th, 1874.

BERTCHY'S HALL, 2:30 P. M., March 4, 1874.

Convention called to order by the President, J. M. Smith, of Green Bay, who stated the object of the convention in an appropriate address.

A paper was then read by Rev. P. S. Bennett, of Appleton. Subject: "A Horticultural Review of the Year." This paper brought forth considerable discussion, in which E. H. Benton, Capt. E. Powers, John Day, D. Huntley, L. Perrot, H. Ryan, J. M. Smith, and M. H. P. Bogan took part, and many valuable thoughts were brought out.

Mr. Benton gave a minute description of the curculio, and how he mastered them. It is to be regretted that his remarks were not written out, that they might have been given to the whole public.

A paper was next read by Z. C. Fairbanks. Subject, "The

Apple," which was listened to with interest. The compiler has failed to receive a copy of it for this volume.

A number of specimens of seedling apples were brought forward, and on motion, a committee on nomenclature was appointed, consisting of Messrs. Benton, Bennett, Arndt, Stilson and Brainerd. An interesting discussion was had on the apple, and the best varieties for this portion of the state, Messrs. Prescott, J. W. Arndt, Bogan, Jas. Brainerd and A. H. Hart taking part.

Convention adjourned to 7:30 P. M., at which time the President again called to order.

An address of Welcome from Mayor S. R. Willey, and Henry D. Ryan, of Appleton. Responded to by Hon. M. P. Lindsley, of Green Bay, in behalf of the Society.

President Geo. M. Steele, of Lawrence University, next read a paper. Subject, Labor and Capital—or conditions and characteristics of a prosperous community.

A paper was then read by Charles L. Hoyt of Rosendale. Relation of the Common Schools to Agriculture.

Adjourned to 9 P. M., March 5th, at which time the convention assembled and was called to order by the President.

E. H. Benton opened the session by reading a paper on Manures and Manuring Lands.

This paper being one of special interest, brought forth considerable discussion, in which nearly all took part.

A paper was then read by W. J. Jennings. "How to elevate the Farmer's calling."

Followed by a paper from Eli Stilson, on "The Western Farmers' Movement and the future prospect of Western Farmers."

Adjourned to 1:30 P. M.

Convention re-assembled and was called to order by the President.

General N. F. Lund read a paper on "Grape Growing," and advanced so many new and valuable thoughts that he

was kept on his feet illustrating by diagram and conversation for a considerable portion of the afternoon. This paper is included in this volume and is of special interest to the people of the Fox River Valley, the grape growing region of Wisconsin.

A. J. Reed favored the convention with an exhaustive statement of the manufacturing capacities of the Fox River Valley, which was listened to with marked interest.

A paper from the President J. M. Smith; "Intelligence in Farming," was next read.

Followed by an address from Geo. E. Morrow, general in its nature, but full of sound practical suggestion.

Adjourned to 7:30 P. M.

Convention again called to order by the President.

Mrs. Helen M. Brittel Huntley read one of the most interesting papers of the session, describing Farm Life—its hardships and pleasures.

Hon. J. M. Smith then favored the convention with a paper on the dairy—which was listened to with great interest.

Resolutions of thanks were extended to the citizens of Appleton for the many courtesies shown their members—their hospitality being shown throughout the session in a substantial manner—the welcome given in the beginning by the Mayor proving to mean no less than free entertainment to all, and every pains taken to render the visit enjoyable. Too much cannot be said in praise of the citizens of this city.

A resolution was adopted unanimously asking an appropriation from the state of one thousand dollars.

On motion adjourned *sine die*.

R. D. TORREY,
Secretary.

J. M. SMITH,
President.

NOTE. — The papers of Messrs. Stilson and Morrow are not given in full, as the Secretary has been unable to get only a synopsis. The papers are given in the order read and it is believed will well repay a careful perusal. — COMPILER.

HORTICULTURAL REVIEW OF THE YEAR.

A review of the horticultural situation is very befitting this time and place. It is only to be regretted that the task was not assigned to an abler pen.

The year 1872-3 will pass into the annals of fruit growing especially, as pre-eminent in its devastations.

It is doubtful, if in the memory of any living man these were so general and so complete.

In some instances whole plantations, consisting of tens of thousands of nursery trees were destroyed. Occasionally an orchard, several years in bearing shared a similar fate; while as a rule—a large proportion—probably from one-fourth to three-fourths of all the fruit trees in the state, old and young, were more or less injured.

In view of such appalling destruction it becomes us to pause, *inquire* and LEARN.

The object of this hasty paper will be to present, in condensed form, the lessons of the year.

The first that I urge is, *areduction of the number of varieties*. It has been for years the practice --I had almost said the rage-- of nursery men and fruit growers to multiply varieties until in some instances they had reached hundreds.

Agricultural and Horticultural Societies have encouraged this insane practice by offering premiums for the greatest number of varieties, without much regard to quality of fruit, or hardiness of the tree. As a consequence thousands of dollars have been paid out for trees worth nothing except for firewood. Besides, if these varieties were all hardy it would not be wise to plant many of them, for the reason that comparatively few are sufficiently productive to warrant remunerative results.

In an orchard of a thousand trees, with fifty of the best varieties in cultivation, the grower will probably get his money from less than ten; possibly from less than five.

Though this fact is not a special lesson of the last year, it is confirmed by its doings, and is withal so important that I can hardly forbear to give it a degree of prominence. Several varieties that have long been considered "half hardy," must be given up entirely, while others that have been regarded almost as iron-clads, have suffered greatly in reputation.

It would be unwise however to discard all varieties that were injured by the severity of last winter. Many of these will probably pass unscathed through nineteen-twentieths of our winters, and being superior in productiveness and quality of fruit, are well worthy of cultivation.

Another lesson of the year is, increased care of our trees. In the nursery, perhaps the best thing we can do is to bank them well with the plow in the fall; and in the orchard a coat of mulch will be the most serviceable.

True, some trees, both in nursery and orchard, were saved by a luxuriant growth of weeds or grass about their roots. But this preventative cannot be justified on any good horticultural principles.

Pear culture in some localities has been rather unsuccessful for several years, and the winter in question was very hard on young trees.

Some therefore have begun to doubt seriously whether we should encourage further attempts in this direction.

It is however a fact that in many instances our pear trees of bearing sizes came through all right and produced fair crops last summer. With this fact before us, it will not be easy, and probably not best for us to give up the culture of this luscious fruit. Perhaps our tenacity in holding to it, is proof that it was the fruit that tempted our first parents in Eden. If so, whatever theologians may say, horticulturists will agree that they were not much to be blamed, after all.

I am not aware that anything especially new was developed in regard to the plum and cherry. They will still be planted and will still regale us with their delicious product.

Thus far I have confined myself to large fruits. It is worthy of remark that small fruits suffered less. True, strawberries and grapes are usually covered in the winter, and always should be. But several hundred vines in this city were caught by the hasty grasp of last winter, and remained entirely unprotected. The covered suffered perhaps from ten to twenty-five per cent. in the product of fruit, but no injury to the vine so far as I could discover;—the Diana was considerably injured in both respects.

Raspberries, so far as I observed, suffered less than usual.

Perhaps I ought to state that we gave our bushes somewhat different treatment last year from that of former years. We pruned them in mid summer as usual, and then let them have their own way, not even removing the old wood till the following spring. This I believe to be a protection, and the true way to treat them, though that was a blunder, and a violation of the rules of the books.

Nor did I apprehend the utility of it until a few days since while examining our canes that have been treated in the old way. Notwithstanding the unusual mildness of the winter, it is very doubtful if they come through with as much vigor as they possessed last spring.

But although this is an open question, I am very well satisfied that fall pruning is unadvisable in our rigorous climate. It so violently checks the growth as to cause the cane to die for several inches entirely, and it seems to me this must injure it for several inches more. Henceforth we shall probably imitate the blunder of a year ago last fall.

On the whole, therefore, after surveying the entire field, we see no reason for giving up the culture of fruits. For the next century so many causes of failure may not concur as existed in the winter of 1872-3.

For be it remembered that the extreme cold was not the only, nor yet the main cause of the wide-spread destruction.

Were it so, we might have considerable occasion for discouragement.

Three very dry seasons had followed in succession. How much these had weakened the constitution of bearing trees we are not able to determine. That it did to some extent there is no doubt. Then the winter closed in with the surface of the ground almost entirely destitute of moisture.

This was an unnatural condition for the roots of the trees, and of course must have been unfavorable. In addition to these inauspicious circumstances extreme cold weather commenced four to six weeks earlier than usual, and continued with little abatement till spring. Moreover; the ground being entirely bare during several weeks of this time, the frost penetrated very deeply and was very intense.

Had the freezing been as continuous and less severe, or as severe, and less continuous—even the other unfavorable conditions being the same—the destruction would have been far less. Or had both these been as they were, and the former different, the same results would not have followed. There is therefore no good reason for discouragement in the culture of fruit.

Nor are we shut up, as some at first thought to the cultivation of the crab species.

The Tetoffski, Duchess de Oldenberg, Haas, Fameuse, and several others, are believed still to be well-worthy of extensive planting; while the small fruits can be grown with abounding success.

The Strawberry, the Raspberry and the Grape luxuriate in our soil, and with proper care will survive any winter we may be likely to have in this climate.

Nowhere in Wisconsin are these more at home than in the Fox River Valley.

In conclusion therefore, I will add — Plant not a tree less — cultivate both large and small fruits more extensively than

ever, but be more cautious in selecting varieties, more thorough in culture and more vigilant against both ordinary and extraordinary sources of injury.

ADDRESS OF WELCOME.

BY MAYOR R. S. WILLEY, OF APPLETON.

Mr. Chairman, Ladies and Gentlemen of the Northern Wisconsin Agricultural and Mechanical Association :

It affords me pleasure, in behalf of the people of this City, which I have the honor to represent, to pronounce a few words of welcome on this occasion.

Still I trust that the relations which we have previously sustained and the interest which this City and County have manifested in the work in which your organization is engaged, render this effort unnecessary to convince you that we have a deep sympathy in the material interest for which it is devoted, and that we are glad of the opportunity to extend to you, both as a society, and as individuals, our hospitalities as a people.

And our earnest desire is that the impression that you will receive and carry with you, both of the beauty of our City, and its environs, of the magnificence of our material interests, real and prospective, of the thrift and enterprise of our people, and last but not least, of their social amenities and hospitable homes, may be pleasant to dwell upon and permanent to endure, and that you will have no occasion to regret that Appleton was the place for holding your first Annual Convention.

It must, or should appear to all of us, that the interests of the Fox River Valley, and of the various other counties which contribute to the maintenance of your organization, are substantially identical, and the sooner this fact becomes more generally recognized, a better and more wholesome relation between them will exist.

It is impossible, owing to our geographical relations, and to the material advantages which each locality possesses, for one county, or one section to have an interest which is not shared in common by each and all of the others.

Nature has wisely decreed that the interests and resources of this section of the country, constitute one harmonious whole.

If from this any part be eliminated, we have left imperfect, if not discordant elements.

But if these resources be developed in conjunction, as they should be, it is possible for this section of country within a few years at most, to become wealthy, populous, and powerful.

Hence we see how unwise it is to foster sectional prejudices, and for one industry and one class to seek its promotion at the expense of another.

The Manufacturer cannot thrive without the Farmer, nor the Farmer without the Manufacturer. Each requires the products of the other in supplying his material wants, and the luxuries of life.

The same result also obtains between all diversified branches of industry.

And any hostility or unfriendly feeling existing between them, is founded on a false basis, and inflicts injury alike on all classes of society.

If the Northwestern Agricultural and Mechanical Association has accomplished anything thus far, and its history has certainly been attended with splendid results, it has been to remove this sectional feeling; to establish a healthy relation between the various industrial classes and to beget a laudable ambition to excel in their respective spheres.

We have seen the results in the three splendid exhibitions which have already been given, each successive one surpassing the other in the extent, variety, and excellence of display.

No person could have witnessed them without being convinced that a new era of progress has been inaugurated in Northern Wisconsin.

And I conceive the object of this convention, which I trust is only the first of a series, to be to assist in advancing their material interests, and the consequent prosperity of Northern Wisconsin.

In addition to this it promotes social intercourse, and makes us a united people practically, as we have always been in theory.

Such being the end, and aim of this gathering, it can but be followed with good results.

As its beginning has been auspicious, so may its progress be edifying and instructive, and may you, our neighbors, bear with you to your homes the enthusiasm of success, and pleasant remembrances of the hospitalities of our people.

ADDRESS OF WELCOME.

BY H. D. RYAN, OF APPLETON.

Honored Members of the Northern Wisconsin Agricultural and Mechanical Association:

GENTLEMEN:—The wise man hath said, "To everything there is a season, and a time to every purpose under the heaven." Time of itself is simply duration. That which occurs—that which takes place—as the earth performs its task around the god of day, is the real essential, the very important of which we term epochs or events. This day, now fading into night, brings to each assembled, another mile stone to mark life's devious way. To many present, this occasion and its richly freighted transactions, will add another bright and beautiful picture—another hallowed record on memory's unending page, that will linger in grateful remembrance in the beating hearts before me, long after

the frosts of years shall garland in snowy coverings the heads of all present.

This is no idle event, no passing breath. A grand epic — a splendid poem in golden words is being composed to-day. As the photographer chains the sunbeam and treasures the human face in lineaments almost divine — as the artist catches the smile which nestles on infancy's face, and transfers it to canvass in enduring colors, so memory will gather a treasure of life to-night.

This meeting together means something. Beyond the mere coming together of the members of your Association, composed as it is of the toilers of this splendid State, it means that those engaged in tilling the soil, developing the mechanical arts, have brains, minds and thoughts. It means that labor will first respect herself, and thus dignifying work, compel the admiration of the world. Labor and work have been creeping on through the centuries at snail's pace, to win respect and honor from capital and opulence, with many times but little results. To-day the outlook grows brighter, and the busy world has been compelled by Mr. Grange and his co-workers, to look up from its avariciousness and give a prolonged stare, and leads us to hope that the time will come

“ When the common sense of men,
Shall hold this fretful world in awe,
And the kindly earth shall slumber
Lapt in universal law.”

But I do not stand here to deliver a learned address on these matters. I appear on behalf of the citizens of Appleton and our county, to extend to you in their behalf a cordial, hearty, earnest, full and free welcome to our young and growing city, “set on a hill,” with its warmest hospitalities. Therefore, we speak that glad and joyous word “Welcome” to our homes and hearts; not in any formal sense, but in the way of friendly greeting extended to the returning wanderer through distant lands. Welcome! what glad pulsating joy

dances and tingles through our being at the utterance from loving lips! Welcome! what memories its association recalls! Welcome! what a world of tenderness thrills at its sound! Feeble words are inadequate to utter the thought, or fashion the feeling its expression brings.

Some of you have left distant homes, dear friends, and hallowed associations behind, to long for your returning footsteps. Here we extend all these during your stay to counterfeit the same. Hearts, loving hearts, beat tenderly here as there, and beat in unison with humanity.

Our rushing, working river unites its voice with ours to-day. Our stately College peals its bell in unison with glad acclaim. Our mills and factories, busy in singing the song of labor, will rest awhile to-day to clasp hands with its new found friends before us.

But, digressing from lofty panegyrics, I may say, in the language of the inspired bard :

“ We're mighty glad you've come !”

To be practical — to descend from stars and the blue canopy above ; we wish you would come and stay forever, or at least, until the White Harvester calls your name, and then we'll give you all a decent send-off to the other shore. In the language of another, we wish you would come and bring your knitting, and spend the unending day. We can offer you magnificent inducements. Real estate here contains just as much land to the acre as can be found anywhere in the West. Water is just as wet here as on the streets of Oshkosh. Fish grown here, since the fish commission emptied itself in our beautiful Fox, have just as many bones as those the Green Bayites have lived upon since Noah left his ark. Mud can be procured here of almost as great depth as has existed during the christian era at Fond du Lac. Lunatics and fools are no more abundant here than have ever fed from the public crib at Madison, under the palmiest days of the ancient or modern regime. Our ladies are just as willing to be courted

and married as those at Menasha and Néenah. Our cemeteries are just as delightful for occupancy as those of any city in the State. If you doubt this, go and be interred and be convinced. Our merchants and millers are getting rich just as fast as their conscience and customers will permit. Our newspapers and politicians, like the good and great Washington, cannot tell a lie. Our railroads perpetrate no more death-dealing accidents than those of more favored climes. Our gas works furnish as much of that useful material as any place in the Union, except Chicago. In fact, everything we have is in apple-pie order, except our jail and lock-up, which, in consequence of disuse, have gone into an early decay. But hearing of your coming Convention, at the suggestion and earnest solicitation of your Secretary, we have made arrangements during the sitting of your body, for all possible contingencies.

And now in the name of all these interests, and in behalf of our citizens, one and all, I bid you welcome! and in the pathetic language of Tiny Tim, I say, "God bless us all, every one." May your stay among us be characterized by nothing to mar the pleasure of our mutual intercourse in word or act. May your deliberations be such that good may be done your and our great cause. May you accomplish all and more than an abundance of real benefit to you and your splendid society, which, but yesterday an infant, to-day stands forth a stalwart representative of strength and manhood—a monument of energetic effort in our great State. May you return to your homes and firesides in peace and safety, and may you entertain no regret that you made the sacrifice in coming; and when the golden deeds of the good are inscribed in the records of humanity, may your name not stand second.

Thanking you for the honor of addressing you in these hastily prepared words, once more I utter in all its fullness, Welcome!

RESPONSE FOR THE SOCIETY.

BY M. P. LINDSLEY.

The President of the Northern Wisconsin Agricultural and Mechanical Association has charged me with the solemn duty of returning thanks. Now, sir, I am neither a Minister nor the son of a Minister, and why he should have singled me out of all these Doctors of Agriculture, if not of Divinity, and charged me with this high duty, I am at a loss to understand, unless it is because he happens to live down at that ancient city of Green Bay, where they don't seem to know any difference between a Granger and a Minister. However, I most freely pardon the President, his singular selection, knowing the benighted region from which he hails, and accept with pleasure the high office which his partiality has conferred upon me.

On behalf of the President and the members of this Convention, I thank you, sir, for this hearty welcome to your prosperous city, and for the words of encouragement which you have uttered on behalf of our Northern Association. And through you, permit me to thank also, the citizens of Appleton and vicinity, for their marked courtesy and kindness and for the generous hospitality which they have so freely extended, to the delegates and friends attending this Convention, and to assure you and them, that for all these attentions, greetings, and encouragements, our hearts are sincerely grateful.

And in this connection I desire to say further on my own behalf, that, I have come a long way, even thirty miles, over a rough—yes, and dangerous road too—to attend this convention, this aged school, and unlike most boys who go to school, I have not brought my dinner! And therefore, in these panicky times of tight money market—and no money at all, I find myself here a boarder on your bounty! So I

assure you that, in my case, your "generous hospitality," is just the thing. It means business in one direction at least, for I am in the very best possible condition to appreciate a "good square meal."

But seriously, Mr. Mayor, I am very glad to be here, even though I did not bring my dinner. Glad to attend this Convention and to sit in council with these Solons of the soil. Glad to know that our State can grow such men, many of them eminent and all thorough and practical in their chosen calling.

The history of the Society seems much like a fable, and yet it is all fact. A child in years — only about three years since its organization — and yet it has wrought the works of a man, rivaling almost the achievements of the Parent Society of the State.

The strong, cool heads and sinewy hands of this higher northern latitude, have, as it were conspired together to do a noble work for the state and for themselves as well. Not in the spirit of envy or jealousy, but in that broad Catholic spirit, which laboreth for the good of all, knowing no north, no south, no east, no west, so that the grand interests of agriculture and the mechanic arts and industries are promoted and built up.

In its aims and objects this Association is simply auxiliary to the State Society, doing work here in Northern Wisconsin, which it could not do, stimulating hundreds of men and scores of different trades and industries to greater effort and activity in this direction. In this view it is a benefactor and an educator of the people and is therefore entitled to encouragement and support. In this light its practical energetic men, its laudable aims and its truly commendable achievements, is a high compliment alike to this association, and to the intelligence and enterprise of the citizens of the whole state.

Boys may run merchandizing and milling, may sell calico

and cut shingles, may keep books and make paper, but it takes *men* to make farmers. *Men* to master the science of agriculture. Here is the hope of the State, in her intelligent, faithful husbandmen. And in her liberal provisions for the education and training of the young men and women, who are soon to fill their places and the places of your public educators and teachers, your county, state and national offices. With such farmers and farmers' wives, with such teachers and officers, what have we to fear? Nay, have we not much to be proud of; much on which to congratulate ourselves?

It requires no argument to convince me of the value and importance of these gatherings; nor yet of the dignified and honorable position which agriculture holds in the affairs of the state and nation, for I am convinced already. I am as one to the manor born. My father was a farmer, and my grandfather before him, and for a score of years and more I followed the plow summers, and flattered myself that none could strike a straighter headland or turn a neater furrow than myself. So that, while the elementary principles of knowledge and agriculture were being worked into my head winters, by dint of ferrule and the oil of hickory, in the faithful, yet perhaps not very merciful hands of the "down east" schoolmaster, twenty-five and thirty years ago, my father, who always had an eye to business, and the great value of "steady habits" and "habits of industry," (which branch of moral and political economy is not so much taught by parents now-a-days, I am sorry to say) was persistently working into my hands and muscles the practical part of farming. So that while I have come up here to be taught and to sit at the feet of these wise men of the West, learning of them, I am not, as one, totally depraved and needing regeneration on this subject. My faith is strong and abiding. It is the knowledge I want, the principles and their practical demonstration, as sought for and wrought out in the actual experiences of these delegates and their co-laborers, all over the land.

Books are nothing ; [the science of agriculture is nothing ; these have existed in some form, since time began. It is the *men* and *women* behind them, who study them, and reduce their studies to the test of practice. *These* are "the powers that be" in this department of knowledge. *These* are the *vitalizing* forces, which have emergized and ennobled the calling ; which have brought the science down from its ancient mythical niche among the stars and placed it on earth, where it belongs, and where it can wield its normal forces and win its way to popular favor and honor.

And this leads me, with your permission, to say a word of, so called "book farming" against which so much prejudice exists among the less intelligent class of farmers. I am not an advocate of book farming proper, but I am an advocate, and an earnest one, too, of books, of intelligence, of thoroughly understanding the principles which underlie this calling and by which it is controlled. In this, as in every other avocation, I am in favor of knowing all about it, and to that end I believe it to be the duty of the State, as well as the citizen, to encourage in all proper ways the dissemination and acquisition of this special knowledge. I would not farm from books by rote, as our wives make a pudding or cake, by following the recipe. But I would take all the principles, facts and experiments, which they contain, and lift them out of the books, and place them in the mind ; running them through it, very much as the farmer runs uncleaned wheat through the fanning mill, separating the wheat from the chaff and foul stuff.

In other words, I would collect all the information possible from books, and from the experience of others, meanwhile scanning it thoroughly and making it my own ; then I would add to it, my own experience and judgment, and before using it, observe the labelled directions on most patent medicines, viz : "to be well shaken before taken." *Know* your business and guide it ; but use all the helps you

can obtain; despise none, be they books or traditional experiences. The more the better. Ten men can hoe an acre of corn quicker than one. Ten views of a mountain range taken from all sides of it, give a more comprehensive knowledge of the whole range, than one view. So ten or a hundred men examining and studying agriculture, theoretically and practically, would be likely to know more about it, than one man would studying the object alone. Seeing it from different stand points, and under different circumstances and conditions of soil, climate, fertilizers, etc., their varied experiences and views must shed increased light and knowledge upon the subject. Hence I say we ought not to *fear* books on farming, nor encourage the too common prejudice against them, but rather, we ought to love them, and in sack cloth and ashes to mourn as a class, their absence from so many farm houses, and the prejudice against them in too many minds.

This sir is a Mechanical, as well as an Agricultural Association, whose object is to promote at the same time this important branch of industry.

Perhaps no better evidence of the growth of the State, of the development of its rich and varied resources, can be found than in this department. In a large sense, the two are twins, each dependent on the other, each keeping pace with the other in the advancing steps of civilization. Encourage the one and the other feels it. To foster and strengthen both, therefore is manifestly true wisdom, and it is a compliment to society, as well as a significant fact, that, in the organic laws of this association, these two great industries of the world, are permitted to join hands in it, and thus, like two great giant brothers, mutually and harmoniously to help each other, and by that magnetic power of union to help more effectively, all other kindred industries also.

On this account, if no other, it is fitting and suggestive that this convention has been called, and is now assembled,

at this enterprising, young, manufacturing city of the Fox River Valley. True, she is not a Lowell yet, nor is Wisconsin agriculturally considered, a Massachusetts, but Appleton has the water power and the material advantage to rival and excel Lowell, as Wisconsin has Massachusetts. Each are as children in their present growth and development, compared to their future manhood.

Not only Appleton, but the whole Fox River Valley is thickly studded with powers, every one of which would equal, if not surpass those at Lowell.

And not only the Fox River Valley, is ringing with the roar of valuable and available water-falls, pregnant with unused forces; but scores on scores of miles of this grand heritage of Northern Wisconsin, is running riot, with manifold, wild and untrained cataracts, scattered as it were promiscuously, by the hand of Providence, along its magnificent rivers. The Wisconsin, the Black, the Chippewa, and many smaller rivers entering into them, and the larger waters of the State, afford facilities and power for manufacturing and milling of all kinds, which are only equaled by the hidden wealth and undeveloped resources of this princely heritage.

Again sir, I thank you, on behalf of the members of this convention, and bid you and energetic citizens God Speed, in your laudable ambition of taming and harnessing to the car of industry, these wild cataracts.

LABOR AND CAPITAL.

BY PRESIDENT GEO. M. STEELE, D.D.

Every person would like to live in a prosperous community. If asked to describe such a community, I suppose, almost any one would say, in a general way it is one where there is plenty of work for those who want it at remunerative prices; where there is a ready sale for products and

where a great variety of these can be had at reasonable cost; where wealth is constantly increasing and justly distributed; where there is the largest liberty under wholesome and thoroughly executed laws; where the people are intelligent, refined and virtuous; and where consequently there is complete security to the persons and property of all the members of the community.

It will be perceived that in this enumeration of general characteristics I have described no romantic utopia or impossible earthly elysium; but a sober, practical condition of human society here in this world such as any community may hope to obtain by wise and prudent action.

I. One of the conditions of such a community, is a *stable Agricultural basis*. This is not only a condition but an essential condition. This I say, not because I am addressing an agricultural convention, but because it is an obvious fact—so obvious, indeed, that there is scarcely need to mention it except by way of allusion, and that one may not seem to ignore it. There are no commodities but such as must be traced back to the parentage of the soil, and whatever value may have resulted from the industry, ingenuity and intelligence of man. The latter could have created nothing without the raw material on which to work. It is true that this raw material does not all come from the soil through what is technically termed agriculture. The immense values which are potentially in iron, coal, lead, tin, copper, salt, petroleum, limestone, marble, and other useful and costly minerals, as well as the vast wealth of the precious metals, come from the bountiful bosom of the earth, though not at the call of the farmer. Yet the enterprises and industries which are involved in these productions are possibly only on the condition of at least a partially developed agriculture. The latter must be the basis, the indispensable condition—the foundation and bottom of all the industries of the community. If this falls out, the whole structure goes down

immediately, and just in proportion as this fails to be a paramount interest in the community, just in that proportion the whole industrial structure is unstable, irregular and precarious.

Now, this very fact of primary importance of agriculture may lead, and has often lead, to an important practical error concerning its relations to other industries. That error is that agriculture is less dependent on the other industries for its highest development than they are upon it. It is true as already stated, that there must be some development of agriculture somewhere before there can be anything like a prosperous and progressive community. But a moment's thought will convince any sensible person that there can be no considerable advancement of agriculture until science has discovered the means of discerning the qualities of the soil and the appliances by which these qualities may be multiplied and made most largely available; and especially not until the tools and implements which vastly abbreviate the exertion of human strength and vastly increase its results, are provided. But this provision implies the discovery not only of the stores of iron, but the development of facilities for bringing it to the surface and then of the slowly and toilfully prepared means for reducing the ores and purifying the metal and manufacturing it into the necessary forms. These again imply the discovery of coal and means of transporting and using it, and a thousand mechanical processes implying scientific investigation, inventive skill, and large intelligence; or in other words such an advanced state of society as is possible only in connection with a considerably varied industry. Hence it is an important fact and not as generally understood as it should be, that while agriculture is one of the earliest and most essential of the arts, it is almost the latest in its highest development. In other words while it is an indispensable condition of even the most moderate civilization, it is more dependent for its complete development on

other arts and industries than they for their complete development are upon it.

2. This brings us to a second condition and characteristic of a prosperous community, namely, a considerable diversity of employments. It has been the favorite doctrine of theorising political economists that the division of labor so advantageous among individuals of the same community, would be equally advantageous when applied to different communities. Yet it is remarkable that no one of these theorists ever defines the limits to which he would extend his doctrine. That there are limits is evident from the fact that no one has ever dared to assert the universal application of the principle. It would be indeed almost ludicrously preposterous for one to teach that it would be a good thing for all the carpenters to live in Michigan, all the blacksmiths in Illinois, all the painters in Wisconsin and all the brick and stone masons in Iowa, while all the farmers should confine themselves to Minnesota and all the manufacturers of flour should do business in New York. Yet while this absurd extreme is avoided there is still the doctrine extant that any special effort at any considerable expense to introduce new industries into a community is unwise and unprofitable, and that it is better for each community to confine itself to such occupations as spring up spontaneously and exchange its products with those which cultivate enterprises of a different character.

The great fallacy which lies at the basis of their doctrine is one which might be easily exposed to a careful and thoughtful mind, but which is obscured to the unthinking. It is this: important industrial enterprises do not spring up spontaneously in a community? It requires effort, special exertion, outlay of money and generally some direct encouragement which virtually amounts to a contribution of means towards their inauguration. What do we mean by an "enterprising" community? Why, simply one which interests

itself in enterprises, using means to induce and encourage capitalists to establish industries in its midst. It is true such measures are sometimes overdone, and financial burdens entailed but under ordinarily prudent management these towns thrive and prosper not only in themselves, but become a means of wealth to the region for leagues around them; while those towns which believe in "letting well enough alone," in allowing nature to take her own way, and sticking to the trades already existing, languish and fall into decay.

One great reason for the multiplying of employments to the utmost extent in a community is the diversity of capability and aptitude existing. A great part of the labor power is best if forced into a narrow range of exertion. It may be said that every man can become a farmer, or carpenter, or blacksmith if he has a mind to; but then every one has not a mind to, and you can't make every one have a mind for any particular calling, and after all your fine theorising on the subject, there is the flat fact that however all men might do the same thing, they simply won't.

That vastly greater productive results ensue from labor where each one finds that to which he is adapted will be evident to every thoughtful mind. One thus works with greater interest and ardor and finds pleasure and zest amounting often to enthusiasm, in adapting means to such and cautioning facilities for expediting business.

It is a favorite argument with the "let-well-enough-alone" theorists that every new employment introduced into a community must necessarily draw away some portion of the labor from other occupations or be itself a failure. How false this is may be seen by reflecting that in most communities, and especially in those when the employments are few, there is a considerable amount of unemployed or misemployed labor. Almost any man of moderately wide experience is aware that the setting up of an entirely new business in a town or village instead of diminishing or discouraging any previously

existing enterprise that was really profitable, has usually enlarged it, and has even added subsidiary industries besides its own to those already existing.

The labor needed is always forthcoming, and in its coming brings multiplied demands for the fruits of other work besides its own. This is forcibly illustrated by the new industrial history which is just now opening up in the Southern States of our own union. Hitherto and especially before the war southern politicians, statesmen and economists insisted almost unanimously and most strenuously that the one business of the South was agriculture. They could make more money immediately by producing raw material sending it away to be manufactured into desirable commodities and then retransported to their plantations. So they cultivated millions of acres and exhausted their soil till thousands of plantations were abandoned, and the population continued to scatter itself abroad with small concentration and combination. The few were immensely rich, and cultivated and refined, and the masses were either slaves, or poor, ignorant and degraded.

Even so late as 1871, less than three years ago, one of the prominent men of Georgia, a man of intelligence, a democrat of the old school, but a loyal union man all through the war, told me that the business of the south was to work the soil; that they had no adaptations for manufacturing, as there was a scarcity of labor fit for such operations. ●

Now read in the February number of *Harper's Monthly*, what an able Southern writer says in an article entitled, "The New South." Several of the Southern States aware of the vastness of the transportation tax imposed upon them, have determined to offset and if possible neutralize it by a tax of another kind which by diversifying their industry will mightily multiply the productive power of their communities. They have exempted all new mills from taxation for ten years after their introduction. But as Mr. De Lean says,

"In the south as in the north the incipency as well as the prayers of this great industry is due to individual effort and energy stirring against a mass of popular prejudice growing out of the belief that agriculture was the only proper and profitable pursuit, and that manufacturing industry debauched and demoralized public and private morals nor could possibly be made to pay in the South."

Under these encouragements and in response to this energy of public and spirited and enterprising men, there were in 1870 more than 900 cotton and woolen manufacturing establishments in the Southern States, most of them having sprung up within a few years. Since that time, the increase must have been still more rapid, as I find statistics in the article under consideration, showing that the production within the four years intervening since the last census, has nearly doubled.

These establishments have a ready market for a large proportion of their products right at their own doors, getting a higher price for them than the northern manufacturer gets for his, and yet selling them at a cheaper rate than the same fabrics brought from the north can be sold to southern buyers at retail. The reasons of this, are the same as we should naturally suppose would prevail anywhere under similar circumstances. They can buy cotton at from ten to fifteen per cent. cheaper than the northern mills. There is a great abundance of labor, for which there has hitherto been no demand, and it can be had twenty per cent. cheaper than the same grade of labor at the north. The mills in the south, employ on a rough estimate something like 20,000 hands, many of which, perhaps most of which would otherwise be nearly idle, and the amount paid out in wages must amount to five or six millions of dollars annually. These operators are almost entirely of the class of poor whites, the colored people not seeming to be adapted to manufacturing employments. Nor is this all. As is natural, a great variety of

subsidiary employments spring up in connection with these larger enterprises, utilizing not only vast amounts of labor otherwise running to waste, but incalculable values of otherwise valueless materials. Better than all the rest, it gathers the inhabitants in towns and villages where they can establish schools, and thus education is promoted, and the generation to come will be more competent and more independent than those which have preceded them.

I have cited this example of the introduction of new industries, into a community where but few previously existed, to illustrate the doctrine that it requires outlay and expense to do this, especially where the public sentiment has been against any diversification, or where there has been an apathy on the subject. It shows that this important element of prosperity does not come in spontaneously; it is like trying to build a fire with a few embers; much exertion at first is necessary; but when once well under way, it will supply its own energy and go on by its own force. So societary circulation, when once fairly established, will go on with increasingly rapid movement, marvelously multiplying the productive forces.

This diversity of employments is also essential to the establishment of local societary centers. The concentration of population at only two or three points in a large country, building up enormous cities, while the extremities of the land are left in rural wildness and nakedness, would be a most pitiful policy. If we must all go to New York, Philadelphia and Baltimore for our markets, we must all be at the mercy of remorseless and conscienceless corporations, to an extent which the most imaginative Granger has never begun to dream of. No great country can be prosperous, which does not multiply its manufacturing villages and market towns, so that there shall be one within easy reach of every considerable agricultural region. By such means alone will it be possible to effect these combinations of men, requisite to effect

certain enterprises on which the grand advancement of society depends. In this way only can the soil itself be rendered most largely productive, and the richest lands brought under cultivation. Only in this way can those facilities of education be furnished, and thought and invention stimulated, till science and art bring forth their vast appliances by which nature's resistance to man is overcome, and man's superiority to nature is attained, compelling her to work in her mighty way to serve his ends. It is wonderful how nature yields to man as he gets the better of her. At first she refuses to do anything for him. Every child that comes into the world would die of exposure and starvation, if it were dependent on nature alone. But let man once begin to get the advantage, and there is no end to her obsequiousness; and he ever marches on in this mastery by a geometric ratio, till she grows prodigal of the prices which she puts at his disposal for gratuitous service. Thus water and wind, and steam and electricity, with all the mechanical powers and a thousand others, have come trooping in one after another, each giving the power to coerce two or three more, till we are astonished at the miracles of energy with which she serves us.

It is said that the steam power of Great Britain now performs the work of more than 600,000,000 of men. This is probably more than twice, if not thrice, the number of able-bodied men now living in the whole world. This is only a fraction of the work which is done in one little island, whose population is scarcely one-fiftieth that of the globe! It shows the prodigious forces amounting to a hundred-fold each man's ability, which are at each man's service, if society will only make the proper combinations and wisely forecast its devices.

3. A third condition and characteristic of a prosperous community is the proximity of producer and consumer. This is indeed a consequence of the previous condition and is perhaps partly involved in it. For unless there be a con-

siderable diversity of employment there can be no immediate neighborhood, at least, except to a limited extent, of producer and consumer. Two men who produce the same commodity alone have no commerce or proper association with each other. Each has nothing that the other wants. Yet each must in some way have commerce and association if not with his neighbor, then with some distant producer. The man who raises only wheat or corn cannot clothe himself with either; nor can he exchange them with another man who only raises the same. The man who produces only cloth cannot eat it. The farmer must seek the clothier, hatter and shoe-maker where they can be found, and must pay the cost of transporting his own commodity to the place at which these persons are located and then transporting their wares back to his own locality. We complain of *taxes*, direct and indirect, external and internal, of state and national. But we never fully realize the whole extent of our taxation and often omit the most considerable items. Altogether the largest tax which the producer of only raw material in a community remote from market centers, has to pay is the *tax of transportation*, and few even now are aware how enormous that tax is. We think it pretty hard to have to pay 2 and 3 per cent on the moderate estimate of property usually made by the assessor, and if by any chance it runs up to 4 per cent we call it almost murderous. Yet the Iowa farmer pays 50 per cent tax on the value of his wheat in the Eastern cities, and 75 per cent on the value of his corn, and on the whole, does it quite patiently, considering everything.

This tax increases geometrically as the distance from market increases arithmetically. Corn which is worth \$25 a ton in the market is worth nothing at a distance of 120 miles if carried on an ordinary carriage road. By railroad the cost is about one-tenth of this.

There is loud complaint among our farmers concerning the extortions of the railroad corporations. There is no

doubt ample occasion for it. I am not aware that the frauds which have been perpetuated, the tendency to monopoly of privileges, the reckless and outrageous speculations in which they have indulged, have even been much exaggerated. Still we are to remember that whatever villanies are implied in their management they are a vast source of wealth. We may not know what to do with them; but we should know still less what to do without them. It is all well enough to use every legitimate means to reduce the cost of transportation. That there are such means and that they can effect the desired end is not very doubtful. Yet when this reduction is made to the greatest practicable extent, the tax will still be burdensome. What this section of the country needs is not so much cheap transportation, as less occasion for transportation. If we bring the great industries here which are necessary to our societary completeness, we shall have no need to transport our wares to them and theirs to us at so great cost. Nor is this all or even any large part of the advantage. The taxes saved will be not merely those of transportation, but also of a long series of middlemen reaching from Paris, London, Birmingham, Manchester, Liverpool, New York, Chicago, Milwaukee, and other intermediate stations, by each of whom toll is exacted on all goods passing through their hands; and in addition, the cost of insurance, exchange, discounts; etc.

I really believe that if Wisconsin would even now adopt the policy of exempting from taxation for a series of years all the new mills and new machinery which should be put in anywhere in the State for the manufacture of woolen and cotton and some other goods, the State would gain incalculably. There would not be merely the saving in the tax of transportation and for the support of vast numbers of middlemen and mere traders, but the deterioration of the soil now rapidly taking place would be averted and the productiveness of the land would be enhanced to a degree far

beyond that when it first opened its furrow to the share of the plowman.

One of the principal causes of the evils of which complaint is made just now by our farmers and others is the diffusiveness of our population — or rather the disposition to scatter abroad instead of concentrating. The abundance and richness and cheapness of farming lands, the hope of rapid development and large and speedy returns for any investment made, induces men to push out the frontier line more rapidly than they can take their civilization along with them. A farmer goes and settles in Nebraska, hundreds of miles away from any manufacturing center; he raises his corn and wonders and perhaps scolds because nobody comes to buy it, and it costs more than the market price to get it to the market. He might as well set up a printing press among the Modoc Indians and expect to get a living by advertising for them!

Every such undue extension of the population into regions where only the business of agriculture is attempted harms the adjacent more civilized regions by unnatural competition in the market of breadstuffs, and it impedes the prosperity of the whole country as well as subjects the immigrant and adventurer to unnecessary hardships. It is an established fact though hardly widely understood, that famines almost invariably occur only in exclusively agricultural or food producing regions. The only case of anything like famine which I have recently heard of in this country exists now scarcely 500 miles west of us, in the rich prairie lands of northwestern Iowa. A great famine is reported in India in one of the richest agricultural regions in the world. In both these cases the producer is located at such immense distances from the consumer, that when the one resource of the former is cut off, the event is most disastrous. No community can be prosperous where only a few of the many elements essential to human society enter into its composition.

4. A fourth characteristic of a prosperous community is, that raw materials and finished commodities will be always approximating in price. Labor and land and their immediate products in such a community will always be in a rising market; while cloth, hats, shoes, cutlery and machinery, by reason of the better facilities and less costly processes of production, will be growing cheaper. It is the enormous fallacy of the British political economists and public men that every means should be used to secure cheap labor to keep wages down. Partly because they deem this necessary in order to secure the proper profits of capital, and partly from vices inherent in their civil polity, the tendency of legislation has been more favorable to capitalists than to laborers, and this has been to the essential detriment of both. Hence the ingenuity of economists has been taxed to the utmost to concoct a philosophy which would account for the unfortunate condition of the laboring classes. This strange philosophy has been the result, namely, that wages must be kept at the point which will enable the common laborer barely to live and keep in fair condition to labor to support a wife in the same condition, and raise as many children as will keep the labor market supplied, and no more; that if higher wages than this were paid, the improvement in the laboring man's condition would result in the raising of more children than the wages paid would support; thus causing population to press upon subsistence till famine, war, or pestilence must providentially step in to reduce it within its proper limits. A more atrocious system of philosophy, implying more impious impeachments of the Divine wisdom, I will venture to say, never was accepted by man. Yet such a system has virtually been taught and accepted by some of the most reputable public men which the present century has produced. How irrational and unphilosophical it is can be ascertained by careful examination, though not obvious to the superficial observer.

It rests on the doctrine that population naturally increases faster than capital, or even than sustenance. This is almost pure assumption, and, as facts go, capable of entire disproof. We should moreover not suppose from what we see of the Divine methods in other departments of nature, that God would ordain a law of human increase while he ordains also a law of the proportional decrease of the] means of sustenance. It should also be evident to one who studies the subject with even a small degree of care, that increasing wages is always tending to make the work of the laborer more effective and profitable. It gives a man more leisure, greater opportunity for thought, makes him more intelligent and sagacious, enables him to educate his children; thus always increasing and improving the character of the laborer. It is found by actual experiment and statistics in our own country, in Ireland, in England and France, that almost invariably the highest wages give the most profitable labor, and is therefore in relation to profits the cheapest. At all events, it is only in those communities where labor is in a rising market, where raw material is approximating in price to that of the finished commodity, that capital multiplies most rapidly, that the laborer is most free and most in demand, that man, by his increasing intelligence, is most rapidly gaining the mastery of nature, and compelling more and more her gratuitous service. The farmer in this country is in general both a capitalist and a laborer. As a laborer he is justly perhaps jealous of the encroachments and extortions of the capitalist. But is he as a capitalist, as mindful and careful of the rights of the laborer? Does not the farmer sometimes declaim concerning the extravagantly high wages of the laborer, and fall into the error of demanding cheap labor? If he does, he not only commits the sin of which he complains in others, but he sins against his own real interests as well as the interests of the whole community.

5. If what I have before advanced be true, there follows

one more important and interesting characteristic of a prosperous community. It is that while the capitalist will always be receiving a larger *amount* though a smaller proportion of the joint product of capital and labor, the laborer will always be receiving both a larger *amount* and a larger *proportion* of the same product. This is one of the most beautiful laws in political economy, and its discovery is due to Mr. Carey, of Philadelphia. I will try to illustrate it briefly. Here are two men without tools, and consequently able to produce very little. One finds or invents an axe. He is now a capitalist. He can produce as much in one day now as in twenty before. The other man, who has still nothing but his hands, says, lend me your axe. The capitalist replies, I will do so on condition that you give me three-fourths of the product. This seems like an enormous proportion; but as the mere laborer can by this bargain make five times as much as he can otherwise, he is glad to make even such an agreement. Thus it is in the infancy of society, the capitalist can set his own price. But suppose another man comes with another axe; now capital is in competition for labor. Each axe-owner would rather have a smaller proportion than not to have any, hence the laborer gets a larger proportion, say one-half instead of one-fourth. In the meantime other and superior instruments are invented, by use of which the gross product will be still greater. Now the one-half or one-third which goes to the capitalist, though a smaller *proportion* than the three-fourths first secured, yet the *amount* is still greater.

Mr. Carey gives a report as follows :

	Whole Product.	Laborer.	Capitalist.
1st.	100	25	75
2nd.	200	66 $\frac{2}{3}$	133 $\frac{1}{4}$
3d.	300	150	150
4th.	400	225	175
6th.	600	400	200

Such are the beneficent laws ordained by Providence for

the social regulation of man. It is for us to discern these laws and adapt ourselves to them, then will all classes of society rapidly improve, man will become the master of nature which will serve him with bounteous liberality; and comfort, freedom, intelligence, virtue and religion will be the inalienable heritage of the community.

COMMON SCHOOLS AND AGRICULTURE.

BY C. L. HOYT.

The rural districts of our country are in commotion! Organization is the watchword of the hour! The great question, how can we elevate the condition of agriculture, and of those who follow it? seems to be placed on the road to an ultimate practical solution, through the thorough and united activity of the agricultural masses. Much may and will be done to effect reform on transportation and the handling of produce, in simplifying the means of exchange, in the co-operation for the procuring of farm machinery, and for the general advancement of science and skill in practical farming, but these reforms however desirable, can be but partial and transient in their results, and unavailing as a means of the permanent elevation of the agricultural calling, unless supplemented by a thorough reform in the methods of education by which farmers sons and daughters are fitted for their station in life.

True, our Agricultural Colleges are well equipped for these purposes, and if well patronized could accomplish much, but the numbers which they, and all other collegiate institutions could educate, is but small when compared with all the number of youth comprised within the rural masses. Increase their facilities to the utmost extent, and it will still remain true that the great mass of the youth of our rural communities, will obtain no other education than that afforded by the facilities within reach of their own homes.

View this subject then in whatever light we will, the great fact still remains, that the elevation of the agricultural masses in intelligence mainly depends upon the Common Schools of the rural districts.

1st. What is the present state of education in our farming communities? Have the great improvements and advancements, which, within the last half century, have been effected in the educational system of our principal cities, been in any corresponding degree, extended into the rural districts of our land? If we examine these questions thoroughly we shall find that such is not the case; and that, as a means of fitting out farmers sons and daughters to be intelligent men and women of this age and time of the world, our common school system is deficient and comes far short of what it ought to be in these respects. We shall find that while there are many districts, which make efforts to secure teachers of more than average qualifications, and obtain to a fair degree of thoroughness in scholarship and deportment, the larger number of our schools are run with more or less of a slack hand; conferring but an imperfect knowledge of those three R's—readin, 'ritin and 'rithmetic, with a smattering of geography and a little grammer; their management characterized by a general want of thoroughness of scholarship and discipline, and often an obliviousness in regard to general manners and deportment.

Here we may find the solution of that deplorable fact, stated by Prof. Keniston in the annual address before our Rosendale Club, viz: that "Farmers as a class were far behind most other classes and occupations in general intelligence." And this lack of intelligence is after all, the main cause of all the grievances, social, political or pecuniary, of which farmers at the present day so bitterly complain. It is the ignorance of the farming community which has invited and presented a field for the manipulations of the more intelligent, though and corrupt railroad operator, the selfish

produce gambler, and the oily, smooth tonged demagogue and unprincipled politician.

It is recorded that an ancient philosopher, being asked, what things are most proper for boys to learn, replied, "chiefly those things which they intend to practice when they become men."

If we look at the educational system of our principal cities we shall find that this trite maxim is far better put in practice there, than in our rural districts. We shall find that they endeavor to embrace every study necessary to train their pupils as intelligent citizens; and every appliance needed to confer that polish of manners and social demeanor which city society generally requires and to a great extent exhibits, and we shall find also that if any particular study will aid the pupil in his proposed business, mechanical or mercantile, it is generally taught in the public schools, as book-keeping, designing, the higher mathematics, etc., all of which vastly aid the scholar in the great pursuits of city life.

Now it is the difference in education that constitutes all the real superiority which the city inhabitant possesses over the country farmer. The city gentleman or lady is in general well informed, speaks correctly, is easy and polite in his or her manners and deportment; and possesses that self confidence and ability to take care of one's self, which are conferred by such accomplishments. On the other hand, except in the cases of those persons who have had advantages superior to the mass, the countryman is comparatively ignorant, awkward in his manners, and frequently uncouth in his whole personal appearance and bearing; and even while his natural qualifications are, as is often the case decidedly superior, he fails to reap the advantages of them, through his deficient and adverse social surroundings.

So noted is this difference in appearance and general bearing, that in our great cities the countryman from the farm

may be distinguished in the streets as far as the eye can see him; even among the motley crowd, from all nations, which now-a-days collect there; and the practical eye of the city youth will even correctly locate him, telling accurately what section of the country he hails from.

There exists unfortunately, among farmers themselves, too much partiality for this state of comparative ignorance and uncouthness of manners, and too much prejudice against a higher degree of intelligence and politeness of bearing. The earliest impressions which we receive in life, are apt to be the most permanent and lasting impressions. The farmer looks back upon his school boy days as the happiest of his life, and consequently the school which he attended, is, in his mind, invested with a peculiar charm. With what fondness he recalls the scenes connected with the old time country school-house, located in the back district where he was raised; and when called upon to act in school district matters, that school generally forms the ideal upon which are based his efforts for the education of his children; an ideal perhaps not very incorrectly described in the following lines by a humorous poet of New England, thirty years ago:

“When but a little boy,
To Cow Brook school I went;
First, Webster was my joy,
Then Daboll my intent;
Murray, I went clean through,
And learnt his rules by heart,
And read in the ‘Preceptor’ tew,
And then in the third part.

Phil Ant’ny was my schoolmaster,
A learned man was he;
In ‘rithmetic he’d gone as far
As the double rule of three,
He’d studied physic tew,
And when he boarded round
He cured worms and tizzic tew,
With roots dug from the ground.

Upon the hills it stood,
 That schoolhouse old and warm,
 With that big pile of wood
 It laughed at cold and storm,
 The hillside slope in front
 How glorious the view,
 We used to ride full half a mile
 On sleds and dug outs tew."

Now we do not mean to say that all our country schools are precisely of the "Cow Brook" order; but much too great a proportion of them are not far enough advanced from the ideal thus set forth; and we have too many people who are well satisfied with such schools. Thus the farmer, reared in comparative ignorance, too often goes plodding on, training up his children in the same paths of intellectual neglect; each generation furnished with but little knowledge save the empirical dogmas of their ancestors. Thus while laboring abundantly with his hands the farmer fails to find legitimate exercise for the noble faculties of his immortal mind.

Moving amidst the beautiful scenes of external nature in which he might make himself almost a paradise, through his ignorance and blindness he fails to realize the grandeur of his situation; and too often toils on as a mere machine, unaffected by the elevating and refining influence which would make a far happier as well as a better man.

Let us here ask the question should these things continue to be so? Ought we not to seek to inaugurate a higher and more liberal system of education than for our rural districts? Is it necessary that the great calling of agriculture, which lies at the very basis of our national prosperity, aye, and in the elevation of which is involved the perpetuity of our free institutions, should remain forever in a condition of comparative ignorance; and its masses continue to grovel in that debasing subserviency which such a condition enjenders?

The opinion seems unfortunately to prevail, among people

at large, or at least practically so, that farmers as a class do not need much education, that for those who must labor in tilling soil to know how to read and write along with the knowledge of the routine of their pursuit, abundantly qualifies them for their situation in life.

To ascertain the foundation of these prejudices against a higher popular education, we shall have to look back into the history of the past.

In the nations of antiquity, learning, even during the most brilliant periods, was confined to an oligarchy, and while with delight we read the classic lore of Greece and Rome, we are pained with the reflection, that the masses of the people, were slaves, were well nigh as ignorant and imbruted as the animals with which they were associated in labor.

After the ignorant barbarians of the north of Europe, the Goths and Vandals, had overturned the Roman Empire and become its rulers, the dark ages were ushered in. These men had not reached the ideas of civilization attained by the Greek and Romans, and their language was destitute of terms by which to express them. A long night of ignorant barbarianism settled down upon the world for centuries; and when at last civilization dawned again, and ancient manuscripts were taken from the lumber rooms, or disinterred from the monastic cells, and studied with avidity, learning was still confined to the monks and priests and to the feudal lords and noblemen.

No one, at this stage of the world, seems to have dreamed of the idea that the masses of the people could ever need to be educated. And even after the art of printing came, and the reformation was ushered in, and the area of education thereby greatly extended, it seems never to have been imagined that the vulgar mind, as they called it, could understand or appreciate the various branches of general knowledge.

The idea of any degree of universal education at all, is of quite modern date, and has not been put in practice in Europe •

until, within the last century, and then only in Germany, Switzerland, Scotland, and some other similar states. Even Great Britain has only recently been moving in the matter of free popular education; and throughout the greater part of Europe, the common people are still in a deplorable state of ignorance and superstition, bordering on barbarism; only restrained from acts of continual violence by the strong hand of governmental power.

When we thus take a retrospect over the world's history, when we reflect that all human progress has been slow, though gradual and sure, then will we cease to wonder that there should yet linger within the breasts of very many of our people, strong prejudices against the instruction of the rural masses in the higher branches of learning.

Our New England ancestors when they planted on American shores the free common school along side of the Christian Church, were far in advance of their times. The English mind of their age was not ripe for their maturity, nor educated for their moral science. It was no easy task to engraft their principles of education and of religious and civil liberty, upon the old stock of reverence for hierarchical assumption and obedience to aristocratical power. The great mass of the people, bound fast in the chains of feudal slavery and despotism, had looked to their nobles and rulers as to beings of a higher order, and to their spiritual guides as their conscience keepers by a Divine right; and they were neither sufficiently enlightened nor independent to break through the habits of ages, and assert their rights as men created in the image of God! The spirit of human progress engendered by the struggles of the sixteenth century, needed a peculiar soil, and to flourish in profusion required to be planted in a field expressly prepared for the purpose, rather than in those previously adapted and used for other policies.

• To the wilds of this western world, the genius of intelligent liberty came to seek a true home, and to build up for herself

institutions and laws upon such foundations as she herself might lay, or rather upon the eternal and immutable foundation of right. The spirit of a true enlightened christian civilization, here alone, of all other lands, unfettered by the lingering bonds of old feudalism, found free scope and verge enough for its largest activity; and uninfluenced, save by the leadings of the higher power, with the free public school as a prominent adjunct it reared a system that is the admiration of the world, and the hope of every lover of freedom on the earth.

But the free common school as planted by our ancestors, grand as it was in its inception and well adapted to their time, was not equal in its educational facilities to the intellectual wants of the present age. It needed to be improved upon by each successive generation, in order to answer the educational needs of each. With the required advancement as before remarked our principal cities have generally kept pace, while it is in the rural districts, comprising full the quarter part of our population, and that mainly agricultural, that the greatest deficiency in educational progress is experienced.

It becomes our duty as American citizens, heirs of a great and priceless heritage, as well as agriculturists interested in the elevation of our great pursuit and those engaged in it, to take up this noble work of education inaugurated by our ancestors and to carry it along, each man and woman working in his or her place and pushing at the wheel, until all remaining obstacles are overcome.

Our distinctive American institutions and American privileges should be held as a sacred trust to hand down, exalted and improved rather than deteriorated, to our posterity.

Holy Writ declares that all men are alike created in the image of God. That image revealed in the constitution of man declares that all men are alike, endowed by nature with original faculties for the understanding and appreciating of

knowledge. How absurd then the idea, lingering relics of a semi-barbarous age, that a liberal education is only for the wealthy; or if to be made free, only for those classes whose pursuits draw them together in city life. Let us urge then a higher and better education for the children of the farmer; and let us agitate these great truths until the people of our whole country, the rural districts included, shall possess, as near as may be, as good advantages of education as those enjoyed by the most favored cities of our land.

I know that many will object to these views as impracticable; urging the isolation of the farmer as a great obstacle to his educational improvement. But experience has proved that the isolation of the farmer is not insurmountable. That instead of being the chief cause of his ignorance, is in itself, much occasioned by his ignorance. Wherever a farming community is intellectual, there, their educational facilities are made good, schools are well kept, institutions of religion and literature well maintained, and farmer's clubs and associations for practical improvement are kept running. In such districts, although no more densely settled than others, but very little is experienced of the evils of isolation.

To the farmer, the practical application of the sound axiom of the ancient philosopher before quoted, is of the utmost possible importance. No sons and daughters, more than his need to learn "chiefly those things which they intend to practice when they become men and women." No other pursuits in life demands a more liberal education to prepare those engaged in them for their political, moral and social duties than does that of the farmer. No occupation presents so many points of contact with the great and varied principles of natural science, as does that of agriculture. It involves as many branches of knowledge as most other arts and learned professions, and the farmer to be a thorough master of his calling, requires as much mental discipline as those who practice law, medicine, engineering, and the mechanical arts.

The time is coming, indeed has already arrived, when education, practically applied, is utterly indispensable to any great success in agricultural pursuits; and those who do not possess its light must be content to plod their way through life like one groping along in darkness. They must be considered as wanting in intelligence and enterprise; will accomplish but little, and barely subsist, while the more intelligent farmer reaps abundant harvests.

However strong the prejudice against education may be, the old empirical system of farming, in a country where the population is yearly becoming more dense, the soil becoming exhausted, and manures scarce, cannot maintain a successful competition with that which is conducted upon intelligent principles.

We now come to the question, what are the best means for the improvements of education in the rural districts? How far can the well-approved and tested principle of advanced popular education, in our principal cities, be applied and put in practice throughout our country at large.

The following "hints toward reform" are thrown out, not as dictating a solution of these questions, but for the purpose of eliciting thought and discussion upon the subject:

1. The common district schools should be elevated in their character and efficiency, and should be equalized so as to have the same studies, the same text books, and the same qualifications for teachers, throughout the State. Their studies should embrace reading, spelling and defining, writing, geography, American history, and grammar. The text-books should be so arranged as to occasion the least possible expense, consistent with the greatest possible efficiency.

The teachers should be graduates of the State Normal Schools, or of other schools or academies of equal grade; and none less qualified should obtain certificates.

2. Out of a suitable number of common-school districts should be formed a high-school district, in which a free

public high school should be maintained, governed by the same rules of equality of studies, text-books, and teachers' qualifications.

The studies should begin where the district school left off, and should carry the scholar through a complete preparatory or academic course, comprising the higher mathematics, composition and rhetoric, elocution, ancient and modern history, physical geography, astronomy and physiology. They should also embrace the elements of the following sciences, all of which bear directly upon agriculture, and are absolutely necessary to make the farmer intelligent in his profession.

Geology teaches the nature and origin of the various soils and rocks, and all the great physical changes which are taking place from natural causes on the earth and beneath its surface. The connection between this science and agriculture is so apparent to every one who learns but the rudiments of it, that it needs only to be studied in a simple treatise to be at once applied and put in practice.

Botany teaches the characters, habits, and localities of all the different plants; also of their physiology; and explains most of the processes of vegetation, and is of vast importance. Indeed, the farmer and the horticulturalist are about the only persons to whom this study and the practical application of its principles are indispensable.

Chemistry is the key which unlocks the great laboratory of Nature, and shows us how she performs her complicated processes, and produces all the wonderful phenomena.

Comparative Anatomy and Physiology constitute a branch of *Zoology*, which treats of the form, structure, functions, differences and peculiarities of all the animal bodies. It is the basis of all knowledge relative to breeding, rearing and feeding, and curing the diseases of animals.

At least two or three terms should be devoted to each and

all of these studies during the academical course of every farmer's son and daughter.

We do not mean to say that the scholar would then have what would be called a thorough professional knowledge of these important practical sciences; but enough would be imparted to create a desire for more, which, with the attainable facilities for reading through life, would enable him to keep up with the age, and maintain a high character for intelligence and cultivated taste, although he did not go through any higher institution of learning.

The want of such a grade of schools—the grade between the common school and the college—has long been felt in our country. At the last National Educational convention, leading minds declared that the want of a sufficient number of township academies was the great necessity of our times. Through the means of such schools the number of students in our college courses would be vastly increased, and all our universities and colleges would be at once lifted up to a higher plane.

We should not then, as now, complain that our agricultural colleges are well fitted up and furnished with everything but *students*; and our Lawrence University and Ripon College would not then, as now, be occupied to such an extent with preparatory courses; but would soon become a university and a college in fact.

Some may enquire, what place would be given to the languages in such a system of education? It is a doubtful question, whether, with the exception of the rudiments of Latin, which assists in comprehending English, any place ought to be given to the languages at all, in schools kept at the public expense. The time of the public school cannot be taken up with them, without the exclusion of some necessary or important English branches.

The acquisition of languages does not necessarily confer intelligence. A person may speak a number of tongues,

and yet remain upon most subjects of practical importance an ignorant man or woman.

Said the eccentric David Crockett, on one occasion, in addressing the House of Representatives, "Mr. Speaker:— If a man is a natural born fool and knows twenty different languages, what then? Why sir, he has twenty different modes of talking foolishly."

This bold and sagacious backwoodsman with his strong common sense, knew but little of fashionable life, or he would doubtless have acknowledged with an old writer that, in superficial circles, "a mouthful of nonsense and affectation sounds far better and is infinitely more imposing in a foreign tongue" than in the common vernacular.

The languages are usually learned for some special purpose; they should therefore be pursued as a specialty and paid for as such. The State ought not to be taxed to furnish them.

What should be aimed at is the best practical, universal English education.

The moral tone of our public schools is a subject which has long occasioned much discussion. That education and morals can be entirely separated, both common sense and experience shows to be a fallacy. If the moral tone of a school is not positively good, it will be more or less positively evil. When the founders of our Republic left religion to be supported by voluntary zeal, they did not intend to thereby eliminate from their system of public instruction those principles of morals upon which our social order is based. Accordingly we find that our original States, in all their public school system, placed the Bible as their great moral standard. But, as diverse beliefs multiplied in the land, this began to create dissatisfaction, and within the last thirty years has been the occasion of such controversy that our national mind has become unsettled upon this subject, so that at the present time we seem to be without any deci-

ded views as to the extent with which the intellectual should be blended with the moral in our systems of public instruction.

View this matter as we may, however, it is clearly the right of the State to inculcate in its public school system that degree of morality so necessary to the public safety. When we consider the great proportion of his time which the youth necessarily spends in the school, and the decided impress which it stamps upon his moral character, it would seem that all who have the common good at heart should harmonize their conflicting views, and unite upon some plan by which the State may exercise its duty in instructing the youth in that public virtue so necessary to the existence and perpetuity of a free republic.

SHOULD EDUCATION BE MADE COMPULSORY ?

When we take into consideration the great fact that virtue and intelligence are necessary to the proper performance of the duties of citizenship; when we consider the remarkably close connection between ignorance and crime; when we consider the vast facilities furnished through ignorant and debased constituencies for the corruption of the elective franchise, we are compelled to conclude that it is the duty of the State and nation to seek protection by enforcing the duty of education.

There are many interesting statistics bearing upon this question which may be deduced in favor of this position, but which the already too protracted length of this paper will not admit of quoting in full. Suffice it to say, that in New England, eighty per cent. of the crimes are committed by those who have no education, or none sufficient to serve them a valuable purpose in life.

From three to seven per cent. of the population of the United States commit thirty per cent. of all the crime; and less than one-fifth of one per cent. is committed by those who are liberally educated.

Not far from seventy-five per cent. of the crime of New England is committed by an ignorant foreign element who number only sixty per cent. of the entire population.

It is noticed that the immigrant coming hither with education, either in school or labor, does not betake himself to crime. In the juvenile reformatories almost all the children are of ignorant parents.

In view of all these facts it would seem that compulsory education, to a reasonable extent, was both desirable and necessary, especially when we realize that many parents, through avarice or otherwise, deprive their children of all educational privileges.

The discipline of our schools is a matter of great consequence. The school should be governed on the principles of love and uniform kindness of treatment. No fractiousness nor cruelty on the part of teachers should be tolerated for an instant. But the necessary degree of order and thoroughness to promote the efficiency of the school should be at all events maintained; and, when all other means fail, the disobedient and incorrigible should be properly punished. The decorum of the school should be well looked after, and a sure and terribly severe punishment should immediately follow every act of indecency or obscenity. "A rod for the fool's back, etc."

Great care should be taken to keep the minds of female scholars from contact with impurity. Their modesty should be preserved inviolate; otherwise the consequences may be deplorable.

It will be said by some that the plans and principles of education here laid down are impracticable in the rural districts, because in advance of the times; that the minds of the farming community are not yet prepared for any advanced system of education.

It is just because they are not so prepared, that we ought to press with all the more urgency, the claims of this impor-

tant subject. The people must be brought up to this point as soon as possible.

In the mean time, the friends of a more advanced education in the rural districts, can establish *private* academies, for which the laws of this State furnish every facility. This experiment has been attempted in our rural township of Rosendale, thus far with flattering prospects of success; and although it has not attained to the highest degree of practical efficiency which could be desired, yet as time and experience reveal the true educational needs of the community, there is ground to hope that the wisdom will not be wanting to remedy every defect; and that our Rosendale Academy will yet become a model practical school, to be copied by every rural community.

In conclusion, let us again urge the great advantages which would follow the more liberal education of the agricultural masses.

Than agriculture, in its various branches, there is no better nor nobler field for the exercise of the most refined and cultivated faculties. No other pursuit is so well adapted to the culture and development of both the body and the mind in harmony. From its ranks, in all ages, have been developed some of the wisest and greatest of men; the highest and noblest benefactors of our race. The men who began the first settlement of our country, and founded here these institutions of learning guarded by law, were most of them farmers and planters.

Possessed, as our country is, of a vast agricultural domain, the garden of the world, stretching across an entire great continent, a large majority of our people are, and must of necessity ever continue to be, devoted to the same great pursuits.

Said Edward Everett, "The average condition of the agricultural masses decides the character of a people." How important then, to the interests of our nation, that the farmer

should be more liberally educated. Give him a more generous intellectual culture and he will apply to his great pursuit the advanced principles and practices which modern science and skill have evoked. This educated taste will render his surroundings beautiful and attractive. The whole outward aspect of farmers and their surroundings will be vastly improved, and the whole rural landscape so changed and beautified, that men of intelligence and culture will be drawn to agriculture from other pursuits and professions.

With a taste for reading, a great portion of his leisure, now worse than wasted, will be devoted to that higher recreation which develops the nobler faculties of the mind. Every community could thus be made up of the best and most intelligent society, and every family could have its associations of accomplishment combined with rural beauty and enjoyment.

Farmers' homes will then be made attractive. With that taste for the beautiful, in nature and art, which enlightened culture would inspire, the home would be one worthy of the name, which would draw his family within the circle of elevated society and influences, which would afford them every rational means of improvement and recreation. The farmer himself will not then, as too often now, regard his calling with aversion, and as a degrading drudgery which he follows only by dint of sheer necessity, and which he will get out of when presented with a favorable opportunity.

Having learned to respect and honor his calling, that calling will in return be made to honor him. In short, the only true road to the permanent elevation of agriculture lies through the better education of those engaged in it. To this end should be directed the energies of all who would raise our great pursuit to that position of dignity, honor, and respect which its relative importance demands.

MANURES AND MANURING LANDS.

BY E. H. BENTON.

To me is allotted the task of discussing the proper methods of applying the manures in common use by the common farmer, and if possible, to aid him in securing the largest returns from the least outlay. I limit myself thus, because my aim is to help the greatest number to the greatest good.

But before we are ready to take up the main subject, we must inquire into the matter of conditions of soil, which may influence the result very much. We all know that it takes far more feed to fat an animal in cold weather, exposed to storms without shelter, than in warm weather; and also that there is a great difference in animals in their tendency to lay on fat.

So there are soils which need draining both of surface and subsoil, and to be exposed to frost and air, to prepare them for a profitable application of manures; others leach very readily, and unless there is proper treatment, manures applied may rapidly pass beyond the reach of plant roots.

Again, on rolling, hilly lands, it is quite important that right conditions are secured, in order to derive the proper benefit which should accrue from applying manure.

With these few illustrations, we will give our first rule or direction; other things being equal, the best results will be reached by applying green or unfermented manure to sod land.

Just after writing this, I took up the *Western Farmer* of February 7, and on the first page I saw a short extract from the *N. E. Farmer*, which I will here quote.

"In answer to an inquiry we took the position that, on tolerably level land, it would be advisable to draw out the manure at any convenient time during the winter, and spread it evenly over the mowing lots, or upon fields that are to be

planted or sown next spring, in preference to leaving it in the barn yard, or to putting it into small heaps to be spread in April or May.

In case it is left in small heaps on the field, a large portion of the soluble part is washed out during the winter, and goes directly into the soil under the heap, causing the succeeding crop to lodge and rot over these spots, while the land between the heaps gets much less than its due proportion of the fertilizing properties of the manure applied.

We know there are many good farmers who are afraid to leave stable manure exposed on the surface of their lands over night. They will apply it no faster than it can be plowed under. How manure most benefits the soil and how it is wasted, are old questions, that are not yet fully settled in the minds of either theoretical or practical men. Our opinions are based on the practical experience of many years."

From transactions of Wisconsin State Agricultural Society, 1858—1859, P. 321 in prize essay, by John Edwards, of Rosendale, I quote :

"I have no hesitation in saying that the grass land should receive all the manure, for the manure will quicken the growth of the grass, which in turn will draw largely upon the atmosphere for its sustenance. We thus secure the aid of a powerful auxiliary, which, were the manure applied directly to the crops, we should not secure. It appears, therefore, that the proper time for the applying of manure is the month of October ; if delayed much longer than that, it can neither be plowed in nor spread on the ground. Many farmers are in the habit of drawing out their manure in the fall, and leaving it to be spread the following spring, but this plan is liable to objection, inasmuch as nearly all the value of the manure will be in a small place, instead of fertilizing uniformly the whole field."

Unfermented manures contain and retain nearly all their fertilizing qualities until washed out by rains, and when

spread evenly on the land from the vehicle on which they are conveyed to the field, which we always practice and recommend, the land will be uniformly benefitted, and scarcely nothing be lost. The roots of the grass permeating every inch of the soil on the surface and to quite a distance beneath in the subsoil, are ever ready to appropriate to a wonderful extent every particle of nourishment, and what is not expended in growth above will be stored up in extended root growth beneath. By this method of application no labor is applied to the manure in piling, stirring and watering, but it is taken without loss from fermentation, fire fanging, or other chemical changes, which necessarily involve more or less loss, both of bulk and quality, and when spread you do not need to plow or drag to prevent loss, or secure it from utter waste.

Another consideration of much weight in favor of this mode, is the mulching office performed by the coarse, fibrous material used for litter, which office is almost as valuable as the direct manurial effect. The stimulated growth of the grass will cover the coarse material, and it will rapidly decay without loss of any value. This method may be adopted even on lands intended to be mown the next season, if applied in autumn and thoroughly reduced by using a Thomas' Harrow or a brush, when it will sufficiently decay to prevent liability to being gathered by the rake; but this difficulty would be much obviated by leaving a higher stubble than usual.

But this method is chiefly intended to be used on sod land which is to be planted the next year, and in this case the coarse manure may be applied any time after mowing, till it is plowed in the spring; and it is advised to plow it not over three to four inches deep. In this case the surface soil is more or less filled with plant food ready for immediate use in the best form; and by thorough harrowing, the sod will

soon begin to decay, and thus at all stages of its growth the plant will perform its best.

It is very proper to say here that the largest crops of corn ever raised, were planted on sod treated in this manner, and the largest crops of potatoes. To one who has closely observed, it is obvious that the very best conditions are present in a decaying sod, previously fed to the full with liquid manure, to secure the largest possible yield of crops adapted to the mechanical status. Where manure cannot be had, use gypsum and clover for two years, and an approximating condition will be attained. Where gypsum is inoperative, use ashes and salt, or lime and salt. To get the full benefit of this beginning, it should be followed by some of the small grains, making a three years rotation, grass, corn or potatoes, and wheat, oats or barley. On lands much reduced or worn, we would sow wheat, etc., with clover seed and gypsum the first year, corn the second; fall plow, and the next spring begin again with wheat, etc.

This rotation continued six years, will fit almost any soil for a longer rotation and greater profits.

Our second proposition relates to the application of manures to cultivated lands which are being cropped every year. The manure must be composted or fermented until entirely broken down or rotted, and thoroughly mixed with the soil near the surface, soon after applying it.

The reason for a thorough admixture of manure and soil, is that no manure can be appropriated as plant food until digested or reduced to a liquid form, and we insist on having the whole surface equally manured.

J. B. Root, of Rockford, Ill., says in *Western Farmer* of February 21, 1874, speaking of leached ashes :

"But neither this nor any other fertilizer do I apply in the hill or in the furrows. * * Endeavor to get fertilizers a couple of inches below the surface, and give plants such liberal cultivation that they will have the thrift and vigor to

permeate the whole soil, and secure plant food equally from every part."

The same writer advises the surface application of manures on plowed land in fall or winter, to secure its general diffusion in the soil in such condition as to best aid in early, rapid growth. This would involve much less labor than the first method, and yet be as thoroughly accomplished.

The practical limit to the amount on any given surface which may be profitably applied, is that which the soil, rain, air and light will, with sufficient cultivation, digest and dissolve into plant food. Any more than this cannot yield any benefit, except mechanically on heavy or clay soils, in helping to render them looser and more easily cultivated. But this superfluous portion may be available another year if not rendered inert by chemical change and evaporation, in a gaseous form of its fertilizing properties.

The most finely comminuted fertilizer will the sooner manifest its presence and be the soonest expended or appropriated. The influence of the so called commercial fertilizer seldom extends beyond one year, while the green and coarse manures are seldom entirely exhausted until the fourth year. There is always danger of injury to plants in the germinal stage of growth, by the close proximity or contact of crude, heating, acrid or coarse manures, and there is a specific danger of disease in all highly stimulated growth. Too much of any undigested fertilizer or manure is detrimental and sometimes destructive to some crops, and this danger is aggravated when they are applied in the hill or drill along with the seed. No fertilizer is of any benefit to the plant until it has passed the germinal stage of growth and commenced the vegetative.

In corroboration of some of the positions which I have taken, I will quote from Agriculture of Massachusetts 2nd series, p. 8, 1859, of Secretary's report, where he says:

"Hence it may be laid down as a rule universally applica-

ble everywhere and under all circumstances, that the more thoroughly and intimately the plant food is diffused through and mixed with the soil, the greater will be the growth of any plant therein in a given time."

Also on P. 11, "The Hon. Charles B. Calvert, of Maryland, after a series of experiments conducted for the purpose of ascertaining the best method, now applies his stable manures to the surface." Says Dr. Voelcker, the eminent chemist and experimenter, "In the case of clay soils, I have no hesitation to say the manure may be spread even six months before it is plowed in, without losing any appreciable quantity of manuring matter."

In this article we have sought very briefly, to enunciate principles, rather than to collect isolated experiments; very improperly, we think called facts; and which oftener mislead than benefit. But very essential is it to every inquiring mind that he divest himself of preconceived notions, based as they so often are on tradition, superstition and isolated bits of information; and theories based on simple coincidences, empirical assertions or vague hypotheses. He must acquaint himself with the physiology of soils rather than with the "Man in the Moon," and observe more the laws of nature, than the signs of the zodiac; he needs more faith in the fiat of the Creator "That whatsoever a man soweth that shall he also reap," than in the baseless assumption that you can sow wheat and from that seed reap chess.

There are those yet living that do not believe in the rotatory motion of the earth on its axis, and who do believe the sun crosses the line, and they talk of the exhaustless fertility of their soils, and sow or plant the same crop consecutively on the same land, until they are obliged to rotate themselves on to another farm.

We shall not take up the application of manures in Market Gardening, as it comes more properly under the appellation

of high farming, which requires special treatment, special manures, and is too complex for our limited space.

But let us see what we need to know that we may act understandingly in manuring lands; it being pre-supposed that we understand how to save, make and keep our manure, so as to derive the greatest measure of effect when applied.

First, how plants grow and how they feed, or Physiological Botany; and seeing they cannot travel to find the most favorable soil and other conditions best adapted to their needs, we must know what soils and what conditions of it, will best meet their wants, or Physiology of Soils. But when we have rightly prepared our lands, and judiciously applied our manure, what comes of it, if we have not rain and sunshine in sufficient quantity to wake into life and activity the wonderful powers lying latent in Nature's Laboratory.

How wonderfully life feeds on death—or to state the problem in another form: Death places the organized structure where the laws of chemical change will render every particle of it fit to again enter into the structure of living organisms; and thus from creation's first morn, till the angel, with one foot on the sea and one on the land, shall swear by Him that liveth forever, that time shall be no longer, will the succession of life and death minister to the needs of our race.

But in agriculture as in every pursuit or calling of life, too strong a desire to reap large immediate results for money and labor invested, most always defeats itself, in using temporary expedients rather than enduring principles. Never forget that it is of the utmost importance that you secure a good foundation before you build; have your land free from standing water above and below; free from stumps, stones and clods; free from weeds and sprouts, and in a sufficiently loose condition, deep enough to secure almost entire immunity from extremes of wet or drouth, heat or cold.

But while we are doing all this we need not become or remain coarse, unrefined and boorish in our manners or repulsive

in our surroundings. We may not starve our minds to feed our bodies or our soils, but by a judicious admixture of head work and hand work, of brain and brawn, enrich our minds and our lands, and cause even the waste places to rejoice, and the desert to bloom as the rose.

Life is real, life is earnest,
 And the grave is not its goal;
 Dust thou art, to dust returnest,
 Was not spoken of the soul.
 Let us then be up and doing,
 With a heart for any fate;
 Still achieving, still pursuing,
 Learn to labor and to wait.

HOW TO ELEVATE THE FARMER'S CALLING.

BY W. J. JENNINGS.

Let it be understood that in dealing with this question we are to take the community of farmers as we find it--not as it appears here to-day, or as we see it among the thrifty and enlightened of ourselves, but as a whole, including the wise and the unwise, the thrifty and the shiftless, the enlightened and the ignorant, the forehanded and those who are pressed down with a load of debt. There are those among us--the wide-awake, active, always on the alert to learn and practice what they know, who need no incitement, no spurring; they are in the front and always will be. It is to the less fortunate class that I desire to call attention.

Judging from what I have seen, I think if a Farmer's Club or other kindred association, could be organized in every school district in the State, and fairly supported, a great advancement would be made. The fact seems to be that in farming pursuits, as well as in religious propagandism we must go after our fellow men. I don't know how general

would be the movement among the masses for popular education, unless the State took the initiatory steps. We know that it is deemed wise for our Sunday School and Missionary Societies to send agents and missionaries to organize schools and societies among those who will not or cannot help themselves, and it strikes me that our State Agricultural Society could do no better thing, if the funds were at hand, than to put and keep an efficient agent in the field at large to lecture, organize agricultural associations, disseminate information in farming, and thus encourage that great class among us who are the very ones who most need help.

This suggestion may seem to be impracticable, and perhaps is. The Professors of our State University have already done great good in lectures delivered to the people at different points in the State.

I know that a little leaven leavens the whole lump, and it may be argued that any truth once lodged in the public mind will sooner or later influence the whole mass. Our farmers are isolated, their business relations do not compel them to mingle much together, rather to live independently, and hence very much of what is written and said and done for the farming interest, they are in a great measure ignorant of. In order to elevate our calling we must elevate the men who make our calling. We cannot disassociate one from the other. And our calling will be judged of by the mass of those who compose it, rather than by the few who are in the front.

Again I would suggest, or rather hint at the idea, that something might be done by way of giving instruction in the rudiments of agriculture in our public schools. Might not elementary works be prepared either as text or reading books? There are many facts lying at the basis of farming in its various branches which our children can comprehend. The theory of farming needs to be learned as well as the practical part of it.

As an illustration I will only mention a class of books in one department connected with our calling, to wit, on Botany. Prof. Gray of Harvard University, has prepared a number of books on this subject adapted to and designed for use in common schools. The titles of some of these books are "How Plants Behave," "How Plants Grow," Lessons in Botany, and Vegetable Physiology," etc.

These are charming books, calculated to please and instruct. They are keys which unlock some of the best treasures of Nature. And who can doubt that if the children in our common schools of suitable age could take a course in these studies they would be better fitted to adorn their future calling. If our existing laws prohibits the study of such subjects let a change in our laws be made.

Surely all have an indirect if not a direct interest in Agriculture. Not a merchant or mechanic, or professional man unless pent up in close city quarters, but will have his garden his flowers, his vines and small fruit. The business man of the city looks and longs for the day when he can quit town life and live in the country. All love to have some hold of mother earth. With this sentiment prevailing what possible objection can be brought against the idea suggested?

Again as "knowledge is power," so an increase and diffusion of knowledge will elevate the farmer, and as a consequence his calling. The trained intellect will tell in any pursuit. Perhaps we cannot expect from a class so diverse in all qualities, and generally from the middle and lower portion of society, so much mind in proportion as is exhibited in some of the other industries.

It seems to be admitted in some quarters, and perhaps we might as well make the admission that farming does not need the brains of the manufacturer or mechanic to make business a fair success. Many farmers gain a competence, live comfortably, bring up a family of children, and yet exhib-

it but a low type of intelligence, an intelligence wholly inadequate to success in other callings.

And right here, perhaps, is where we make a grand mistake. Because our fathers got along pretty well with their wooden plows and harrows, and rude machinery generally, and but little of that, it is no reason that we, their children, can succeed in the same way. Times have changed. We must remember that we are living in the latter part of the nineteenth century, rather than in the first part. The last fifty years have witnessed a complete revolution in almost every department of industry. The best talent of the country is enlisted in the interest of progress and improvement.

Science is called to the aid of the farmer no less than to the manufacturer and artizan. The laboratory of the chemist is employed to aid us — all in fact that brains can do is being done to aid our calling as well as that of others.

What we want as a class, is to utilize the results of this ingenuity and skill. Some are doing it and are reaping corresponding results — many of us are laggards, failing to appreciate the value of improved methods, still clinging to the past and scouting book knowledge.

Friends, the dark ages are past. Let us admit the fact. A brighter day has dawned. Let us admit that fact also. These improved methods call for a higher grade of mind in the farmer, and the sooner we admit this fact and act accordingly the better it will be for us. In fact we have to come up to a higher standard of mental culture in order to compete with other industries. And we ought to be thankful for the friendly hand put forth to help us out of the ditch.

TEACHING BY EXAMPLE.

We must teach by example. It will not do to preach one thing and practice another. Our works are spread out before the world, and are generally a pretty good exponent of

what we are. Many a man has had his faith in Christianity shaken by the inconsistencies of its professors. So in farming, or in fact any other calling. Our teaching and practice must agree. If a man, loud in the praise of some particular kind of stock, can exhibit only an inferior article, our faith in that man's pretensions is shaken, and, knowing no better, we are apt to judge of all animals of that kind by this one. So of a man who preaches clean culture and clean fences; if we find his fields and fences foul, his preaching don't amount to much. When a man talks in the papers or in the Farmers' Club about the necessity and economy of housing tools, and yet stores his out doors, we say he might as well keep still.

It is said we are imitators. This fact gives farmers a power for good or evil. If but two or three thrifty, wide-awake farmers live in an otherwise unthrifty community, they may be the means of doing much towards elevating their calling, as well as their neighbors, simply by the force of example. The most stupid will sooner or later be caught with the contagion of enterprize and thrift which they see about them. If thrifty neighbor A, by drawing out his manure to his land, receives marked benefits, unthrifty neighbor B will soon follow suit. If neighbor C, by underdraining a piece of low land, increases the value of said land fifty per cent., neighbor C will see it. And so in regard to a thousand things—in the use of improved implements, in the feeding and care of stock, in the selection of seed, in the culture of the soil, etc.

GOOD LAWS.

Much may be done to elevate farming by Constitutional and Statutory law. The prosperity of every nation depends largely on the success of its agriculture. And it should be the aim of every well-ordered State to foster, so far as is consistent with other interests, this prime branch of industry.

Our own Government has been generous in this regard. We have our Department of Agriculture in Washington, which if not doing all we would like, is yet an earnest of what the Government would do. The liberal manner in which the Public Domain has been parcelled out to actual settlers is another instance of the liberal intentions to encourage agriculture. So the munificent land grants to encourage building railroads across our continent, thus affording the farmer facilities for marketing his products. The endowment of Agricultural Colleges in every State by the General Government, the appropriation of large sums of money to improve our harbors and rivers that we may have easy access to our eastern markets, are benefits which we should not forget. I certainly do not feel like reproaching or blaming the Government. It has been lavish in its expenditures in our behalf. If we have ills, which certainly cannot be denied, I think our Government is showing a willingness to remedy them so far as it can. We must not ask too much. Let us be thankful for what we have.

The questions of currency and finance, of interest and banking, of transportation and protection, of free trade, and a thousand others growing out of these, are questions that are difficult to adjust, and none but a tyro in such matters knows exactly how to adjust them. Our best statesmen, past and present, have found them to be difficult questions. Time and experience are needed to rightly settle them. Monopolies and rings will exist in one form or other in spite of us, but if the farmers of this country, with the Government on their side, cannot put a stop to their oppression, I pity our lack of intelligence. Constitutions may be made, bad laws repealed. Our law-makers are our servants. The question is in our hands. Let us study; think, think deeply, think long and patiently, then act.

INFLUENCE OF WOMEN.

Again much may be done to elevate farming by enlisting

the aid of our wives and daughters. They are with us. Their interests are identified with ours. But how, do you ask, can they assist? I answer, by a love for their calling, which will show itself in many ways. First, by informing themselves in regard to the details of their occupation, then by qualifying themselves by reading and study, and a practical contact with the actual duties of the farm house. A neat house keeper, a good bread and butter maker is not without her influence. The duties of the indoor home are largely controlled by the wife and mother. When everything is neat and tasty in the house, the children well bred and fed, the center-table well covered with good books and papers, the walls adorned with becoming paintings or pictures, with the actual presence of blooming plants during the dreary season of winter; I say where these things are found in the farm house there is a refining, elevating influence which gives to the farming interest a power not easily estimated.

Besides, women can do much with the pen. Some of the most valuable contributions of our current agricultural literature are the productions of her pen. Who of us have not felt proud of our calling when reading the productions of such women as "Daisy Eyebright," "Faith Rochester," and a host of others, not excepting your own Mrs. Huntley? And here permit me to say and bear testimony to the good our ladies have done, not only in contributing to the literature of the day, but in meeting in our clubs, granger, and conventions, having a part, and encouraging us in our work.

I say to our gentlewomen, here is a field where you may be useful. Here are rights you may have without asserting them. Here you may work for the elevation of your own sex, and for the cause we have at heart.

These are a few of the many suggestions which might be thrown out for improving our condition as a class. After

all that can be said in the way of breaking down monopolies and rings, however much they may stand in the way of the farmer's advancement, the fact will still remain, that in order to true and lasting improvement, the mind, the better part of us, must be cultivated.

NO SHORT ROAD TO SUCCESS.

One thing more must not be forgotten. Let us not deceive ourselves with the fallacious idea that there is a short road to wealth and success in farming. With all the multiplied appliances to help us along there is work, hard work to be done on the farm, and so in any other calling. Let us go where we will, this question of work will stare us in the face, as an important factor of success. Moderate labor to the well man never injures; it is a benefit; and even hard, laborious work is better for the mind, and body, and morals, than idleness. It is an old saying that "it is better to wear out than to rust out." And I claim that work in any lawful calling is respectable, and farm work in particular—dandies and loafers to the contrary notwithstanding.

Farmers, let us take heart; complain less; seek to cultivate our brains more; then our work will be better done; be patient, be persistent, be honest, be cheerful and happy in our calling—then farming will be elevated to that position, and exert that influence among the other industries which its importance demands.

THE WESTERN FARMERS' MOVEMENT.

BY ELI STILSON.

Mr. Stilson gave a picture of the experience of the farmers in Wisconsin from the first settlement of the State to the present time. He alluded to the lack of railroad facilities in early days, the increase of freight rates before the war, the blockade of the Mississippi, and the consequent rise in

freights in 1861. He said the heavy taxation, which was a natural outgrowth of the war, operated against the farmer until 1864, when began the most favorable period in the history of the Western farmer. Money was abundant, prices good, mortgages paid off, farms improved, buildings sprung up, and the farmers generally prospered. The flush times continued through 1865, 1866, 1867. In 1868 and 1869 the prices of farm products generally declined, but still crops were good.

All this time railroads were grasping, combining, consolidated; but the farmers good naturedly slumbered, as the prices had not fallen below the actual cost of production. The years 1871, 1872, 1873 were characterized by severe drouths, and the crops were cut short. But this was attended with no increase of prices, or decrease in the cost of transportation. It had become evident to the farmers that the wealth of the producers is fast finding its way into the pockets of railway magnates.

Other causes than the railroad monopolies which has brought about the movement may be enumerated as follows:

First.—General distrust on the part of the farmers of our rulers on account of their reckless squandering of public lands, the corruption in high places, and the selfish disregard of the public good.

Second.—A general fever for speculation, extravagance, and waste, as instanced in the building of useless railroads, followed by financial panic and the disturbance of business credit.

Third.—Farmers, as a rule, don't understand their business. They have fallen into certain ruts and grooves, and followed them blindly, without knowing whether this or that branch of their work paid the best, until their time and capital had been wasted. The study of the laws of supply and demand, when to buy and when to sell, the nature of the

soils and the rotation of crops, has been sadly neglected. Now, while we seek to settle the great questions of the rights of producer, carrier, and manufacturer, let us dig deep and lay the foundation for an improved agriculture; and, while we present an unbroken front to unitedly contend against the ills that have hindered us, let "Progress" be our motto. The Western farmer should call as powerfully for the developement of agriculture as for resistance to the encroachment of railroads and monopolists.

The farmers need better education, more brain work, and less overtaxing of the physical nature. This movement will work one immense benefit in overcoming a great obstacle to successful culture among the farmers, viz: the isolation in which farmers live. Conventions, farmers' clubs, and granges break down the barriers between the farmers, and unite them in one common brotherhood.

The farmer should not ignore the high duty which he owes to his country by absolving himself from the duty of acting independently at times of elections. The farmers in the past have been bound too closely by party ties, and too often roped in by politicians to contend for some abstract principle to the neglect of crying wrongs which stare them in the face. Offices have been multiplied, salaries and fees increased out of all proportion. Speculations, bribery, and corruption, and defalcations have become rampant, and we should fear that the Republic would fall as Rome did, by internal rottenness, were it not that, in some instances at least, grim justice is meted out to the offenders. Tweed occupied a felon's cell, his colleagues are in prison or have fled, and an honest judge occupies the seat where bribery and corruption held high carnival.

Even Congress shows some signs of returning sanity by repealing some of its obnoxious laws, and paying some respect to the people whose rights it has outraged.

Corruption in high places is no new thing. Eighteen

hundred years ago the corruption of the Jews had entered into the Temple; but there came One with a scourge of small cords and drove them out. So may this Farmers' Movement, by the farmers' votes, assist to make a scourge of small cords that shall drive from the high places in the Republic all tainted with the corruption of Credit Mobilier, back-salary grabbers, railroad land grabbers and aiders and abettors, and all who have beggared, robbed, and nearly bankrupted the nation and many of the States.

Let no person receive the farmers' vote who has the taint of corruption on his garments. By so acting we shall not only lighten the burden that is weighing us down, but may help to transmit to our children the blessings of a free country.

GRAPE GROWING.

BY GENERAL N. F. LUND.

EARLY HISTORY.

History goes not back to the time when man first planted the vine; and beyond the Sacred Records its first culture is shrouded in allegories, myths and fables; the only records that have come down to us being found in the poems and sculptures of antiquity. In the mythology of the ancients it had its special protecting deity, and Bacchus, the God of wine, was crowned with ivy and vine leaves. The shield of Achilles represented a vine gathering; and on the oldest Greek tombs are found pictures representing the vine-harvest.

It is first introduced to our notice, when Noah planted a vineyard and drank of the wine; and as one of the articles of provision hospitably offered by Melchizedek to Abraham, and the Sacred Writings abound in allusions to the vine and

its fruit. Herodotus speaks of its culture in Egypt, and Pliny writes of the natural history of the vine.

It is doubtless as old as the human race, and its cultivation was probably amongst the earliest efforts of human industry; while from the remotest records of antiquity we learn that the vine has been celebrated as the type of plenty and the symbol of happiness.

The country where the vine was first cultivated cannot be positively known, but it is believed to have been the hilly region on the southern shores of the Caspian sea, in the Persian province of Ghilan; from which country it probably spread across the continent, to its eastern limit by the sea. The records tell us that the Phœnicians carried it to the islands of the Mediterranean whence it spread to Italy, Spain and France and thence over Europe.

The profitable cultivation of the grape in the open air is as yet confined to a zone of about two thousand miles in breadth. The northern limit of its cultivation is not confined to a given parallel of latitude. It has been observed in Europe that as you go east the culture of the vines extends to the north. Young says, that within the limits of France there is a difference of two degrees of heat in the same parallel. In the United States the difference of climate is also found, but operating in a reverse manner. As we come west from the sea coast, a milder climate is found in the same latitude. In the observations of Humboldt, he found that the best wines of Europe were produced in the interior, away from the seaboard, and remarks, that the cause does not alone reside in the lower temperature of the coast, but he attributes the difference to the light from a clearer state of the heavens. Throughout this zone of two thousand miles the wild vine grows almost universally, most probably native to the soil where found.

IN AMERICA.

The numerous varieties cultivated in Europe are supposed

to have originated from one species. Prof. Gray, one of the highest botanical authorities, classifies the native grapes of this country under four species. These growing in wild luxuriance doubtless suggested the cultivation of the vine to the first settlers of America, for we learn that it early attracted the attention of the colonists. Most naturally they brought from their old home the choice fruits to which they were accustomed, and for which the wild grape was a poor substitute, and thus the foreign grape was introduced to America.

But after many unsuccessful attempts, (continuing through nearly two centuries), to acclimate and grow the European varieties in open air culture, the experiment was abandoned and pomologists began their experiments for the improvement of our native species.

The great turning point of vine culture in this country was the introduction of the Catawba grape by Maj. Adlum, who considered that by it, he had conferred a greater benefit upon the American people than he would to have paid off the national debt.

From this point our progress has been marked and certain; at first slow and doubting, but accelerated as success followed success, until now it is rapid and assured; each year adding new and choice varieties, many of them by hybridizing with the foreign varieties, thus in part gaining what we had failed to accomplish in the attempts to acclimate them.

The question of the successful cultivation of the grape in this country should be considered no longer as a doubtful matter, for our experience proves that no fruit can be more generally grown, with hope of annual crops. We know that some sections, from local causes, are better adapted to its culture than others; but this is also true of all fruits. As an example, in our own State, peaches have long since been out of the question, even in the few favored localities where

once found; while a general crop of apples, pears, plums, and other fruits borne on trees, is an exception rather than a rule. But with the grape it is the reverse; we look for its fruit with each returning season, and are seldom disappointed.

IN WISCONSIN.

Our State is most favorably located for grape growing; situated as we are a thousand miles from the sea, no cold ocean winds reach us; our atmosphere is dry and clear; the sun-light pure and bright. Our hot summers are adapted to the rapid growth required in the full development of the vine and its fruit, forcing growth with marvellous rapidity from a soil that seems just adapted to the grape; while our cool nights and dry atmosphere are especially favorable in keeping them comparatively free from the diseases which attack the vine in less favored localities.

The great hindrance to grape culture would seem to be our rigorous winters; and this alone has unquestionably prevented many from planting it. But our winter climate has settled the question of winter protection for the vine. It is a necessity that cannot be avoided except in rare instances, and never with perfect safety. Doubtless one of the chief reasons why the vine is more successful in fruiting with us than fruit bearing trees, is the fact that we are compelled to give it this winter protection. Thus shielded it is safe from climate changes for five months of the year, and when in the spring we uncover it, it seems almost to leap in its growth. Could we thus protect our fruit bearing trees, the result would probably be the same. In fact I have seen it stated that the experiment had already been made of protecting fruit bearing trees with coverings of boards during the winter, and with the most favorable results.

This might not be profitable, but the question of profit or loss does not change the fact established by the experiment,

viz: that by protection we get fruit. With the grape the question of profit is all on the side of protection.

Under circumstances more favorable than for its cultivation than that of any other fruit; with promise of speedy returns; shall we still question whether we can raise the grape in Wisconsin? Rather let us ask, will we raise it? Our wants must compel an affirmative answer, and this answer has already been given by hundreds among us, who are yearly gathering its fruit.

TERMINOLOGY.

To cultivate the vine with success, we must know of its wonderful structure and growth, and its proper culture and training should claim our careful attention, remembering always that the ultimate object is the harvesting of the ripened clusters.

In speaking of the vine, we must constantly use terms applicable to it. I therefore give in advance its terminology, commencing with the root:

The *Stock* is the main part of the vine above the root, and below where it branches.

The *Stem* includes those portions which have ceased to bear shoots, and are two years old and over.

The *Arm* is a portion of the stem trained in a horizontal position.

The *Cane* is a ripened shoot, from six to eighteen months old, or until it ceases to bear shoots directly from its own buds.

The *Spur* is a cane cut short.

The *Shoots* are the growth of the current year until the fall of the leaf.

The *Laterals* spring only from the buds of shoots, and are simply the shoot reproducing itself from its own buds.

The *Nodes* are the joints in the shoots and canes from which spring the leaves, buds, tendrils or clusters and laterals.

The *Internodes* are spaces between the nodes—both these latter disappear in the stem.

The *Tendrils* is a twining support.

The *Cluster* or *Bunch* is a tendril perfected into fruit.

The *Buds* on the shoots occur only at the nodes in the *axils* of the leaves. They are of two kinds, growing side by side. From one springs the lateral, making its growth the current year; the other remains dormant, perfecting for the growth of the shoot the coming year.

There are also the *Blossom-buds* which appear only on the tendrils, and the *Berries*.

The whole makes up the *Vine*.

Let it be borne in mind that the vine has not leaf buds and fruit buds distinctively, like the apple, but leaves and fruit come from the same bud, borne on the shoot, the growth of the present year itself growing from the bud perfected for that purpose the previous year. No part of the vine which has once borne leaf or fruit will bear it a second time.

SOIL AND ITS PREPARATION.

Until within a few years, a great mystery has been thrown around grape-growing, especially about the preparation of the soil and planting. Into this mystery it was supposed necessary to be initiated by some one who had served a life-long apprenticeship. But thinking brains and practical hands have demonstrated that the mystery need no longer exist, for it has been found that no more knowledge or common sense is required than in the planting and cultivation of other fruits, or many of the field crops.

As a curiosity, let me give you one among many lists of fertilizers recommended and heretofore considered essential in preparing the soil for planting the grape, viz :

“Bones, horns and hoofs of cattle, bonedust, the entire carcasses of animals, cuttings of leather, woolen rags, feathers and hair. All these to be mixed with the soil when the border is first made.”

This is first taken from a work on Grape Culture published in 1860, and is a mild compound compared with some of the lists in that work. It is difficult to understand why the grape should thus be made an exception to other plants and be treated with these powerful prescriptions, for although a great feeder it is exceedingly modest in its demands for stimulants, and care must be used not to over-fertilize, especially the vigorous growing varieties.

If our author will plant on his plan in Wisconsin, we can tell him in advance that his harvest will be leaves and shoots and not fruit; and no one need trouble himself to try the plan here, unless he plants in yellow sand.

The proper soil for the grape we are told on the best authority, is "any soil that will grow good Indian corn."

The cultivator need not be told that it should be in the finest possible condition, for without this we cannot secure the highest success with any fruit or crop.

The grape loves a deep mellow soil, which should be thoroughly pulverized. A dry subsoil is an absolute necessity; if this be a compact clay, retentive of moisture, the remedy is draining.

Fortunately our soil is largely underlaid with gravel, forming the most perfect natural drainage. In this we have another decided advantage for the success of the grape, as it is an established fact, that well drained land always possesses a higher temperature than that which is wet, the difference being ten to twelve degrees, and is accounted for by the rapid absorption of heat by the water, as it becomes converted into vapor.

A French writer makes the following observations on the influence which a dry or moist soil has upon the grape:

"Other things being equal we obtain grapes which contain much sugar and little acid from vines grown on dry soil and much acid, albumen and mucilage with little sugar, in a soil which is absolutely wet."

PLANTING.

A good root is of the first importance as with all other plants; and in setting, the crown should be placed at least four inches below the level of the ground, for deep planting is a requisite with our hot sun and dry atmosphere.

Before planting, the roots should be smoothly pruned, all bruised ends cut off, and if very long, they should be shortened several inches. This process greatly multiplies the fibrous roots.

In planting, spread out the roots evenly, letting them droop gradually from the crown; then press the soil firmly on and around them. The vine should be grown on stakes until ready for bearing, as it makes its most vigorous growth of wood while growing upright. This will be more fully shown as we proceed.

The stake should be firmly set before planting the root, lest in setting we break or bruise the roots, and if a good one it will last until the trellis is required.

The best of culture should be given, as nothing short of this will yield the desired results.

Much of disappointment may be saved by the proper selection of a location. A low; damp spot where the air cannot circulate freely, should be avoided, as sooner or later it will yield a larger harvest of blight and mildew than of ripened fruit, and the insects that infest the vine will revel in the home thus located.

MULCHING.

Do you ask me if I would mulch? Most assuredly yēs; always and everything where you desire to retain moisture. Mulch grapes when first set, for the protection of the young surface roots which will be thrown out by the stock above the deep set crown; mulch every year until the roots strike deep, and the foliage becomes sufficient to partially shade the ground; mulch after this, at least when there is no rain, and the burning sun is evaporating the moisture from the

surface soil, and reason tells you that the roots near the surface are famishing for drink. At such times, mulch is the salvation of every tree or shrub, whether fruit or ornamental. And let me add, for grapes, the best mulch I have ever found in drought, is fresh mown grass lightly covered with leached wood ashes.

SUMMER PRUNING.

Pruning the vine has from the earliest times been deemed of the utmost importance to insure productiveness and fruit of the best quality. Yet there are those who of late years claim that the vine should not be pruned, but left to grow and bear fruit as nature shall direct; and there are others who have no thought on the subject, but simply neglecting it, leave it to its course. It is not difficult to show that all experience is opposed to this absurd theory, and that those who advocate it are not only behind the age in which they live, but far back beyond the records of the old dead centuries.

In the fifteenth century B. C., the children of Israel were commanded "to prune the vineyard when they should come into the promised land," and "forbidden to gather the grapes of the vine undressed." Isaiah in the eighth century B. C. speaks of the "vineyard trodden down," that "shall not be pruned."

Numa, the successor of Romulus (who lived in the same century with the prophet Isaiah,) to encourage the pruning of vines, "prohibited the the use of any wines in sacrifices to the gods that were made from vines which had not been pruned." The gods must have the best, hence we infer that the finest grapes and wines could only be had in those early days from pruning the vine. These instances might be multiplied indefinitely, but it is sufficient to add that the choicest grapes and finest flavored wines have always been and are still produced from the pruned vines, and though our anti-pruning advocates may claim a more "ex-

cellent way," have failed, and ever must, to show the more excellent fruits.

A practical grape grower has lately said that "The success of grape culture in this country depends almost entirely upon a general diffusion of practical information relative to pruning and training."

The term summer pruning, when taken in its literal significance would include the removal of all superfluous growth from the vine during the growing season, whether in the succulent or ripened state. Understood in this general way we are constantly led into the worst kind of possible error, and it is of vital consequence that the distinction between summer pruning *per se*, and stopping and controlling growth while in the succulent state, be made clear and defined, for on the proper understanding and practice of this, depends not only the fruitfulness of our vine, but its health, vigor, and often its life.

Properly defined, *summer pruning* is the removal of large quantities of superabundant leaves and shoots which have been allowed to grow unchecked until the wood is nearly ripened, and to this only should the term be applied.

Many practice this, under the pretense of "letting in the sun and air to the grapes." While grapes will not ripen well, nor vines be healthy under a dense mass of matted foliage, this is not an evil to be remedied with the knife.

These summer pruners should also observe that all the finer bunches grow and ripen under the shade of the leaves. The sun directly upon the wood or fruit is not necessary to their perfect ripening. Yet the vine, as a whole, should have the full and free benefit of sun and air. Then, if proper training has been given, observation will show the leaves adapting themselves in such a manner as to shield both wood and fruit from the direct rays of the sun.

But the great evil attendant upon summer pruning is giv-

en by an author who writes understandingly of the matter. He says :

“ It is the sudden and violent check which it gives to the plants. The roots have been excited into vigorous action by the enormous draft made upon them, find themselves suddenly without a channel through which their unelaborate product can find vent ; the balance of product and supply is upset, and the fruit is filled with crude, ill-digested sap, thus causing it to be unripe and ill-flavored.”

● And he might have added, the injurious effect on the vine itself, for this rapid growth unchecked cannot find vent alone in the fruit ; the pent up sap must free itself also in foliage growth, the dormant buds will push into laterals and thus the hopes for next year's fruit be blasted.

These are some of the effects of summer pruning, and show conclusively that it should never be practiced. Better by far adopt the practice of the anti-pruners and take such fruit as unassisted nature gives.

STOPPING GROWTH.

Now all the evils of summer pruning are avoided by stopping growth in the shoots and laterals while in the succulent state.

The remedy is not the knife, but the thumb nail. On this subject, our author says :

“ When we reflect that the amount of organizable matter which can be furnished by any vine is limited, and also that all rank and succulent growth is prejudicial to the production of fruit, we can readily appreciate the advantage of directing the sap to the production of fruit, rather than wood and leaves.

“ By early stopping the shoots, and thus preventing the further production of leaves and wood, we render summer pruning unnecessary ; no sudden check is given to the vines, and sap is fully elaborated as soon as supplied, and the fruit receiving an extra supply of properly prepared sap, which

would otherwise have gone to the production of wood and leaves, is enlarged in size and improved in flavor."

The process of checking growth should commence the first season of planting, by pinching laterals on the first shoot, and be continued each year on every shoot grown. When the laterals have formed the second leaf they should be pinched back to one leaf, and when a new lateral starts from the one thus checked, it should be pinched back in the same manner, and so on through the season.

An able writer and practical grape grower has recently said :

" This checking the growth of laterals not only concentrates the strength of the plants into the main canes, but it prevents the formation of a large number of small leaves, which are of no benefit to the plant, and are of themselves so feeble that they cannot resist disease like large and strong ones, consequently they are often attacked while others escape." And again, " It is a fact not to be controverted, that whenever the vine has unripened branches, there is also a corresponding number of immature roots ; and these are as likely to become diseased, if not entirely destroyed, during winter, as unripened branches."

The entire removal of the lateral as practiced by some, I consider very objectionable. Springing as it does from the axil of the leaf and shoot, its removal leaves a wound where there should be none ; as, close beside it, the dormant bud is perfecting, and nothing should be done to prevent its perfect formation. Then again, the dormant bud may *push* if the growth be rank. This is not liable to occur where the lateral is pinched to one leaf.

Only a single shoot should be allowed to grow on each plant until the stock is of sufficient size for the bearing canes to be grown, and this from the lowest bud on the spur if possible.

The bearing canes may be safely grown when the stock is half an inch in diameter.

During the first year, and until the vine is in bearing, the main shoot should be allowed to grow without checking, until late in August, when it should be stopped. This insures the full developement of the roots, the perfect ripening of shoots and buds, and the leaves will drop from ripeness without waiting for frost.

When the vine is bearing, the shoots should be stopped at from two to four leaves beyond the last cluster, according to the vigor of the vine; some varieties requiring greater length of shoot than others, owing to their rampant growth.

If a shoot is feeble in growth it can usually be made vigorous by allowing two or three of its upper laterals to grow unchecked until the proper size is attained, when they should be pinched back.

During this time all the laterals on the vigorous shoots should be closely checked, for if one part of the vine leads in growth it is sure to maintain it unless held in check. In this manner the vine can be made to grow and produce fruit evenly; and the watching of this process of developing a weak shoot will be found exceedingly interesting.

THE TENDRIL.

Thus far I have only spoken of the shoots and laterals as necessary to be checked. But there is another little member of this annual family growth, which though usually unnoticed, we may find deserving of our attention. I refer to the tendril.

We tie our vines to the trellis, and as the tendril is only a "twining support," it becomes useless, and hence seems of no account. But let us give a moment to it. Three years since, in trying to remove a large tendril which had reached out and was clasping a neighboring shoot and its cluster, I naturally found I could not break it. Applying the knife and carefully untwining it, the shoot and cluster were saved

from being strangled. The question at once arose: Why pinch the laterals to save superfluous growth, and allow this waste of nutrition in the growth of this tough, wire-like tendril, which is entirely useless? Acting at once upon the thought, I removed the tendrils from my vines, and have since continued to do so, to the evident benefit of fruit and vine.

Within the past few weeks I have met with the confirmation of my theory and practice in the following:

"The tendrils of climbing plants, as is well known since Mr. Darwin's discoveries, are continually making circuits to find something to cling to. The grape-vine tendril is the slowest in this rotary motion, making a circuit in about three hours.

"A recent writer in an English periodical notes the additional fact that, if after about ten days the tendril finds nothing to cling to, the motion not only ceases, as Mr. Darwin says, but it soon after dies; whereas the one which finds something early in its search lives the entire season, dying only with the leaves when winter comes. Of course this comes down to a question of nutrition. * * * Referring to Darwin's discovery of tendril motion, he shows that all motion must take food to maintain it, and useless motion must be a heavy draft on the nutrition and consequent vital power of the vine. When running over trees, the tendrils find support as soon as formed, and thus a great waste of nutrition is arrested, and more is afforded for regular growth. This explanation, will, perhaps, meet the question of life or death in the tendrils referred to.

"The tendril, after a ten days' fruitless search for something to cling to, exhausts itself and perishes, and because it is thus exhausted it dies within so short a time."

We here see that tendril growth is very rapid, and though allotted but ten days of life, it consumes a great amount of the nutriment of the vine. They will frequently be seen ten

or twelve inches in length and very large, where they have nothing to clasp. They should be removed entire as soon as they start, except on bearing vines, where they should be allowed to remain until the blossom buds are formed; for we must not forget that "every bunch of grapes commences its formation as a tendril," the premature removal of which would rob us of fruit.

Let me here add the caution, not to touch the vine while in blossom for any purpose if it can be avoided, lest the process of fertilization be disturbed.

THE LEAF.

While thus advising and practicing the stopping of superfluous growth on all vines by pinching laterals and removing tendrils; and, on bearing vines, stopping the shoots, I am no advocate for removing the leaves from the shoots. I would as soon expect ripe, high-flavored fruit after removing the unripened cluster, as by stripping off the leaf opposite the cluster. I give the leaves of the shoots equal care and attention with the fruit.

The leaves are the laboratories in which the sap is prepared for the nourishment, not only of the fruit, but of the wood; and without the aid and companionship of the former neither of the latter can ever ripen.

Dr. Lindley, in *Theory and Practice of Horticulture*, says: "It would be no use for a plant to suck food out the earth by its roots, unless there was some place provided in which such food, consisting principally of water and mucilage, could be digested and so converted into the matter which maintains the health of the individual. The stem cannot do this, because it is a mere channel through which the fluids pass. It is to the leaves that this important office is assigned. They have veins through which their fluids pass, and cells in which they are held while digesting; myriads of little caverns through whose sides respiration is maintained, a skin to

guard them from the air, and pores for carrying off perspiration.

For the power which the parts of plants possess of attracting fluids, is in proportion to their amount of perspiration. Now leaves perspire copiously, but the grapes themselves scarcely at all; whence their gradual conversion from a substance of the texture of a leaf into a mass of pulp.

A leaf is, in fact, both stomach and lungs, and of this we may be certain that neither taste, perfume, color, size, nor any other property, can be given to a plant except through the assistance of the leaves. Strip the ripened grapes of their green garments, and no color or sweetness will be collected in their berries."

And yet, Dr. Lindley advocates stopping superfluous growth in some cases, and specially instances the vine. He says:

"In this plant the fruit is borne near the base of the lateral shoot, which will, if unchecked, go on lengthening and producing leaves to a considerable distance. Now, all the food of such a lateral shoot is obtained from the main branch, which, however, is only capable of furnishing a certain quantity. If the lateral shoot is allowed to grow unchecked, it will consume its portion of food in the proportion of many leaves and some grapes; and the more there is of the former the less will be the weight of the latter.

But if the shoot is stopped after having formed two leaves, all the quantity of food which would have been consumed in the production of leaves is applied to the increase of size in the grapes and the leaves that are left; while the general crop of leaves on the vine will be amply sufficient to prepare those secretions which are to give flavor, color and sweetness to the grapes.

In vine pruning, the great object is to leave on the shoots just as much force as may be required to secure for the bunches the food that is intended for them, and at the same

time to deprive the laterals of the means of expending the food uselessly in the production of leaves instead of fruit."

We have here sound philosophy and the best of instruction.

Under this process of checking growth, about the first of September we find the shoots fully ripened to their tips, as are also the spurs of the laterals (where stopped). The fruit ripens earlier and is often double in size and quantity to that on the unchecked vine, while in sweetness, richness and flavor, there is no comparison.

It is from such culture, that the best results thus far have been obtained in the open air.

FALL PRUNING.

We have seen that the proper time for fall pruning is just after the leaves have fallen. Also that on the falling of the leaf the shoot becomes the cane. Lying alternately along the sides of the cane we now find the dormant buds to which frequent reference has been made; and if the process of checking growth has been such as indicated, they will be found round and full almost to bursting; and seemingly impatient for the coming spring.

In these are centered the hope for next season's fruit, and if properly preserved during the winter each will produce its shoot with full complement of leaves, laterals, clusters and tendrils. But we readily see that if all are left, our vines will be but a dense mass of foliage, which will appropriate in its growth most of the nutriment that can be furnished, with little hope for fruit. We therefore prune, and for this pruning, I have found one simple rule a sufficient guide in every instance, whatever the system of training may be.

First find where we want a shoot or shoots to grow the coming year. Then leaving one additional bud on each shoot, cut away all others.

This applies, as well, to pruning before the vine is in bearing.

Should the buds all grow in the spring, the last one on the spur can be rubbed off. Should one fail, we have the extra bud to supply its place. Following this rule, pruning can be done correctly, and after a little practice, rapidly; and I have found it worth more than all the pages of minute instruction in books, or the advice of those who prune without system or reason.

It should be borne in mind always, that a weak bud will produce a feeble shoot and inferior fruit. If then when rubbing off the superfluous bud we can discriminate in favor of the one most fully developed, we shall be gainers, but this should never be done to the sacrifice of the lowest bud if possible to avoid it, for this lengthens the spurs too fast.

COVERING FOR WINTER.

The vine should be placed ready for covering as soon as pruned, but if left uncovered until the ground is frozen it will not be injured. It is in the alternate freezing and thawing that the buds sustain injury.

Before covering for the winter, the ends of the spurs should be allowed time to season, thus preventing the loss of sap through the wounds, when we uncover in the spring.

For winter covering I have found the soil the best material, and over this a light covering of straw or coarse litter to prevent the wind and rain from displacing it and exposing the buds. If the soil be a clay it should not be used, as the water held by the clay is liable to kill the buds. Others reverse the process, first covering with straw or litter, and then soil. One of the most successful amateurs of this State says, "the best covering is marsh hay." A most essential point should never be overlooked: the vine must be so placed that all water will readily drain from it.

In the spring the vine should be left covered as long as possible, for the later the buds can be made to push the better, as they not only escape late frosts, but their excitability seems to be so intensified by being thus retarded, that their

after growth is much more vigorous than it otherwise would have been.

TRAINING.

The systems for training the vine are numerous and most of them have long been in use. The most frequent with us are the arbor, the stake, the vertical and the oblique stems, and the horizontal arm. Of these I have tried several, and carefully examined others; and from experience and observation I give a decided preference to the horizontal arm and spur system. The arbor is adapted more for ornament and shade than for the production of fruit.

The objection I find to the vertical or spiral cane trained to the stake, is, that the shoots grow laterally; the foliage and fruit droop, and hanging in masses, afford hiding places for insects, collect and hold moisture, thus inducing mildew and other diseases; the stakes break in storms unless frequently renewed, with liability to injure both vine and fruit. In the vertical and oblique training of the stem, I find nothing that cannot be better attained with the horizontal arm.

While I would not deny that good fruit is often produced by all of these systems, there is one serious objection to them all. The canes or stems growing more or less upright, the tendency of the sap is rapidly to the extremities, and the most rapid growth and best fruit is usually found on the highest shoots, while the lower shoots will be feeble, the fruit they produce inferior and the vine out of balance.

There are those who insist that we must follow nature strictly in growing the grape. While I would take nature as my guide, it might be found that we differ only in our interpretation of her.

If we observe the vine in the forest, we find it spreading over the loftiest trees or covering the humble shrub. In either case the fruit is borne at the top; for while growing upright it produces its most vigorous growth of wood, but little fruit. It does not produce fruit in abundance until it

reaches a point where it must spread out horizontally, and it matters not whether this be on the highest trees or low shrub. If then the horizontal is the natural and best position that can be given the vine to develop its fruiting powers (and this is the main object in all the various methods of training and pruning), the earlier we can give it this position the better.

With the horizontal arm we obtain this from the start. The upright bearing shoots being spread out equally along the arms, no portion of the vine has any advantage over another, the flow of sap being equal to all parts; and the air and wind having free access, thus rapidly freeing the foliage from moisture, and in checking growth; or if disease or insects attack the vine, every part, shoot, lateral, leaf and fruit can be readily seen and separately examined.

On the horizontal arm the fruit grows in its proper position; the largest clusters nearest the base of the shoots. Frequently the lowest will be double-shouldered, and the next shouldered, while the upper will be a simple cluster.

Again, with low training the fruit receives a greater amount of heat than when growing high on the trellis, as it gets not only the direct rays of the sun, but also the heat reflected from the earth. In our northern climate this is a most important point.

Should the spurs ever become so long as to be inconvenient, new arms may be readily formed by growing one shoot only from each of the center spurs. These should be stopped at about five feet, and not allowed to bear fruit while the remainder of the vine will produce the usual crop.

At the next fall pruning cut away the old arms, prune the two canes to the desired length, and bend them down to form the new arms. But if proper pruning has been given, the arms will not require to be renewed oftener than once in about fifteen years.

Thus we find the vine the most plastic of all fruit bearing

plants. If left to itself it often climbs the lofty tree and bears its fruit far beyond our reach ; but controlled and directed by the will and hand, it bears its most delicious fruit within reach of the child.

A good and cheap trellis for this system is made of light posts, bars two inches wide, sawed from fence boards, and common lath. The lower bar is placed about a foot from the ground ; the upper, the length of a lath above it. To these nail the lath, nine inches from center to center, and you have a cheap trellis, good enough for the garden. A coat of whitewash is an improvement, but without it the vine will soon cover the trellis, and it will only be seen in winter, when the grape garden or vineyard, at its best, is seldom ornamental.

VARIETIES.

On the subject of varieties, every one who writes or speaks of grape growing is expected to have an opinion and list, in readiness for all. I have no special list to recommend indiscriminately, but I confess to an opinion in the matter, formed from observation and experience, and will try and give it.

Usually the first inquiry is, " what shall we plant ? " Before the intelligent cultivator can answer this, various other matters of importance must be settled, such as the location, soil and its condition, the wants and tastes of the individual, and the culture he has decided or may decide to give ; for this latter usually has little or no consideration.

If only the common varieties are wanted, and he has a taste for nothing better, his list is soon made up and his wants supplied. But the choicest grape is as much to be desired as the choicest of other fruits, and the list of such varieties is not small ; in fact I think it is more numerous than that of the purely common grapes.

I spoke of location as important. For several years we of southern Wisconsin were cautioned by gentlemen of north-

ern and central Illinois, to beware of certain varieties of choice grapes which we were planting, but which had universally failed with them, and they advised, if we planted them, to do so sparingly. And yet we find them as free from disease as others, and yielding annually the most prolific crops.

A gentleman in our city, who lives on the shore of Lake Monona, his gardens sloping to the south east, has been raising successfully for years the delicious Iona. On his advice I planted it without hesitation three years since, but have never succeeded in getting vigorous growth or fruit, though I hope for a small amount of the latter the coming season. My garden is on the opposite of the city from his, on the shore of Lake Mendota, sloping to the north west, and I know of no difference in our soils.

He, from his experience, would probably advise my neighbor to plant the Iona. I, from mine, should advise him to plant it if at all, only for trial, while I would advise his neighbor to plant it, confident that he would succeed.

The experience of others has been similar to mine under like conditions. I cannot satisfactorily account for this, but here are the facts, and I mention them to show that often within a short distance, with only changed conditions, we find a marked difference in the success of the same variety.

I might make a list for you of "the valley of the lower Fox," in which the cultivators here could probably point to varieties at which they would laugh, and justly. My opinion then is, that no one in any locality can make a list for another locality, that will surely succeed, and my advice in this matter to any one who desires to plant the grape without experimenting in varieties, would be, to consult some one in his near vicinity who has had experience, and then follow his recommendations. And I caution you to take the advice of no traveling stranger who has plants of untried varieties to

sell, and who "knows they will succeed here because they have in Ohio," or some other locality.

And yet it is by experimenting that the choice grape suited to any locality must be found, and those who have the time, taste and inclination should do this without hesitation. Those who have been doing it in late years, are now in many instances richly repaid for their perseverance.

GATHERING THE FRUIT.

Gathering the grape before it is ripe is the too common practice. Grapes thoroughly ripe are seldom found in the market. The reasons for this are various. Naturally we become impatient for the harvest, after so much watching for the ripening of the fruit.

The demand for early grapes, and the desire to be first in market and thus command a high price is a great inducement to the gathering of unripe fruit with those who raise it for the market.

Again, some suppose them ripe because they are colored and appear to be ripe, when in fact they have only begun the ripening process. Others gather unripe grapes from necessity, the culture given them having been such that they can never ripen.

Most varieties change their color fifteen or twenty days before they become fully ripened. Now the grape is a fruit that must be matured in perfection on the vine or not at all. When the fruit is ripe the stem of the cluster near or at its junction with the shoot will be found brown and drying, or, properly, ripening. It is safe now to gather it as ripe fruit, but far better to err, if at all, on the side of over-ripeness, for such fruit will keep much better than that not fully ripe, and some varieties are greatly improved in their mellow richness by a few additional days on the vine.

In Agricultural Report for 1869, William Saunder, Superintendent of Garden and Grounds, says:

"No grape attains full maturity until the wood supporting the bunch becomes brown and hard, and the foliage is assuming its autumn coloring; in other words, ripe fruit cannot be gathered from unripe wood, the ripening of the fruit depending upon the general maturity of the current growth of the plant.

I am aware that this but seldom occurs in ordinary culture and management, the fruit being gathered, usually, long previous to the ripening of the wood; that is to say, the fruit is picked before maturity."

If the process of checking growth of which we have spoken has been faithfully followed, the reward will now be, in harvesting large, delicious fruit, from thoroughly ripened wood one or two weeks earlier than imperfectly ripened and inferior fruit can be gathered from the unchecked vine.

KEEPING THE FRUIT.

Many varieties of the grape can be kept far into the winter, some even until spring, and as the earliest usually ripen in August or the first of September, with a well selected assortment of varieties we may have it in season nearly or quite as long as the apple. For keeping they should be gathered when the vines and fruit are dry, (the middle of a bright day is the best) spread a few days for the evaporation of any chance moisture, and the drying of the ends of the stems. All unripe, decayed and imperfect berries should be removed. Then pack in shallow boxes two or three layers deep, with or without a thickness of paper between the layers, cover the boxes and keep dry and as cool as possible above the freezing point.

Perfectly clean, dry oats are excellent for packing—there is not the objection to them that is found in sawdust, chaff, chopped hay or other fine and dusty materials. The fruit will require an occasional examination, but with a little care we may enjoy it for months.

ENCOURAGEMENT TO PLANT IN WISCONSIN.

I have thus hurriedly given the process of growing the grape, from the planting of the root to the storing of our fruit for winter, a subject, the full details of which, requires a book to be written.

I would not be understood to represent the raising of this delicious fruit as free from discouragements and disappointments, for they are to be met in this as in all other human efforts. The root we set with so much care will sometimes fail, the bud be weak, and the growth feeble, disease and insects are to be met and fought; but all these we must encounter in any attempt to raise fruit, no more with grapes than others; and in our State much less than in most localities.

It may be objected that what has been named as necessary to successfully grow the grape will require much time and labor. For vineyard cultivation this would be true, but for the garden it need not be so. An hour to-day, a half-hour to-morrow, that might not be given to any definite object, thus on through the season, and all has been done that has been enumerated; and what at first seemed labor, has become a pleasant recreation.

One of the greatest needs in our State to-day is a supply of fruit, and while waiting for the growth of the orchard and for the apple, our chief dependence must be upon the small fruits. Each of these has its appropriate place, and season; none of them could be spared, and all should be raised to the limit of our wants. But most of them ripen early in the summer, and their season continues but a few weeks at most. The grape should supplement all these, closing up the season with its profusion of varieties. It should be found in every home. The farmer with his plentiful acres cannot afford to be without it, while the laborer, the professional man or mechanic in village or city, should find at least a corner in which to grow a vine in some form. Only a few

square feet of earth will grow it on the upright trellis or stake, and better in that form than none at all.

The coming spring is the time to begin if you have not already planted, for if you delay you are certain to lose a year in the growth of your vine, and one season's fruit.

A further inducement is, that few plants will so fully repay your labor and care. It bears fruit at three or four years of age, and continues to improve in quality and quantity with each succeeding year.

Again, you may be planting for others to harvest, in the far-distant future, for the vine lives to a great age. In Italy the vineyard of a hundred years is spoken of as young.

I have been greatly encouraged in my hopes for the success of the grape in our State by the favorable accounts from this valley and region.

Our friends who visited your fair last autumn returned with wonderful stories of the mammoth clusters and berries with which their eyes and palates were feasted. Your representatives at the late meeting of the State Horticultural Society gave the most favorable report of the grape. In our part of the State we can report the like favorable results, while our eastern friends who visit us are astonished that such fruit can be raised in Wisconsin.

What I have said has been with special reference to raising the grape for its use as a fruit. In its use for the manufacture of wine I have had no experience. Neither have I made reference to the vine as an ornamental plant, though on this point full chapters are often, and justly written; and it has been a matter of surprise to me that woman has not more frequently seen its beauty and grace, and found great pleasure and recreation in the garden culture of the grape. After the first work of planting, and with the exception of the winter covering and its removal in spring, the labor is scarcely greater than that of the flower garden. Why not then divide your care and taste, and give the vine

a place beside the flowers? The growing beauty of the cluster may not so suddenly surprise you as the bursting rose, but the reward is far richer.

A chaste writer gives us, in most delicate language, its grace and beauty: "The vine is one of the most graceful of plants. Its beauty is not of a glaring or self-asserting character, but quiet and unobtrusive. It is not possessed of showy-colored flowers, but is distinguished for the grace of its foliage, the fragrance of its blossoms, and the exquisite symmetry of its fruit, and its full, overspreading luxuriance.

Every leaf in its shape, venation, and coloring, is a model of beauty, while painters tell us that to study the perfection of form, color, light and shade united in one object, we must place before us a bunch of grapes. In every country where it is cultivated, the vine forms one of the most beautiful features of the landscape."

If then it combines with the useful so much of beauty and grace, let us unite to make Wisconsin the home of the vine.

MANUFACTURING CAPABILITIES OF THE FOX RIVER VALLEY.

BY A. J. REID, EDITOR OF THE APPLETON POST.

Mr. Chairman, Ladies and Gentlemen:—In constructing a wagon I believe a mechanic places the little wheels in front and the big wheels behind, which method utility sanctions and approves; and although I will venture no criticisms, yet it must be apparent to all, that in the arrangement of this programme the officers have ignored this rule and placed the big wheels in front and the little wheels behind. Of course I speak for myself only, and may add that I trust this order may not reverse the upward progress of the machine. However I will offer no further apology for the unusual position in which I appear. The officers of your organization have

done me the honor to request that I furnish a paper for this occasion on the manufacturing capabilities of the Fox River Valley, and although the discourse may, and doubtless will be, unworthy the text, yet I will venture to ask your indulgence while I read as well as I can what I have written as well as I could."

The history of the pioneer from the time he surrenders the luxurious comforts and many advantages of his New England home and settles in the new country until it becomes fully developed, is attended with a series of important results which impart to American civilization some of its most distinctive features. Whether he is conscious of it or not, he is an important agent in the progressive economy which characterizes our history as a nation. If ever an epigram were justified by the logic of events—events of our own times—in which each one of us have played a part more or less conspicuous, it is the oft-quoted saying of Bishop Berkeley: "Westward the star of empire takes its way." It is scarcely a century ago since the population of the United States was less than two and one-half millions, and our total property valuation was less than six hundred and twenty millions of dollars. It is within that time also that this country first claimed a position among the political powers of the earth. In what country, and during what age has this era of progress been equalled? To-day we have a population exceeding forty millions, a property valuation of over thirty billions of dollars, and the sceptre of our political power has not only been extended throughout the vast domain bounded by the oceans, the lakes and the gulf, but it is even being handed across the Atlantic and placed unsought in our grasp. Whither must we look for the causes which have contributed to this celebrated era of national development? Among all the various classes which may present themselves as candidates for the honors and the credits due for this vast multiplication of wealth, the modest and sturdy pioneer ranks in

importance with the most industrious elements of society. His story is simple, but it is the initial point of a grand plot in which is displayed the evolution of national wealth from the crude materials in nature's storehouse.

He settles in his western home, and makes available the uncultivated resources of the soil to minister to his immediate wants. Rude cabins are erected to protect him and his from the ravages of cold; the virgin soil is invited by the hand of industry to surrender of its elements in sustaining a new order of vegetable life, by means of which his additional physical wants may be supplied. Thus his efforts are exerted and year after year he approximates nearer and nearer to his dreams of an agricultural Utopia. His surplus earnings are appropriated to an enlargement of his facilities for operations. His wants and desires, in common with those of the whole community, multiply proportionately with the advancement which is being made. His constant contact with the elements about him enables him to see undeveloped wealth other than that which the soil can produce and which, if properly utilized, will contribute to a more advanced state of society. Accordingly manufacturing interests secure some attention. Grist mills are erected for the better preparation of breadstuffs; Saw-mills are established to furnish materials for a more comely and comfortable class of dwellings, and thus a work is done for the entire community, better and cheaper, which individuals were previously compelled to do.

The influx of population follows, wealth increases, greater familiarity with the resources of the country is acquired. Foreign demand for the products into which its crude material can be converted encourages and warrants the establishment of new branches of industry. The community realizes that its future importance and the maximum standard of wealth to which it is possible to attain depends upon the uniform and complete development of its natural resources.

Of course it is only such localities as are highly favored by

nature that can hope to excel in the new and enlarged capacity which I have indicated, because the value of all industrial products is provisional first upon the cost of production, and secondly upon the expense of placing them in the hands of consumers. The cost of preparing industrial products for consumption, likewise depends upon two considerations; first, the labor which is involved in securing the raw materials which is determined by the distance at which they are created from the manufacturing center, and secondly upon the facility with which power can be secured to convert these materials into the various products for which they are adapted.

In all cases, therefore, the value of the fruits of industry depends upon the surplus realized by the manufacturer after the cost of production and transportation have been subtracted.

Sacred history teaches us, and the lesson is confirmed by observation, that in the distribution of her gifts nature has bestowed upon her children, some one talent, some two, some three, and some ten talents. So in the arrangement of her physical resources, she seems to have bestowed special favors. And in the latter case, as in the former, their greatest utility depends upon their greatest development.

To the savage who occupied this valley a quarter of a century ago, it displayed no greater practical advantage than the least favored part of the vast territory over which he roamed. Its advantages existed then as they do now, but could be of no service to mankind until they were properly utilized.

Of course the first and chief feature of the superiority which this valley possesses, and which is destined to make it sooner or later the great manufacturing center of the West, if not the entire country, is the not only unsurpassed but unequalled water power afforded by the Fox River. What part of the universe with which he has to do has not man in his vanity assumed to suggest some improvement on the origin-

al design? The Fox River water power, however is an exception which lies beyond the domain of criticism. Its flow is as ceaseless as the attraction of gravitation is constant; its supply as regular and uniform as the change of seasons; its volume sufficient in extent to furnish investment for three hundred millions of capital and employment for one-half million of mechanics and laboring men.

While other streams are crippled in power by drouths and rendered furious and dangerous by freshets, the Fox River is always the faithful servant of industry, and is never disturbed or rendered unreliable by the action of the elements upon it. The Lower Fox, to which I now specially refer, has its source in Lake Winnebago, which serves as an immense reservoir so extensive in its area that the difference between the maximum and minimum quantity of water which is discharged through its outlet is never greater than three feet. And the lesser quantity is always ample to subserve both the purposes of navigation and large manufacturing interests as well.

The value of rapid streams to the manufacturing industries of the world is almost beyond calculation and affords superior advantages in furnishing power, to any other of the natural agents. Steam is valuable and can be appropriated to a greater variety of purposes, and to dispense with it would place us a long way back on the road whereby we have advanced from barbarism. But power thus furnished and communicated to machinery involves far greater outlay than that supplied by falling water.

The apparatus required and the material necessary in its production creates an expense which forms no inconsiderable item in the annual disbursements of the manufacturer who uses it. The iron muscles to which it imparts life and power may never weary, but they have to be replaced at an expense vastly greater than that which is necessary in the utilization of water. Its generation is preceded by a consumption of material which in most localities is important. But the flow

of water is ceaseless, and for which nature exacts no royalty, and with which the spread of civilization does not interfere or lessen.

The object of this comparison is not to demonstrate the inadequacy of steam, but to show the superior advantages possessed by water falls as a means of creating, or rather transferring power for manufacturing purposes. The value of steam consists in its universal application; that of water in its special application.

The Hon. William D. Kelly, in demonstrating to a southern audience the impractical and unwise policy of slavery, stated that a dozen men and dogs had often followed for days on the track of one lame negro, while water-power equivalent to the muscular force of a thousand negroes ran to waste unregarded beside them. We smile at the policy thus forcibly exposed; but might not this smile, when we consider the vast and almost unlimited power of this kind which is still unappropriated in this beautiful valley, be broadened into a laugh and turned against ourselves?

Notwithstanding the importance we imagine ourselves to have achieved, (and considering our age it is perhaps all that could be expected) and to show how we are as yet only partially developed, I append the following statistics. The power afforded by water falls on the Lower Fox River, between Lake Winnebago and Green Bay, is as follows:

Neenah and Menasha	- - - -	3,000
Appleton,	- - - -	11,500
Cedars,	- - - -	3,000
Little Chute,	- - - -	11,500
Kaukauna,	- - - -	14,500
Rapid Croche,	- - - -	2,300
Little Kaukauna,	- - - -	2,300
DePere,	- - - -	2,300
		<hr/>
Total		49,900

Of this amount, notwithstanding the numerous industrial establishments that are in operation in this valley, and the millions of dollars in products which they are distributing over the world each, year, not more than 20 per cent. of this vast power is appropriated at the present time in forging iron, in fashioning textile fabrics, in converting timber into building materials, wagon stock, and furniture; in changing cereals into breadstuffs, and various kinds of crude materials into articles which the country is already looking for us to supply.

The remaining force of this mighty agent sweeps onward to the sea, impatient to be harnessed by man's genius, and invited by it to promote great interests, and subserve the wants of our citizens.

Let us view the matter in another light. Power is value when it can be made available. A given amount of power contained in a water-fall is at least equivalent in value to the same amount of power invested in horses and mules. The power that is running to waste beside us is, therefore, equivalent to the muscular force of forty thousand horses. It is true, that the horse may do man's bidding on a wider area, but there is a limit to his endurance, and it costs something to create the power which he is competent to exert. But it will answer our purpose to call their value equal. An average horse is competent to earn for its owner at least fifty cents per day. Forty thousand horses, therefore, would be competent to earn \$20,000 every day; and in one year they could create value to the extent of \$6,000,000. And yet, this vast amount of wealth hurries past us every year, and becomes buried in the bosom of the sea. These figures may be startling, but the conclusions are warranted by the facts which precede them.

A pertinent question before we proceed further would be, what course would the people of the Fox River Valley be likely to pursue if this vast power and its attendant value

were invested in so many horses, instead of water-falls? Would they be likely to say, because we have not the means to provide apparatus for employing them, we will, therefore, let them remain idle? We will not even place them in the market, and advise capitalists how an investment of their means in their possession would be a profitable transaction for the buyer and seller? Would not such a policy be entitled to ridicule?

I offer no unfriendly criticism upon the enterprise of the people of this valley. I know the practical difficulties to be overcome in developing resources such as we possess. But still, I maintain that we have not done all in our power to make known our superior advantages to the outside world. The people of this valley should be more zealous in explaining to the world their elements of supremacy. They should have agents employed who are competent to effectually represent their interests to capitalists, and at the monied centers of the country. The bread thus cast upon the waters would return after many days.

But the story is not yet half told. It still remains for me to explain the resources of this beautiful valley, upon which the perpetual smiles of the Almighty seem to rest; and of the country tributary to it.

The fertility of its soil alone is an element of wealth which can be reckoned with the most flattering results. Perhaps a few general statistics will enable us to approximate nearer to reliable information. I name only such counties as are contiguous to this stream, which annually produce in value, agricultural products, as follows:

VALLEY OF THE LOWER FOX.

Counties.		Tot. value of farm products.
Brown,	51,884	\$860,127
Outagamie,	74,886	904,021
Calumet,	62,194	776,848
Winnebago,	152,819	2,210,718

VALLEY OF THE UPPER FOX.

Green Lake,	97,149	1,536,438
Waushara,	59,760	843,228
Marquette,	62,219	697,709
Columbia,	251,814	2,913,307
Total,	812,725	9,742,486

These figures are according to the census reports of 1870, and in view of the rapid progress in the development of the country since that time, we may add at least twenty per cent. to the above figures; making the total annual value of the agricultural products of the Fox River valley nearly \$12,000,000.

The amount of timbered land in the same territory, leaving out every acre that is otherwise unimproved, is as follows:

Counties.	Acresof timber land.
Brown, - - - -	98,302
Outagamie, - - - -	107,861
Calumet, - - - -	88,424
Winnebago, - - - -	53,749
Green Lake, - - - -	43,090
Waushara, - - - -	35,560
Marquette, - - - -	97,008
Columbia, - - - -	73,703
Total,	597,697

Thus, 597,697 of magnificently timbered land, or nearly 40 per cent. of the entire area of the territory of which this valley is composed.

Horace Greeley announced, in one of his papers on agriculture, that an average of fifteen per cent. of the area of a country would afford an ample supply of timber for the miscellaneous wants of an agricultural people. Upon this basis there may be appropriated 25 per cent. of the timber which is still standing in the Fox River Valley, for manufac-

turing purposes, or nearly 150,000 acres. Placing the average quantity per acre at 5000 feet, which is by no means an excessive estimate, and we have 750,000,000 feet of timber which is awaiting the further establishment of manufacturing enterprises to convert it into the materials for which civilization is making ever increasing demands. These figures are not the result of guess work, but have been taken from reliable statistical resources. They may be startling, but if the effect of thus presenting them is to assist in awakening the people of this valley to a realization of the fact that they may become a wealthy people by utilizing the advantages which they possess, then the object of this paper will have been accomplished. And it is needless for me to add, that the most extensive and profitable returns can only be realized by the establishment of new industries by which these crude materials can be manufactured in our midst.

But I have as yet only glanced at the capabilities which, if not in our immediate possession, are still at our command. The Hon. S. D. Carpenter, in his recent address before the State Board of Agriculture, estimated that there are produced in the several States and Territories to which, when properly improved, the Fox and Wisconsin Rivers will afford the cheapest and most feasible line of transportation, 1,500,000,000 bushels of cereals every year. From this he deducted 200,000,000 bushels for home consumption, leaving a surplus of 1,300,000,000 bushels of cereals, or if reduced to another denomination, making 40,000,000 tons to be shipped to eastern markets, and from there distributed to various parts of the world. This statement exhibits in a forcible and striking degree what immense resources are at our disposal in the way of agricultural products. And if only a fractional part of this vast amount is utilized, we can readily see how the Fox River Valley may become the grand center for the converting of cereals into breadstuffs for the entire country.

But I find that this subject is growing on my hands, and the more thorough the investigation of details, the more bewildering are the results that follow. Still I would ask your continued indulgence while I discuss the subject a little further.

By means of the improvement of the Fox and Wisconsin Rivers, as now contemplated by the Government, we will be placed in the most convenient relations with the Mississippi States, which embrace the most prolific cotton sections of the entire South. This important product is raised in greatest abundance in eastern Arkansas, western Mississippi, and in the north-eastern part of Louisiana, which section is divided by "The Great Father of Waters." And, it is a fact which investigation will support, that cotton raised in at least one-half of the Southern States can be delivered at various points along this Valley at a much less cost than that which is involved in laying it down at the manufacturing centers of New England. The route is more direct and the distance is not more than one-third as great. In addition to this, it is well known that the route of vessels bearing this product to New England, along and around the coast, is an exceedingly dangerous one, and at some seasons of the year is attended with great loss. The result of this is to make insurance high, and the expense of transportation much greater.

In the route described by the Mississippi, Fox, and Wisconsin Rivers, we see that these difficulties are so greatly lessened as to almost entirely disappear. Hence we see that the manufacture of cotton along the Fox River is entirely practicable and feasible. And, I am sure that though the present generation neglect to carry this policy into effect, their children will not fail to establish and exercise it.

Of one thing we may be certain, that in the manufacture of cotton fabrics with which to supply the people of the country west of central Ohio, we can not only compete with the producers of New England, but we can furnish this class of

goods cheaper than they can, because as we have seen, our facilities for securing raw materials are superior, and our advantages for manufacturing at least equal to theirs—leaving the cost of delivering these goods in our favor. And I even believe that the assumption is attended with no valid doubt, that cotton goods manufactured in this valley can be laid down as cheaply in New York city as those produced on the Atlantic coast.

The relation which this valley sustains to sections of country that are rich in mineral deposits is worthy of more extended consideration than I can bestow upon it at this time. The inexhaustible mineral resources of the country bordering on Lake Superior are too well known to require the presenting of statistics in this connection.

With these districts which abound in iron, and which are less than 150 miles distant, we are connected with a reliable line of water transportation, which in a very short time will be competent to receive vessels of six feet draft. And by the advantage for shipping thus afforded, as experience has already proven, we can manufacture iron in this valley as cheaply as it can be produced in the mining districts. And by reason of the abundance of timber in this section—fuel being an important element in its manufacture—we can furnish a better grade of iron than is produced with anthracite coal in the great iron districts of Pennsylvania. Within the borders of our own State also, the discovery of new and rich iron deposits are constantly being made.

It is known that the Penoka Range, in Northern Wisconsin, which owing to its hitherto isolated condition, has been developed little or none, contains immense and inexhaustible beds of iron ore, averaging 60 per cent. of pure metal, according to the Geological report of David Dale Owen. This rich district will soon be rendered accessible to the manufacturing interests of the Fox River Valley, by the extension of the Wisconsin Central Railroad through its very heart. Tak-

ing our natural advantages as a basis to reckon from, the manufacture of iron ore into pigs, and this pure metal into the various products for which it is adapted, must, or at least ought to, become a very important industry in the Fox River Valley.

The mineral regions of Lake Superior, as well as sixty-two townships in south-western Wisconsin, all of which are accessible to this valley by water communication, also abound in lead, copper, silver, plumbago and immense marble beds, all of which can be utilized by the natural power for manufacturing here afforded, in supplying the numerous and ever increasing demands of civilization.

I have already referred to some of the resources at our command in the way of timber. I have presented figures to show the immense quantity which still remains in this valley for manufactuaing purposes, exclusive of the reserve required to fairly supply the country; but this is not a tithe of the material which we may appropriate if we desire. Beyond the limits of our beautiful valley, to the north and west of us, are immense virgin forests where no trace of the innovations of industry is yet seen, and whose silence is yet unbroken save by the voice of the storm-king in his fury.

Before the expiration of another year, these vast store houses of undeveloped wealth will become subject to our demands by the extension of railroads to and through them. They await the establishment of industries here, by which to be made to subserve a higher and greater purpose.

I have thus endeavored to explain the advantages which we possess in order to achieve distinction as a manufacturing center, viz: a convenient relation to an abundance of all kinds of raw materials, with which to supply great diversified industries, and plenty of natural power to accommodate extensive manufacturing interests. But in addition to this, as I hinted at the outset, the cost of shipping manufactured products to the points of general distribution, is an item to

which great importance attaches, but which I have only time to briefly touch.

The value of being situated on a reliable line of water transportation can hardly be estimated in dollars and cents, such as the great water path across the continent, of which the Fox and Wisconsin rivers will be an important part, when improved as now contemplated by the government. The industrial interests of the Fox River Valley pay an annual tribute to railroad corporations, in the way of freights, not less than \$1,250,000. The total amount of freights on the same quantity of products shipped by water, would not exceed \$300,000. Admitting that business dispatch requires that one-half of this amount be shipped by rail, and our manufacturers may still realize a saving of at least one-half million of dollars, by reason of the facilities afforded by the water channel on which they are situated.

In addition to this the competition for freight, thus created necessitates a reduction in the rates of shipping by rail, of at least fifty per cent, during seven or eight months of every year. We, therefore find the general effect of our favorable situation, to be to enable the manufacturers of this valley to add to their annual profits 75 per cent of the whole amount which they would otherwise be compelled to pay out for freights every year. And taking into consideration our prospective increase, this annual saving will foot up to a fabulous sum.

Before closing these remarks, it strikes me as being pertinent to the question under consideration, how we can best encourage the establishment of new industries in this valley, and the enlargement of those already in operation. That policy, it seems to me, is to advocate and support a system of protective tariff. So far as history has enlightened us, the manufacturing interests of no country have ever been established upon an independent basis without such assistance. Napoleon the First was an eminent protectionist, because in

this policy he recognized one of the strongest elements of independence.

England built up her great industries only by observing a rigid system of protection for over five hundred years. And she did not discard it until she had achieved dominion over all her rivals, and a monopoly of the commerce of the world. What the milk of human kindness is to the helpless babe, so a protective tariff is to the manufacturing interests of a new country. It was the tariff that was established in 1861 that enabled the industries of this country to increase, during the past decade, from less than two billions to over four billions of dollars. It is that which has increased the wealth of the United States, during the same time from sixteen billions to thirty-two billions of dollars.

The prime importance of protection is that it establishes and preserves a uniformity of prices. This can be illustrated by a reference to any of our experienced manufacturers. Take Cast Steel for example. Until about thirteen years ago, we depended mainly upon the English for the manufacture of this article. Prices ruled at such a rate that men in this country found it could be produced here for the same figure. Accordingly they engaged in its manufacture, and if prices remained as they had been, they would have asked no protection by tariff or otherwise.

It was then that the foreign producer, seeing that his profits were endangered, began the process of crushing out this new trade, by reducing the prices which were previously obtained. But at this point, we argue that the government should step in, as it has done, and protect the new industrial interest.

It thus adopts a policy which develops its wealth, and at the same time, as I have shown, imposes no new tax upon the consumer, other than that which was previously exacted from him by the foreign producer. The same thing may be said of any other commodity which is protected in like man-

ner. And upon the encouragement and maintenance of this policy, I believe, depends in a large measure the completest development of the resources of this valley.

In the foregoing I have endeavored to show what our advantages are, and how they can best be utilized. But it would not be the fair thing to do, to close the books without at least indicating the proper credit for the enterprise which is manifested, and the advancement which has been made. A few figures will best explain. The various counties embraced in the Fox River Valley, annually manufacture products which amount to the following respective values :

Counties.	Valley of Lower Fox.			Dollars in products.
Brown,	-	-	-	\$2,076,410
Outagamie,	-	-	-	1,108,292
Calumet,	-	-	-	157,260
Winnebago,	-	-	-	5,209,947
	Valley of Upper Fox.			
Green Lake,	-	-	-	390,123
Waushara,	-	-	-	271,494
Marquette,	-	-	-	233,177
Columbia,	-	-	-	713,139
Total,				\$10,661,842

It is proper to add that four years have elapsed since these figures were compiled, during which time, it is safe to estimate that the annual amount of our manufactured products have at least increased one-half—in Outagamie County they have more than doubled—in which case they would represent a value of \$20,000,000, which is by no means a discreditable exhibit for a country which has only just passed its majority.

In this paper I have endeavored to present facts only, and have made no attempt to embellish them with pictures of the imagination. From them we are enabled to see what has already been accomplished, and of the grand possibilities which are within our reach.

Of our future no man can tell, and I should not undertake to predict. But where nature has distributed her favors with such princely munificence, and where industrious man has already sown the seeds of commerce, culture and civilization, may we not expect, even within the period of the present generation, a rich and bountiful harvest? And should this country be destined to illustrate the frailty of all things earthly and material — if corruption shall debauch her legislation and palsy her manly strength, let us not doubt that the last struggles of expiring liberty will be made in this favored spot — in the green glades and grassy dells along this beautiful valley of the Fox — where its roots will have the firmest hold in the industry, culture and patriotism of her people.

INTELLIGENCE IN FARMING.

BY J. M. SMITH.

Mr. Chairman, and Gentlemen of the Convention:—Many years since, my now aged father made his first trip to the then great West. At that time all the country west of Ohio was a vast territory or wilderness or both. Just fifty years later he made another western journey and visited me at my home in Green Bay. One day while conversing with him about the vast improvements in the west, I said to him what would you have thought if some one had said to you fifty years ago, when you were traveling on foot where Chicago now stands, that you would live to see the day when you could leave your home in New Jersey, and come there in 36 hours, and find a city of 300,000 inhabitants? "Well," said he "I should of course have told him that he was a fool." And in all human probability and to all appearances he would have been justified in thus speaking. Suppose that fifty years ago some man had stood upon the summit of this park, and

proclaimed to the world the great improvements of the next fifty years, only such ones as have actually been accomplished, what would have been thought of him? His friends, if he had any, would have cared for him as a lunatic. The world would have said he was half knave, the other half fool. And yet the actual results of the last half century have changed the condition of society throughout the civilized world.

And thus it is in almost every branch of the arts and sciences, every year and almost every day in the year, brings us some new discovery in the sciences, or some farther development in those long known, and something that will eventually add to the general happiness of civilized man wherever he is found. And now comes the question, Are the cultivators of the soil keeping pace in the science of Agriculture, with the other arts and sciences? Is the science of Agriculture to-day, as far in advance of fifty years ago, as the sciences are? I think that you will agree with me that it is not. If this is so, why is it? and what is to be our remedy in the future? Let us spend a few minutes in looking at this matter fairly, and if we are behind in the great work of our life let us know it, and then we shall be better able to point out the remedy necessary for a more rapid advance in the future. Fifty years ago scarcely one man in a million would have admitted that there was such a thing as science in Agriculture, or that it was necessary for a man to have any scientific knowledge whatever, and in fact but very little knowledge of any other kind to be a farmer. If a man had brains, he must be educated for a lawyer, a doctor, or a minister. If he was active of body, and skillful with the work of his hands, he must be a mechanic. If he was good looking, and had a pleasing address, he was fit for a dry goods merchant. If he could play a few tunes upon a violin, and was nimble with his feet, he might make a dancing master; But if he had none of these accomplishments, and in fact no others; if he

could slave and toil from morning till night, with but little more thought beyond supplying the common wants of life, for himself and others around him, than the oxen that he drove, then he would do for a farmer. Gentlemen, let us thank God that those ideas have passed away. But do not think me drawing entirely a fancy sketch. I remember well and it was less than fifty years ago, that my father subscribed for his first Agricultural paper, and I believe it was then the first and only agricultural paper in the United States, the *Cultivator*, published at Albany. And I remember too that the neighbors laughed at the idea of his being a book farmer. In short, for hundreds of years the real cultivators of the soil throughout nearly all of Europe, and in a large part of our own country, had been either slaves or serfs, and as a matter of necessity must be kept in ignorance, for no educated people were ever kept in slavery. And in this country, and within the recollection of most of those who hear me, it was said by a man who had held the high positions of Vice-President, of the United States, member of a Cabinet, and for many years a United States Senator, that the hands that guided a plow should never be permitted to touch a ballot.

These and many other prejudices honored with the belief of centuries, handed down from father to son, and from mother to daughter, some of them hoary with age, had to be uprooted and destroyed before even a beginning in scientific agriculture could be successfully made.

But for a farmer to take an agricultural paper, or a dozen of them, is no longer a disgrace to him, even in the eyes of those who are unwilling to follow his good example. And it has become to be an almost universally acknowledged fact that no man can now obtain any prominence, either as a stock grower, a dairyman, a grain grower, or in fact any branch of farming, without having some considerable information upon the particular subjects to which he is devoting his attention.

And the more perfect is his knowledge of his business, the more successful is he in it. His farm is the fulcrum upon which he moves, and his knowledge of his business is his lever by which he makes himself successful. Gentlemen, knowledge is power, and in no business is it more so, than in the cultivation of the soil.

The great want of our cultivators of the soil is a more thorough and scientific knowledge of their business. It is not enough that you should know how to work, and to work well. Most if not all of you know that now. And right here, is, I think, one of the greatest faults of our farmers. They work too hard, and do not give themselves sufficient time for study, and obtaining the information that they need.

You can hire men to drive the mower, and the reaper, as you can to hold the plow as steady as you can, to seed a field as evenly and as well as you can. In short there is but very little hard work upon the farm, but what hired men can be taught to do, and to do well:

If farmers cannot average more than thirteen or fourteen bushels of wheat per acre, thirty-one or thirty-two bushels of oats, and less than thirty-five bushels of corn, or 2,900 pounds of hay, I am ready and willing to admit that you cannot afford to hire your work done, and more than that, that the time will come when you cannot afford even to stay upon your farms and do the work yourselves. Gentlemen, farms have a very quiet way of getting rid of their owners in such cases. Let me illustrate this: When I was a boy there was a farm in my native neighborhood which my father and others said was the best grain farm in that part of the township, but the owner of it always insisted and argued that farming did not pay. He could make more money at anything else than he could at his farm, and he acted upon this belief. I do not think that he ever planted or sowed a crop either, in good season, or in good order. His cultivation was still worse than his planting. As to his

harvesting, he had very little of it to do. When his barnyard became so bad that either his barn or the manure had to be removed, he succeeded in getting the manure hauled upon the land in such a manner as to double or treble his crop of weeds, which was always large, even in the poorest of seasons. The result of the whole was that years ago his farm utterly refused to support him, even in poverty, and he is to-day an old man of ninety-five years, totally blind, without one dollar in the world, and living entirely upon the charity of his friends.

Forty years since most of his neighbors adopted a system of improvement in their farming, and the result is that where it has been followed up, to-day they are all of them either rich or in comfortable circumstances, while the farm of the old gentleman first mentioned is in such a wretched condition that I would not take it as a gift if I must put it in good condition, although it lies near a railroad and within thirty miles of New York City.

Do not say that there is no danger of such a result here. The only difference is in the time. In your case the farm will not run down as fast as there, but the final result will be the same in both cases.

What shall be done to make the farm average twenty-five or thirty bushels of wheat per acre and other crops in the same proportion? Where barnyard manure is plenty, and can be had for a moderate price, the question is comparatively easy. But there are very many, and in fact the most of the farmers are so situated that, all things considered, it is not best that they should enter largely into stock growing but should confine themselves principally to grain growing. This makes the matter still worse, and demands that the owner of such a farm should exercise both good sense and intelligence, often of a high order, to keep his farm in first-rate condition. Still I maintain that it can be done. First, as a means of so doing, I would place the compost heap.

Valuable as a heap of compost manure is, I do not think that I have ever seen one in this State except upon my own ground.

If you will take the straw from the yard, commencing in the spring, and then during the season employ your spare time in gathering refuse to go with it. If you have a swamp of muck to go to, you may readily make it the foundation of your fortune; if not, haul the wash from the roadside, the leaves from the forest, the contents of the privy, the scrapings of the hen roost, the soapsuds and the refuse from the house, the weeds and the refuse from the farm, in fact, anything and everything that can be made available and useful in increasing the heap. All of these should be mixed together and occasionally worked over.

If the heap gets to heating to any extent, a sufficient supply of water should be put on to check it, but not enough to drain from it.

But very few farmers have any idea of either the amount of manure that may thus be gathered, or of its real cash value upon the farm when once made.

Lime and finely ground bone dust will be found very valuable, more so probably for wheat, than the other crops grown in this State. Wood ashes I consider the most valuable for some crops of any manure that I have ever tried, they are good in any place that I have ever tried them; and I have used nearly 10,000 bushels during the last few years. When put upon potatoes they have never failed to give me a large crop.

I would never mix them with other manures as they are said to release the ammonia, and permit its escape, instead of absorbing it as the earth and straw does in the compost heap. Next in order comes the manufactured articles of Poudrette, Superphosphates, etc.

Your own good sense and judgment must be your guides. By posting yourself upon the subject of manures, their appli-

cation and uses, you will in a few years be able to double the crops of your entire farm, and in many cases do much better than that. But it requires some knowledge of manures and the best mode of application to get the full benefit of them after they are obtained.

Gentlemen, my own experience tells me that when we do our own part, and do it well, it is a rare thing that a kind Providence does not so arrange the seasons, as to give us at least fair crops, and it is but seldom, that I fail of a crop but that I see something which I might have done, but neglected to do, which would have very much improved what proved to be a poor or moderate crop.

Remember that all plant food must be reduced either to a liquid, or gaseous form before it becomes available for their use. Hence the dry hard lumps buried six inches or more deep are of but little more use than so many lumps of pig iron, would be in the bottom of your furrows. Do not be afraid of some extra expense, and do not be uneasy if it does not come back the first or even the second year. If you work with intelligence, as well as with good practical common sense, you are sure to win in a few years.

I have not an acre of land that paid its expenses for the first two, and some of it not for three years. But I have none but what has paid handsomely since that. And I am very sure that the same principles which apply to my land, will apply to yours.

Poor crops do not pay. You cannot afford to hire them grown, neither can you afford to grow them yourself, but first rate crops will pay for hired help, and leave you a nice annual surplus beside.

It is not enough gentlemen, that you should be able to raise good crops. It is not sufficient that you should even keep your farms constantly and steadily improving, but you should know when to sell, where to sell, and how to sell to the best advantage to yourself and to your family.

In the summer season when you are looking over your waving fields of wheat, and anticipating its probable yield, do you know what the prospect is in Germany, or upon the plains of Hungary, or upon the shores of the Baltic Sea in Russia?

You might ask why should I care about the crops in those countries across the sea, and 5,000 miles away from me? And yet the yield there, does affect you here, and we cannot help it if we would.

The partial failure of the crop in those countries, as was the case last season, enhances the price throughout this country. On the contrary an extra large crop there, depresses the price here. At first view this may seem strange, and yet the truth is easily seen. Your wheat in this country is worth not what the millers here will pay for it, but what it is worth to ship to Milwaukee.

In Milwaukee the millers must pay for it just what it is worth to ship to New York or Boston.

But suppose one of those large eastern manufacturers go to the flour dealer in New York and say to him, "I want one thousand barrels of flour, and will give \$10 per barrel for it." The merchant says, "No sir, that flour is worth \$10.50 to ship to Liverpool, and I shall not take less for it."

The miller then goes to the wheat dealer and tells him that he wants 1,000 bushels of wheat, and cannot afford to pay more than \$2 per bushel." But the dealer says, "Well, I am sorry for you, but that wheat is worth \$2.25, to ship to Liverpool, and I cannot take less than that for it." Thus it is throughout nearly the entire list of our staple crops.

Now, if you know about the crops in Europe, what their condition is, what was the yield of their last crop, also if you know the condition of the crops in our own country, the portions of it where there are extra large ones, the places where there is a deficiency, and in what that deficiency exists, and about to what extent it exists, also whether the large manu-

facturing cities are in a prosperous condition, and will need a full supply; if you are posted in these matters, you are not a position to be frightened by any stories that may be told you, for the sake of getting some crop from you at less than its value, or at a time when it is very low, but is just upon the point of going up in price.

You know its real value, as well as the would be buyer, you know the probabilities of a rise or a fall as well as he does, and are master of the situation, and need not be influenced by him in the least degree.

Here let me say that just as long as farmers remain in ignorance upon these points, just so long will there be shysters and speculators who will be willing and ready to take the advantage of it.

Do not say that you cannot afford to take all the papers, magazines, etc., that would be necessary to keep you fully posted on all these matters. I tell you as your friend, that you cannot afford to do without them.

Let me illustrate this. Last fall a friend of mine had a fine crop of early onions; I called upon him one day and asked him how he was selling them. Said he, "I have been selling for one dollar, and have just sold one hundred bushels at that price." It was just fifty cents per bushel less than they were worth at that time, and fifty cents less than I had been, or was then selling for. Here was an absolute loss of \$50 upon that one sale; just about what I pay for one year's reading matter.

Yet, if I had told him to invest fifty dollars a year in reading matter, he would have thought me insane. I did tell him what they were worth, and then he was angry because I had not kept him posted as to price.

There is another thing to be considered in this connection. It is this: Sometimes there are vast combinations among monied men and speculators, to control the market and the price of some staple commodity of the farm. Sometimes

the effort is for the time being to depress the price, until they can get a sufficient quantity to dictate prices. Sometimes the prices are inflated beyond what either reason or common sense would dictate. Now if you are as thoroughly conversant with the real facts in such a case, as you may be, and ought to be, you are able to judge correctly whether the depression that is taking place in the price of some product is in consequence of an actual over-supply, or whether it is the result of a "bear" movement among some shrewd speculators, and to be followed by the opposite or "bull" movement, as soon as they think they can dictate prices. If it be the former, you will refuse to sell, and wait until the proper time arrives.

Gentlemen, it is not necessary that I should follow these topics further. You will readily see that, other things being equal, the more intelligence a man has, the more certain is he to win success; and this rule will hold good in every branch or department of the farm.

As industry is better than indolence, I would have the farmer industrious.

As temperance is better than drunkenness, they should be temperate.

As virtue is better than vice, they should be virtuous.

As truth is better than falsehood, they should be truthful.

As a pleasant, comfortable home is ever better than the cheerless abode where ignorance and poverty reign, I would that your homes should be the abodes of peace, happiness, and plenty.

And as the right is ever nobler, as well as better, than the wrong, I would have you ever in the right.

And, that you may attain these ends, I would have you truly intelligent.

SUCCESS IN FARMING.

BY G. E. MORROW.

To seek success in business is not only a privilege, but a duty. Success will depend largely on the possession of a liking for the business. Hence the first question for a boy or man to decide is whether he wishes to become a farmer. If not, well; there is no law; there should be no custom or public opinion forcing any man to be a farmer. Farming is an honorable business; as honorable as any other; no more honorable than any other useful calling. If, all things considered, one prefers to be a farmer, make the best of it; look on the bright side: don't whine. Manfully resisting every wrong, working to remove every oppression and correct every evil, self-respect and self-interest, the happiness of self and family, demand that the farmer shall secure all the enjoyment possible out of his business.

Faith in the business, in its possibilities and future prosperity, is essential. This faith must come from the belief of evidence.

To say that farming cannot be made moderately successful as a general rule, is to say that the creator made a great mistake, for a large portion of the inhabitants of the world must necessarily be farmers. All over the country can be found farmers, large and small, who have succeeded, and are succeeding.

It is reasonable to ask whether the failure of others was not caused by exceptional circumstances or by lack in themselves. Great or sudden wealth is not to be expected; a fair share of success can be looked for with confidence.

Perseverance is especially necessary from the nature of the business. Hard work and close attention will always be parts of farming, just as they are necessary in other business. All things of value cost; success in farming costs time and money.

Adaptation of the plan of farming to the farmer's taste, the location, the character of the soil, the market demands, etc., must be carefully considered. The plan should be so made as to give full and constant use of the capital. With very many farmers the largest share of their capital is their labor.

Intelligence is needed in making the plan and carrying on the labor. Information should be obtained in all practicable ways — by thought, observation, conversation, discussion, and reading. Then each man should decide for himself, for

Self-reliance is one of the most important qualifications to success in any calling. Association is valuable in very many ways, but it may be for wrong or impracticable objects.

Combinations to arbitrarily affect prices have generally failed.

The greatest benefits to be hoped from farmers' associations are not the pecuniary ones. Legislation can help farmers as it can men in any business. But it must not be a main reliance. Farming now suffers from excessive legislation. Attempts to secure laws in the special interests of farmers have rarely succeeded in bringing permanent relief. The most safe and just course is to labor for the repeal of the present bad special legislation rather than to ask for additional special legislation in the supposed interests of farmers.

The lighter the restrictions placed on any business the better for it; the lighter the restrictions placed on any honorable callings, the better for the community at large.

General principles should be kept in mind; among these, that

The farmer's chief business is to produce and to sell. Rich farmers may speculate if they wish; poor ones can not afford the risk.

The greater the possible profit the greater the possible loss.

The profits depend on the difference between the total cost and the net selling price. Increasing the selling price increases the profits. As individuals, farmers can do little in this direction, except by gaining reputation for their products. Decreasing the cost of a product increases the profit. Any farmer can work in this direction by improving his management, better applying his labor, and stopping places where waste occurs.

Cost of transportation depends mainly upon bulk and distance. It is wise to ship products of greatest value compared with bulk. It is wise to reduce distance by encouraging home markets. To do this farmers must sustain friendly relations with every other honorable business. Temporary advantages may be gained by buying and selling by means which will do greater harm. In attempting to correct abuse indiscriminate warfare may injure those who are true friends to the farmer's prosperity.

The average farmer in the West can not safely give all his attention to any one specialty.

The raising and feeding of one or more kinds of live stock is practically essential to the success of most Western farmers. For some years past, probably no one branch of farming has paid better in Wisconsin than dairying.

With low priced lands and high priced labor we can not profitably engage in high farming, but profits will increasingly depend on raising large crops of good quality.

Accumulating money is not all of successful farming. The health, happiness, intelligence, and honor of the farmer and his family are higher and better things than money.

Rather than slavish reliance on the opinions of any man, paper, or book, or society, on legislation or speculation, it is better for each farmer to rely mainly on industry, intelligence, and integrity.

FARM LIFE—ITS HARDSHIPS AND PLEASURES.

BY MRS. HELEN M. BRITELL HUNTLEY

Incident to every business pursuit, there are pleasures to enjoy, difficulties to be overcome and hardships to be endured. The merchant will talk of bad debts and constant confinement to his store; the physician of exposure to cold and storms, the mechanic will tell you of no opportunity for his labor, men of salary fear another day will find them without employment, and all of these will talk of the constant claims of society, that they have none of the quiet and independence of farm life.

The farmer, with a different experience, finds the chief objection to his calling is, too much work, no society, and that he cannot support his family handsomely.

Somewhere there must be a cause and a remedy for this bad state of things. Much of the hardship of farm life is in no sense the legitimate result of farming. Often it is the neglect of the interest of the farm for some other pursuit, which proving disastrous brings debts and privations, and to farming is attributed the cause. Too many are the instances particularly in our western villages, where men of more or less property make farming an experiment. They are only half in earnest about it; perhaps have kept some city property to return to in case of failure.

If they can make money they will remain on the farm, but the money comes slowly and does not come at all without labor, and they go backward in the path of life, to the city or town where they can enjoy privileges they have done nothing to create.

Others will plan to have hardships, and it may be the only thing they have any plan about. They will say "we expect to have a hard time of it on the farm." These will surely realize all their expectations. Hardships and privations, will

grow without culture, and a wonderful crop may be obtained without care or rotation. It should be remembered that failure exists in this class of persons and not in the calling. To be a successful farmer, there must be a love for the calling that will not be satisfied with any other pursuit. There must be a thorough knowledge of all the various industries of the farm.

It is business in its broadest sense, and must be followed with ceaseless energy and untiring industry. Work must be the one excepted thing in the farmer's creed.

Never yet was anything good or great ever accomplished without work. The success that crowns the labor of years brings its reward, and when this is met the hardships through which it was won are all forgotten. Many were the faithful workers in the past who never gave over, but conquered every difficulty till the object for which they labored was reached, and to us and to future generations is left the results of their toil.

Long did that patient son of poverty, Elias Howe, contend with difficulties and privations till at length the little bar of steel was made to do the work of five swift needle women. Through discouragements and failures did Cyrus W. Field, work on till two hemispheres were united by the little cable beneath the sea, and now two nations greet each other with the quickness of thought.

Faithfully did the late lamented Agassiz labor to lift darkness from the science he loved. With no thought of wealth, no time to make money, he has left his discoveries to the world, a better legacy than gold.

Farmers must expect there will be difficulties and hardships connected with their occupation. If the industries of the farm are numerous there will be more of work and care, but if successful, there will be more pleasures also, and like others, they too may leave lasting benefits behind them.

Among those who have no wish to exchange the labors

and pleasures of farm life for any other pursuit, there is sometimes too much said about the hard work, and the pay received. It is not well to take a gloomy view of any condition. The sunny side is always best. They who make most of the pleasures, say least of the hardships, and do most to remove them, are wisest and most successful in the end.

The question of payment is one of much latitude. It pays the farmer to see his wheat whitening for the harvest: his cattle and sheep feeding in green pastures; his orchard loaded with ripening fruit, while bonds, and stocks, and bank notes, would pay another man far better.

There are many things which we might do to increase our pleasures and make our farming pay us better than it does. There can be improvement in all the labors of the farm. Failing to understand the requirements of any calling is a fruitful cause of discouragement and failure. It is very hard to do successful work when one does not know how it should be done, but a knowledge of one's business banishes the difficulties and often makes success certain.

Parents can do a good work for growing sons as they are about to assume the responsibilities of business men, by studying with them all the various sources of information in regard to soils, climate, location and all the different industries of the farm.

This would prepare the young farmer for his work, and do away with many of the hardships pertaining to the new farms of the west, and prevent change of location, so fatal to success in farming.

There is no occupation which receives so much attention from the press as does the pursuit of agriculture. Every newspaper for the family is adding to its columns something of interest to the farmer: Every topic is discussed, many interesting experiments explained. If we will, we may learn by the experience of others, and go across lots, as it were, to success, yet we are told that there are hundreds of farmers

who are hoping for success in their calling, who take no Agricultural paper. Of all the truths stranger than fiction this is the strangest.

A few only appreciate as they should how much it is to secure weekly, many pages of instructive reading pertaining to the business that occupies the thoughts and claims the labors of the whole household, and those who do, will tell you their success, and their pleasure in farming, is owing largely to the books and papers they have read. "I never could have endured my farm life patiently," said one farmer's wife "without the periodicals and papers that come to my home, but with these, my husband, my children, and my flowers I have thought little of the privations."

Every farm house should be a school of instruction, where all things useful and necessary for the duties of coming years should be taught and practiced. Daughters have something to learn concerning many of the farm industries and still more in the very important matter of housekeeping. It is a sad mistake somewhere that the young women of our time care so little for a knowledge of domestic duties.

The mother who does not instruct her daughter in the mysteries of house-keeping, for mysteries they surely are, is laying up for that daughter a lasting store of hardships. "I blame my mother," said one young housekeeper of our acquaintance, "that she did not teach me to do the house work which she well understood."

A practical knowledge of house-keeping will make these duties pleasant; house work will not be drudgery when skillfully performed. Artists and chemist's work may be done even in the kitchen, but this is not to be learned the day that is needed.

If it does not require education and skill to run the domestic machinery successfully in a modern household, says that accomplished woman, Emily Huntington Miller, "then we do not know what does." In no place is this knowledge needed more than in the farm house.

Woman has her full share to do in making farming successful. If the pleasures of home are satisfactory, the business which supports it is quite likely to be satisfactory also. Those who tell us most about the hardships of farm life, give to farmers' wives their full share of commiseration. Many are the gloomy pictures drawn by friendly writers—not as beneficial we have sometimes thought as a few suggestions about remedies would have been—yet in too many cases true, no doubt, but circumstances, education and natural temperament have much to do in the case. Where one has the happy faculty—happy for the possessor—of banishing care, which men possess more largely than women, the burden of care is quite likely to fall upon the latter; but where all interests are mutual, and love has not grown cold with increasing years, and the happiness of the wife and mother receives due attention, this matter of hardships is pretty evenly divided.

It is something to know that a strong arm and willing hand is ever ready to provide the creature comforts, and to look interestedly after all the growing wants of the family. There was much good sense in the reply of one noble woman, a tireless worker in her city home, to her neighbor, who remarked that men knew very little about hardships, when she said "I do not know about that; circumstances have made it necessary for me to assume the responsibility of man and woman in my family, and I have come to the conclusion that the men have their full share of hardships."

The privations which a farmer's family must sometimes endure, isolated as they are from society, must necessarily be felt most keenly by the farmer's wife. "Many times," said one working woman of the farm, "has my winter clothing laid all the year in its summer retreat, while I never once left my home or my children, but cared for all their wants, performed all the varied labors of the household myself." "This," she added, "I then thought was much like as many years of prison life, but time has given it a different coloring.

I now see they were years of pleasure and profit." Well might she say this. Many thousands could not purchase the farm where she toiled. That mother sits to-day in her luxurious home, honored among women; her children first in their profession, are better to her than a crown of diamonds, and a beautiful old age is crowning a useful life. There is many a mother who has only reached the other side of forty, who in looking backward over the years of her farm life, if she has been successful in her home-making, and see her children inclining to ways of wisdom and industry, will take a far different view of the case now from what she did then. She will realize there is something better to live for than the pleasures of society; there are things harder to be endured than the daily round of domestic cares.

We remember now a prosperous Eastern farmer, rich in this world's goods, with many acres of green pastures, with fleecy flocks and gentle herds. From his farm went out tons of creamy cheese, quantities of golden butter. The farm house was clean as polished silver; but no shrub or tree ever shaded it; no flowers ever bloomed by the doors. There was no time for books or papers. The sons grew to manhood with no interest in the farm or in their studies. The mother rode daily in her carriage. The daughters became wives, and presided over other homes much like those of their childhood. The sons, clamorous for their birthright squandered the father's wealth, and those parents went to their graves in poverty and sorrow.

Within the sound of the same church bell, on a rocky hillside farm, toiled a fond father and a loving, gentle voiced mother, performing her household duties with no help but her young children; struggling with privations, she knew little of society outside her home, seldom leaving it except for the house of worship. Time passed on, and growing children made increasing demands on the mother's time and

the father's purse. There was little money for improvements, but the trees were planted, the roses bloomed, the peonies reared their crimson heads and scattered their gay colored petals to the winds, the vines yielded their purple fruit, the orchard its treasures, the seedling pear tree hastened to add its fruit. There was no thought of adding more acres to the farm. The children must be clothed, and schooled and fed. Daily bread and intellectual food must be had. Books and papers were there. The little seven year old boy, whose arms could scarcely span the columns of a newspaper, would talk intelligently of the news of the day. The years went by, and seven dutiful sons and three daughters, each with a spotless reputation, went out from the humble home into our beautiful West, to fill places of honor and trust. The daughters became teachers and wives, and presided over tasteful, beautiful homes, and those parents, now in the late evening of life, with only its simple comforts, are giving to the world the example of successful lives.

There is no good reason why farmers' wives should become rusty and faded before their time, and by word, as they often are for those who know little of a useful life. The cultured brain can live without the appliances of wealth or the pleasures of society.

Years of sickness and almost solitary confinement to her chamber did not destroy the gifted mind of that sweet woman, Elizabeth Barrett Browning; neither did the poverty nor humble home of Fredrika Bremer make her songs less sweet, or her company less charming.

The causes of premature old age and worn out nerves are not so much in the outward surroundings as in the spirit of the place. The hand of affection and taste can do much to lighten the privation and labor. But in country homes, where there is much of this, too little thought is given to that better part of life, and this is why we so often hear it said that women do not like farming. Many a man will tell

you that he has tried farming but his wife did not like it. There was too much work, too many privations, and no society, and he left it for other business. This may be very considerate on the part of a husband, but we deem it a relinquishment of many advantages and pleasures for the love of ease.

There is no woman of intelligence and ability who finds herself settled upon a farm, but will accept the situation and go on with her home making and home keeping, (if a proper regard is shown for the pleasures and adornment of her home, if she can have a rightful apportionment of time, money, and help to make such improvements as taste and skill would suggest. In this there must be the same progression that attends the farmer in his fields. The farmer's wife must find her joys and pleasures in her home, or she finds it nowhere in the wide world.

Women will ilke farming if there is anything onward and upward about it, but, as that spicy writer, Gail Hamilton, would say, it must not be "one uninterrupted flat." She will like farming, if it gives her that high, pure pleasure so dear to woman — the opportunity to make her home delightful to her husband, her children, and her guests.

Nowhere can woman make her home attractive so easily with so small an expenditure of money, as she can in the country. Beneath her skillful hand flowers will come in their loveliness, and fruits in their excellence, and while Flora's treasures give beauty and fragrance, from the bosom of every blossom myriads of busy bees will gather and store in waxy cells of curious workmanship, delicious sweets for the table. Fruitful vines trained to some rustic trellis, may adorn her garden, and mingle with the rich green foliage, luscious grapes in color of amber, or faintest green, or royal purple, will wait in massive clusters to deck the festive board. The splendid trees that give shelter and shade, will yield their varied fruits; the forests will give their mosses and

ferns, and pleasing ornaments made by skillful fingers will add other charms to her graceful home.

In her humble dwelling she may spread an intellectual feast as rich as though hers was a home of wealth. From the "Review," down to the child's paper, she may select the choicest reading for her family. The beautiful pages of the "Aldine" will afford amusement; while "Harper's" and "Scribner's" will add rich stores of knowledge. Papers will come weekly with their instructive teachings. Poetry and music, the language of the skies, must be there, and far back in the country, earnest, faithful workers may rear the beautiful temple of home, that dearest, most sacred thing on earth; where dwells that ethereal something that is felt and seen, which wealth cannot purchase nor privation destroy.

Whether we think of it or not, the whole labor of life, the object for which men toil, for which governments are founded and sustained, discoveries and improvements made, is to secure to the people better and happier homes; and whether we know it or not, the most fruitful source of all the much talked of hardship of farm life is the partial or total disregard of the pleasures of home; putting off till some future time all the simple luxuries, the tasteful adorning, which makes country life so charming, saying there is no time or place on a farm for tasteful apparel, or nicely prepared food, or sociability, refinement, or intellectual pleasures. It is this more than hard work, that saddens and discourages, and makes the heart sick with hopes deferred.

It is human to think that we are fettered by circumstances; that we have no opportunity; that if we had influential friends, or a good location, or money to make money with, we could do something; but there should be no waiting for these desirable conditions. Opportunities must be made and success will come to him or her who makes them. They were only men and women who won it in the past, or are seeking it with persistent industry at the present, and we of

the farmer should never be content with anything less than the best that can be done in the circumstances and the situation. We may not make money like railroad kings, but we may have cultivated farms, beautiful homes, and happy fire-sides.

There is work, much and varied work, to be done by the intelligent farmer and his family. The thoughtful brain must plan for improvements, and sales, profits, and losses, while the active hand guides the plow and gathers in the harvest; but in the grand march of progress, a grand army of workers will come up from forest and prairie, from hillside and valley; every interest of the farm will receive due attention; wrong will be righted; hardship will be lessened; pleasures will be increased, until to be called a farmer, will be the one name for a life of plenty, peace, and prosperity.

THE DAIRY.

BY HON. H. SMITH.

The agitation of the dairy enterprise throughout the north west has been much more pronounced, during the past year, than at any time in our previous history. This has arisen, partly from the steadily increasing prosperity, of those engaged in dairy farming, and partly from the partial failure of grain crops. From the extremes of wet and dry, in different localities, and the natural tendency of land, constantly under the plow, to become foul, as well as the glaring fact to every intelligent farmer, that continual grain raising, with but little or no return of fertilizers, to preserve the fertility of the soil, will in the not very distant future have to be abandoned.

Again the agitation of the dairy interest has also been increased, by that class of farmers engaged in cattle raising, and sheep husbandry. The wide fluctuations in the price of wool, and small demand for mutton, and beef, at home, make

that branch of business almost entirely dependent upon the price, fixed by the immense herds and flocks of California and Texas, and the Territories, where beef, wool and mutton can be produced at a profit, for one-half the cost of production in Wisconsin.

The great and exciting question of transportation, that has created such serious agitation among cattle and grain raisers all through the north west; that has given rise to fearful apprehension, that the peace of society was in imminent dangers, if some of the burdens of that class of farmers, of which they so justly complain, were not removed, while this great wave of excitement has passed over, and affected nearly all farming interests, it has created scarcely a ripple among the dairymen, for the reason that a car load of cheese that would sell in New York, Boston or Philadelphia, for \$2,500, can be transported for \$200, while a car load of cattle or sheep that would not sell for more than half that amount, would cost equally as much; and on a car load of grain, the cost of transportation is so exorbitant as to absorb nearly all the profits in its production.

It is fortunate for the country that the dairy markets of the world, are in such a healthy condition that they can take a large increase of dairy products without depressing the trade.

Cattle-raising might be continued; but changed from beef to raising the dairy cow, and instead of transporting grain beyond the limit of profitable production, feed it to the dairy cow, thus releasing the beef and grain trade from further grief, without seriously affecting the price of dairy products. Butter and cheese being of such a concentrated character, they will bear transportation long distances, and find a ready sale in foreign countries, where beef and grain are in abundance for sale.

So much for the general view of the dairy subject.

In regard to the statistics of the amount made and con-

sumed, as compared with former years, and the great improvement in its manufacture, I will not now take time to relate, but will go more into detail how to begin, and like learning to play the game of chess, the best way to learn is to begin, a person may stand by and look on the chess board and see the game played a long time without making much progress, he may be told that the pawns move one square at a time forward and take a piece diagonally, that the knights move in the shape of an L and that the bishops keep to their colors, moving diagonally, but however plain these directions may be to one that understands the game, but to the unlearned it is all Greek. So if I should tell you that a vat of pure sweet milk (and I would use no other) should be warmed until the thermometer indicated 82 degrees, when sufficient runnett should be added to produce coagulation in one hour and a quarter, then cut and cross cut the curd, when the heat should be gradually raised to 98 degrees, meantime the curd must be made fine, a portion of the whey drawn off, leaving only sufficient to cover the curd, that it should be held in this condition until sufficient acid was developed to make the curd spin, when applied to a heated iron, then cool, salt and put it to press; all this would be very plain talk to one acquainted with the business, but to the uninitiated it would be as unintelligible jargon, as the directions of the moves on a chess board, but to one earnest and anxious to learn the game of chess or the game of making cheese, it is much easier mastered than many suppose.

But there is sometimes a knowledge gained by experience if communicated to others, might serve to solve doubts or confirm the impressions of those contemplating starting a cheese factory. In the first place it is not at all necessary that it should be in a village, but any place where the roads conveniently center, so that as many patrons as possible can come with the least travel, for there are just as many acres around one spot as there is around an other spot. On the four

corners of two leading highways there is accessible within two miles travel about eight sections of land, or over 5,000 acres capable of sustaining 1,000 or 1,200 cows, but if there are 200, 300, or 400 it will pay to begin, and if properly conducted, will grow to be a profitable investment for the proprietor, and a real benefit to those patronizing it.

A building can be erected twenty by forty feet, two stories high, sealed outside with common flooring, and plastered inside, for \$600 or \$700, a wing twenty by twenty-five feet for vat and press room for \$100, an ice house, well, pump, wind mill and reservoir, can be obtained for \$200; these answer all the practical purposes of a running stream, two 600 gallon vats, with two gang presses with twelve hoops each, for \$500 with \$50 added for miscellaneous articles, brings the whole expense at about \$1,600, with capacity to accommodate 400 cows.

The first year, if successfully conducted, will relieve the proprietor of most of his anxiety and give him confidence in his future success, a continuance in the business will surely enrich the soil and add to the selling price from \$50, to \$100 per acre to all land within easy distance of the factory. This is not a theory spun from a stretched imagination, but the practical experience of hundreds of localities throughout the northwest.

It is characteristic of dairymen that the longer they continue in the business, the more confidence they acquire in its future stability.

PROFITS OF DAIRYING IN THE NORTHWEST.

BY C. O. PARSONS.

Read before the Northwestern Dairyman's Association.

Having but little practical knowledge of butter and cheese making, I cannot speak on those points, but will confine my

remarks to a few facts patent to every observer, touching the business of dairying in a financial point of view.

The great question of railroad tariffs, which now agitates both producer and consumer of our surplus of grain, but little affects the individual who confines his energies to the dairy. While it requires about double the usual price of your corn to pay transportation to the eastern markets, it costs only about one-thirtieth of your butter or one-fiftieth the value of your cheese, for freight charges to the Atlantic seaboard. Therefore the dairyman, so far as himself is concerned, can enjoy his peace of mind concerning high freights, while he who confines his profits to sale of the cereals, is working and worrying to bring railroad managers to more reasonable rates of transportation.

Cheese, within the past few years, seems to have become an article of more common diet than formerly, among all foreign nations. It largely supplies the place of butter, in climates too warm for the making or the preservation of the latter. It is said that "one extreme follows another," and it was thought, by those who pin their faith to the doctrine, that cheese making would, ere this, become profitless and decline, but facts prove the reverse. The markets keep well up and surpass the expectations of the most sanguine. While the producers of corn, wheat, rye, barley, oats, beef, and pork have found it "hard sledding" during the past few years, the butter and cheese maker has been receiving profitable returns for his capital and labor invested.

But, says one, "I can not comprehend the reason of this. I do not understand why dairying does not follow the same law which governs every other branch of farming, to-wit: that when any article is high for one or two years, it is pretty certain to decline in price from over supply." The fact is, that while butter and cheese now enter largely into the regular diet of the human race generally, in all parts of the world, these wholesome articles of food can not be produced

in perfection, only in the proper latitude. We are situated in about the right climate for the successful making of these articles, and any far remove, either to the north or south, would prove detrimental if not abortive to the perfection of these chief dairy products. It was my lot to first see the light in Herkimer county, N. Y., the banner cheese county of the United States. Living as I did, at Little Falls, when a boy I remember seeing long strings of teams waiting at the warehouses to unload the precious product, cheese. And I often heard dairymen and their wives speak of the large profits made at the business. This remuneration still seems to attach to the employment there and in this section, lying as it does in the same latitude.

Not only does the business pay in the present products sold, but it remunerates the dairyman largely, through the increasing fertility of his lands, on which cows are kept. While exclusive grain culture constantly impoverishes the soil, dairying tends greatly to enrich it. This is a consideration of momentous importance to every husbandman. It is to him as a mine of wealth to a barren desert. Besides the direct income from the sales of butter and cheese, there is large profit arising from the refuse milk and whey, when made into pork. Nothing contributes more to the growth of young swine than a bountiful supply of milk. Then there are the calves raised on the refuse of the dairy, which, although not always the fattest and most thrifty, frequently grow into fine cattle, and yield in the end, a handsome income to their owners.

While we hear of vast herds of cattle and flocks of sheep being reared and fed on the extensive plains of our own country, and the wide savannas and mountains of Mexico, South America and Australia, we never learn of butter and cheese being shipped from these quarters. While, from these new and sparsely populated districts, the world is receiving very much of the wool, the mutton and the beef

used and consumed by man, we need have no thought that dairying will ever be made profitable, where only the wild grasses abound.

How common it is for many who do not stop to take a comprehensive view of the magnitude of the world's supply and demand, to make a hasty estimate by the amount of any product made or raised in their immediate vicinity, or bounded by their own county lines.

With all the facts before us on this subject, we conclude that dairying is a safe and profitable business, in this range of country, and is destined to be through long years to come. We would, therefore, like to see more cows milked, more cheese factories erected, more butter works in operation throughout this section, in the future, than in the past, although we are far ahead in this matter of many other localities lying within the range of favorable facilities for profitable dairying. But dairying can not be made profitable anywhere, if cows are not properly fed and sheltered. It will not do to treat milch cows otherwise than with the kindest and best of care. We must, if we expect to derive from them a bounteous supply of rich milk, protect them from inclement weather, and feed them with the most nutritious and milk supplying food. The more generous the dairyman in these respects the better will he be rewarded.

While thousands are engaged in the business of dairying in the northwest, there are not as many employed in raising grain as would be if not for this dairy business; and consequently better prices are realized for all the cereals. Thus we see that dairying not only pays the men employed in it, but it assists those in other departments of agriculture to realize better prices, and therefore it is proving a blessing to all classes of our husbandmen.

May the great and growing interests of dairying be so increased throughout this section, that cheese and butter factories will be multiplied to such an extent as to place one

or more within convenient access to every farmer in the land. May railroad and other moneyed corporations of the country that now combine for purposes of extortion and aggrandizement, to the oppression of the masses, be made to deal justly by the people, and permit the great Northwest to excel in material prosperity, as well as in fertility of soil, salubriousness of her climate, and the intelligence and enterprise of her growing population.

PROGRESS OF DAIRYING IN THE NORTHWEST.

BY T. MCD. WILLIAMS, WOODSTOCK, ILL.

Read before the Northwestern Dairymen's Association.

A few of your number kindly invited me to prepare a short paper for this occasion. Since variety is not only the spice of life, but of public associations, I will endeavor to entertain you for a brief period. Near my early home in the Chenango valley, New York, a fine grazing region, of stately elms, of pure water, fine dairies, and bristling with hop poles, there resided a Presbyterian deacon of good character, but with one bad habit—and who among us has as few. This deacon was sent by his people a considerable distance to engage the services of a new preacher, the long established clergyman having asked to retire.

After the usual formalities, a bargain was struck, and as the deacon was about to return, the newly engaged clergyman, impressed with the responsibility of the situation, said, "My dear brother, in coming to labor with you, I shall expect your hearty co-operation, and that you will all pray for my success." The deacon being more of a man of acts than of words warmly replied, "Faith I can't pray much, but I will help carry on." I don't wish in this connection to palm myself off as a deacon for I believe you have no such office

in your association, but will attempt to "help carry on."

Here let me say, a deacon that can stand the test of an ugly kicking cow, with no worse ejaculations than the one referred to, and with no pugilistic efforts at retaliation, is either too lazy for to return compliments or fit for the millenium. I profess to be a follower of Bergh, belong even to an order that inculcate kindness to domestic animals, endeavor to feed and treat all with proper respect, but right here I will acknowledge that when the "stately bull" elevates me in mid air unceremoniously, the "patient ox" kicks my shins, when being attached to the plow, or the "gentle cow" knocks me and pail of milk into promiscuous confusion, I'd much rather the minister would be absent. I believe however, there are more kicking men (or that deserve kicking) than cows, and that kindness toward domestic animals is of the highest importance in every point of view and to all concerned.

The same remark holds good, applied to families in all the relations of life. There may be exceptions, but generally the persons that kindly treat their domestic animals, are seldom applying after divorces, and enjoy pleasant homes.

Having traveled through our country somewhat both in earlier and later years, experience has taught me not to stop for refreshments or social intercourse at a dwelling, however pretentious, if the lowing herd were bemoaning their fate, the noble horse showed unmistakable evidences of neglect, or the starving pigs greeted me at the entrance with haggard mien and shrill key notes of distress. Much rather would I enter the unpretentious cabin, where fair hands had planted the rose or trained the ivy, with only a single cow in the background chewing the cud of contentment.

During our long years of severe labor, and almost life struggle to secure homes and competence, this great north-west, naturally the most prolific and beautiful portion of creation has been too much neglected in the matter of home adornments. But we are now beginning a better era, and

elegant, if not expensive residences, with cheerful surroundings, if not so common as they should be, are by no means rare.

One great element in the improvement of the west is the diversity of our farm products. In the early settlement of the western states, circumstances compelled us to confine our energies to breaking up the soil and grain raising for a livelihood, and many who listen to me, know how hard a struggle we had to secure farms, "deeded in the share" and live without the enjoyment of many luxuries. We soon added to grain raising pork fattening, and this, even at extremely low prices was an improvement, for when wheat failed we had something to fall back on, Next we added sheephusbandry and stock raising and the condition of things brightened. Railroads were built, and the primitive shanty gave place to better structures.

Finally in opposition to the theories and writings of our eastern dairymen, prominent among who may be mentioned X. A. Willard, stating, that this portion of the country could never compete with certain described and somewhat circumscribed eastern limits in the production of butter and cheese of good qualities; a few commenced the business with unfavorable surroundings but with results that proved happy omens of success. Prominent among these of McHenry county, ante-dating cheese factories may be mentioned Seward and Rogers, Bartholomew, Andrew Stull and a few others whose names do not occur to me. Thanks to those pioneers who demonstrated that good cheese could be made in Illinois and to the numerous farm wives of the west who when they had any conveniences placed on our tables butter as savory as the world can produce.

Next came stock raising and feeding on an extensive scale and cheese and butter factories, that have done so much to diversify, improve and enrich McHenry county, and much of the northwest. Western herds compare favorably now with

the best of the old world. ●Western beef and pork stands unrivalled. Western cheese must be equal to eastern, for when shipped under eastern brands it is swallowed for eastern cheese. Western butter of McHenry county manufacture, is not only pronounced first best by judges at St. Louis, but I am informed outsells eastern products in Connecticut markets.

True, we have a few of the gushing springs and sparkling rivulets and brooks of the east, that writers thought would forever debar us from successful competition with that region, but in their stead the breezes of heaven bring up the sparkling water from nature's pure hidden stores, answering all the requirements of the poetic meandering stream, minus its rugged banks and waste of soil.

When our present manufacturers of wind mills, will sell us their wares at not to exceed one half of present prices, as they soon must do, or somebody else will, then the stagnant slough will cease to be used for dairies, and our products will take a still higher place in the markets of the world.

Though our prairies may be more subject to drought, and consequently our pastures earlier fail than eastern grazing lands, yet we have cheaper grain to light us over such exceptional season. All things considered, I think much of the northwest can equal and even exceed any portion of the east in dairy products. In winter dairying we have altogether the advantage, for our corn and oats being much cheaper, we can and will be more generous in feeding, and good winter butter comes only from plenty of nutritious grain food.

The first cheese press I saw in Illinois was at Andrew Stul's. A diminutive cheese was placed under the heel of a bedstead leg, one of the primitive make, hence the more they slept the sooner the cheese was pressed. The next, my wife and nature invented. Near our cabin stood a trio of venerable oaks, that for more than half a century had sheltered the red man and defied the prairie fires, with the exception of a por-

tion of the lower trunk of one of them which had become hollow. Into this cavity one end of a lever was placed, a miniature cheese succeeded (for we had one cow only to our cheese factory), and to the far end we hung a stone. One thing is certain, we made the best cheese in the neighborhood, hence I claim to be enrolled, or rather have my wife enrolled, as one of the earliest dairymen of Northern Illinois.

Those huge timber structures, next used in our early dairies, were no doubt an infringement on my wife's patent, but women then were not so much in the habit of asserting their rights as now, and my wife, knowing more of housekeeping than law, quietly submitted to the infringement. Now, a dozen or more modern presses occupy less room than the primitive structures.

Gentlemen, in conclusion, I congratulate you on the success of your association. I believe it a step in the right direction. I read your last year's proceedings at Whitewater, Wisconsin, with interest, and was astonished then, and more so now, to learn from your statistics the rapid growth of the dairy interests in the west, and particularly in our sister state of Wisconsin. Your combined views, suggestions and experiences, will enhance, perfect and expand this great and important industry. Association is the order of the day, and as one having a vital interest in everything that encourages thought and action on the part of the farmer, and consequently tends to elevate and ennoble farm life, and as one of the representatives of the Farmers' Association of McHenry county, in their behalf I bid you God speed.

ADAPTATION OF THE NORTH-WEST TO
DAIRYING.

BY HON. HIRAM SMITH, SHEBOYGAN FALLS, WIS.

Read before the Northwestern Dairymen's Association.

Those familiar with the dairy literature of a few years ago will recollect that speakers and writers contended that the dairy business was in no danger of being overdone, for the reason that there was but a narrow belt of country lying between the latitudes of 40 and 44 degrees that was naturally adapted to the profitable pursuit of that business; if it was attempted much south of that line the extreme heat of summer lessened the yield, and injured the product so greatly as to absorb the profits; and if attempted much north of that line the short summers, long and cold winters, made the expense of wintering cows so great as to absorb the profit in that direction.

While this described belt of country may be less objectionable than many others, it by no means embraces all the profitable dairy region. We hear of cheese factories being profitably conducted in the far south—in Tennessee and North Carolina—and in the north, Canada is fast becoming a formidable competitor in the dairy markets of the world.

A new, mild, sweet cheese can now be made in quite warm climates and sent to market, when it is two or three weeks old, in ice cars, thus avoiding the danger of being injured during the heated term; for cheese does not become sharp and rank until after it is cured. By sending early to market and raising green fodder for soiling in the hottest part of the season, cheese can be advantageously produced in much warmer climates than was formerly thought possible. So on the other hand, in the far north, warm stables, cut and steamed food, in effect lengthens the season, and makes the manufacture of cheese and butter a profitable employment.

It was once thought, by dairymen living in this narrow belt of country, that they held a sort of protective tariff or monopoly over the manufacture of butter and cheese; and that it could not be much increased; but recent developments have dispelled that notion, and the only reliable protection that dairymen have—or ought to have—is in the excellence of the article produced.

One factory of poor make of cheese checks consumption and gluts the market more than three factories of good make. The increasing demand the past year, gives no indication of the danger of over-production, and the present outlook for dairymen is all that could be desired.

The advocacy of the question of the adaptation of dairying to the northwest seems to be a work of supererogation, in the face of annual production of 20,000,000 pounds of cheese and more than that of butter, and the thousands of prosperous dairy farmers scattered all through the northwest. This settles the question of adaptability, and the pertinent question arises whether the northwest is not the very best dairy region yet occupied. A soil unsurpassed for richness, a favorable climate, all the eastern portion being tempered by the cooling breezes of Lake Michigan; where white clover and June or blue grass gradually creeps in unaided, and frequently in spite of efforts to prevent it—when properly treated, these two grasses are the very best yet discovered for both pasture and meadow for dairy purposes—the cheapness of the land; its close proximity to the largest cornfields in the world; the general healthfulness of the herds, their freedom from most of the maladies that afflict many of the older dairy districts at the east; the network of railroads that accommodate nearly all portions of the country, gives us almost equal advantages in freight with any other locality.

With all these favorable conditions, perhaps it is no exaggeration to state that \$20,000 invested in dairy farming in

the northwest is fully equal to \$30,000 invested in the same business in the dairy districts in New York.

At the annual meeting of the N. Y. State Dairymen's Association, recently held at Sinclairville, President Williard pronounced the season just closing not very prosperous to most New York dairymen. "The average price for dairy products has not been high; the severe drought in May and June affected pasturage and reduced the fall feed and the hay crop. In many cases the cheese products of dairies is one-quarter less than in 1872. The hay crop of New York is estimated to be 33 per cent. below an average. Good milk cows have been sold in Herkimer county for \$15 dollars each, while cows it was not desirable to winter over have sold at from \$5 to \$8 per head; many of these cost \$50 to \$60 last spring."

No such disadvantages have yet visited the northwest, and the past season has been a prosperous one. The improved quality of the products, that have brought full prices and a ready market in New York, gives dairymen a confidence in the future success of the enterprise in the northwest. By careful study, continued improvement, and the intelligent use of recent discoveries and the many natural advantages that surround us, we need have no fears that good butter and good cheese will have to beg buyers at losing prices.

THE DAIRY COW.

BY CHESTER HAZEN, LADOGA, PRESIDENT OF THE WISCONSIN
DAIRYMEN'S ASSOCIATION.

Read before the Northwestern Dairymen's Association.

As dairying has become one of the leading agricultural interests of the Northwest, and the increase in demand for dairy products for the general markets, will have to depend very much on the Northwest for the supply, and the long

distance which our products have to be shipped to the sea-board, seems to make it very necessary that the dairy business should be conducted with the greatest skill and economy, the experience of our associations should accumulate in order to derive the best results.

One very important point to be secured is good cows. There are undoubtedly various opinions in regard to what constitutes a good dairy cow. Some of our best feeders of stock might succeed, perhaps, best with a class of cows that would not be profitable for me as a light feeder.

I want a cow that will give me the most milk, and of good quality, from a given amount of food. For such I would select a medium-sized cow, of any particular breed; rather fine in the bone: a slim head and horns; a full plump eye; rather narrow between the horns; light, slim neck, and if neck drops down slightly in front of shoulder it will do no harm; rather thin, wedge-shaped shoulders; light brisket; increasing in size back of shoulder, to make room for good sized lungs; large barrel; heavy loins, hips and hind quarter, light hams no objection; a square, broad udder, set well forward; in short, a feminine shaped animal, which I can better describe in this way: The milk producing organs should be large and well developed in proportion to the head, neck, shoulder, and bones in the legs.

There are exceptions to all rules, but nine out of ten cows such as I have described, will be first-class milkers, and be good cows the whole season for making cheese, and pay well for all the feed consumed.

The theory advanced by some dairymen that a cow is nothing more than a machine to convert feed into milk is not always correct. It is not always true that the cow that consumes the most feed gives the most milk. There are certain milk producing organs, or qualifications, necessary to produce a large flow of milk, and these are to a great extent inherited from the ancestors.

The rule that like begets like, in breeding all domestic animals, holds good in breeding milk cows. Over twenty years' experience in breeding dairy cows has proved to me conclusively that much has been accomplished in breeding from our native cows, raising the heifer calves from the best milk cows in the dairy.

Much pains should be taken in selecting a bull from the best cow you have or can find, and I would have the bull calf resemble its dam more than the sire if possible.

Great improvements have been made during the past twenty-five years in breeding Short Horns for beef, but in breeding especially for beef the milking points have been neglected.

My experience with Short Horn grades for dairy cows is that the less Short Horn blood in them the better for milk. Still there are exceptions to this rule. There are some good dairy cows of the Short Horn breed.

* It is generally considered that the Ayrshires are the best pure blooded stock for cheese dairying that we have in this country, at least they have the best record. I have been breeding some Ayrshire stock for the past three years. My cows are all young, mostly two years old past. They have done very well for heifers, fully meeting my expectations. They are rather smaller than our native or grade stock; tough, hardy, active cattle; good feeders, and will stand heavy feed while giving milk and not lay on fat, but instead, convert it into milk. When not in milk they will keep in good condition as easily as any native stock in Wisconsin or any other western State.

There is no dairyman in the Northwest who can afford to keep poor milking cows. Better pay one hundred dollars for a first-class cow than buy an ordinary one for twenty-five dollars.

I have often heard it stated that the Ayrshire cows gave the poorest quality of milk of any cows in the country, which

is not the case with mine. In New York, the milk that produces six to eight per cent. of cream is considered poor, ten to eleven fair, fifteen per cent. good, twenty per cent. extra. I am milking four Ayrshire heifers this winter that came in in August and September. I tested their milk in December and it showed twenty per cent. cream.

What is needed here in the West is the best cows we can get, and if well fed and cared for there is no doubt but that they will yield a good profit to the dairyman. I believe every dairyman should raise some heifer calves every season from his best cows. And when you get them started keep them growing until they are cows.

I can not afford to raise calves and let them stand still or go back in winter. Keep them growing, and if you do well by them, they will come in when two years old, and invariably make better cows than they will to come in at three years, because, coming in at two years checks their growth in bone and develops their milking qualities, making a much more desirable cow; whereas, if allowed to run until three years old, they grow too coarse and masculine for first class milkers. This has been my experience in breeding milking stock.

If you wish to breed grade stock of any blood, breed from a full blooded bull. A grade bull is not to be relied upon to produce anything like a uniformity of stock, which would be a serious objection to a good dairyman or breeder.

A large, coarse cow, with heavy carcass to support, is not as profitable for the dairy as a medium or undersized cow that is a good milker. It requires a certain amount of food to support the carcass in proportion (usually) to its size, and a small cow that will give as much milk as a large one is decidedly the best for the dairy. But some would say the larger cow, when she is no longer profitable for milk is worth more for beef. That may be true, but to support 200 pounds extra of carcass, for ten years, will much more than balance

the difference in the value of the cows when fattened for beef. A good dairy cow that will pay two or three times what her carcass is worth for beef every year in milk, is far more valuable for the dairy, even if the carcass is worthless for beef. But this is not the case. The real difference in favor of the large cow for beef, is only the difference in the number of pounds of beef.

I believe I can keep five cows of 800 pounds each on the same feed that would be required to keep four cows of 1000 pounds each, and if I bred carefully from first-class milking stock, they would produce one-fifth more milk, or twenty per cent., which would be a net profit of twenty per cent. in favor of the smaller cows. Perhaps 800 pounds is rather light for a first-class dairy cow, but my experience is decidedly in favor of medium-sized cows.

WHOLESOME FOOD AND PURE WATER FOR COWS.

BY NAHUM E. BALLOU, M. D.

Read before the Northwestern Dairyman's Association.

Milk, produced by the cow, and many other mammals, contains within itself, all of the elements required for the sustenance of the human body. Pure and uncontaminated, its capabilities for sustaining muscular waste in the human body far exceeds any other article of food. The constituents of milk in a hundred parts taken, are of water 86.28, of butter 4.38, of sugar of milk 5.27, of casein 3.80, of various salts 0.27. Total, 100.00.

The specific gravity of milk usually ranges from 1.025 to 1.031.

According to Dr. Percy's analysis (an eminent New York physician), healthy milk has an alkaline reaction, while milk from diseased cows is always acid, just the opposite, chemi-

cally speaking. Gay, Lussac, Berzelius, and other eminent chemists, have confirmed Dr. Percy's analysis. Unhealthy milk soon follows in cows shut from the light of day, and in those confined in bad air and supplied with unwholesome food. But when we come to exact the proportions of noxious and baneful ingredients existing in bad milk, though sufficient to expose the character of the milk, they can not indicate the poisonous qualities of the worst sorts, nor the evil effects that may follow their use. In organic compounds used for food, as in the air we breathe, the most dangerous poisons may lie concealed beyond the power of detection by the most delicate tests, or by the use of the most powerful microscopes, and the existence of such deadly constituents is brought to light only by their effects upon the human system. Thus, while science is yet too feeble to detect and pick up the subtle poisons that lurk in our food, the real nature of contaminated milk is most conclusively shown in diseases more particularly of young children, as engrafted upon their delicate organizations, and traced to the use of poisoned milk as revealed in the distillery milk of New York City.

We see by this preliminary view, that after the dairyman has selected the most approved stock for his dairy, the care involved, which secures the purest milk is of the highest importance. From observations connected with the treatment of dairy cows, in many instances it is feared that too little stress is put upon this initial feature which governs all subsequent steps in the work of perfecting butter and cheese. Indeed, it is the experience of all factory men, that the failures to turn out first-class dairy goods, may generally be traced to a negligence of the very first principles involved in the elaboration of pure milk, without which all the subsequent skill of the superintendent can not supply.

When we come to consider that the character of the milk is wholly influenced by the kind of herbage, and the quality

of water used by the cow, it is a matter of vital importance to consumers of dairy products, that the source of the milk should, as a prime necessity, be pure, as constituents and components of the milk.

If the milk comes to the factory contaminated, it matters not how many processes, in which heat and other transforming agencies are used, if the milk was tainted, vitiated, or poisoned, the resulting products must necessarily also be contaminated. To illustrate. We have had accounts from our own State and from Nebraska, where persons were almost fatally poisoned by partaking of cheese made from diseased milk, rendered so, in cases where the cows had eaten the poisonous plant that induced milk sickness in those who used the milk or cheese made therefrom.

Any weed having a pungent or fetid taste, used or eaten by cows will always vitiate their milk. Leeks eaten by milch cows will affect the milk so as to render it unfit for use. Growing winter wheat will, when eaten by cows giving milk, impart so strong an alkaline taste as to render it unfit for family use.

These facts have been acquired by observation, not by the crucible of the chemist, yet are reliable nevertheless. Pastures, therefore, when laid down for milch cows should contain a variety of sweet, succulent grasses, in order to influence a flow of pure milk.

It is said that the quantity of food furnished cows has a notable influence upon the quantity of milk, especially upon the production of casein; hence an abundant supply, as a matter of course, of pure food, gives increased returns to the dairyman. The cow that can crop the most herbage, other things being equal, will give the greatest flow of milk.

While the products of the dairy are fast becoming great food staples, in fact, fast taking the place of beef and other animal food to supply animal waste, it is all important that they come to us pure and undefiled, purely the outgrowth of

the sweetest and purest herbage, and water as pure as we are accustomed to slake our own thirst with.

I have dwelt at some length, in order if possible to correct these unwarrantable practices, for in the surrender of the manufacture of butter and cheese to the "associated system" we would wish to have safeguards thrown around each stage of production of these great staples, that bid fair to inaugurate an industry of immense proportions in our country.

EFFECTS OF FOOD AND DRINK ON MILK.

BY H. C. DRAKE, LAKE MILLS, WIS.

Read before the Northwestern Dairymen's Association.

In this age of books and conventions, purely original matter cannot be expected in a paper of this kind, but only such an arrangement and compilation of established facts as shall best subserve the dairy interests.

Though we cannot suppose that the farmer is not to some extent a student, yet I think I am safe in saying that no branch of industry is carried on in a more careless and haphazard way than general farming; that no class of men follow more in the old and well trod paths of their ancestors than do farmers. We see the mechanic and tradesman constantly seeking after easier and cheaper means of producing the articles of his particular traffic; going back to first principles, to raw material, selecting those best adapted to the particular object he has in view, and carefully calculating the cost from step to step of its transportation into the perfect article of his trade. To such an extent, and with such minuteness are his calculations conducted that perhaps before a cent is expended he knows to a dollar what the desired article will cost, and whether it can withstand the competition

of the general market with profit to himself or not. Why cannot the dairyman pursue nearly the same course? He cannot for himself, it is true, analyze chemically the milk, cheese and butter he produces, or the grass, hay, etc., his stock consumes, but chemists have done it for him, and by study and thought he may use the results of their research with profit.

First, then as the production of milk of the best quality and in the largest quantity is the primary object of the dairyman, let us look a little into its constituent elements and peculiarities, and after learning what we can of those elements we can search for such food and general management of the cow as shall best promote the object sought.

As milk is the only article of food containing within itself all the life giving elements, capable of maintaining life, promoting health and growth, we must expect to find it composed of many compounds, some of them very delicate and subtle. A few of its leading elements only can be mentioned in this paper, but learning the existence of these subtle agencies and the complication of its compounds, we at once see the great care and caution which should be exercised both in the treatment of the cow, which produces the milk, and the milk itself. Every one knows that the more complicated the machinery the more care and experience are required in running it properly.

The cow in the hands of the dairyman is simply a milk producing machine, infinitely complicated and extremely delicate, and his great care should be how best to feed and care for that machine to produce desired results. The components of milk are mineral, liquid and gaseous, each minutely divided and subdivided, showing a structure high-toned and complicated, the proper arrangements of its parts easily thrown out of balance and its utility thereby injured or perhaps entirely destroyed.

Chemists tell us that milk is composed of the following

general elements: In each 100 parts (leaving out small decimals) water, 87.4; butter, 3.43; casein, 3.00; milk sugar, 5.12; mineral matter, .93.

To give an idea of the minute subdivision of its elements, I will quote from Mr. Anson Bartlett, of Ohio, before the Northwestern Dairymen's Association, at its session in January 1871.

He says: "Different analyses of cow's milk although differing in the proportion of component parts, are nearly alike in general features and the proportion of different elements in each component part, remains constant as far as known. I shall therefore present but one general analysis which is probably a fair average. In every 1000 parts of pure milk, are 837.48 water, 57.04 butter, 45.54 milk sugar; 46.50 casein, 7.24 albumen, 6.20 salts, consisting of chloride of sodium, phosphate of lime, sulphate of lime, carbonate of lime, and magnesia, some potash and sulphur, and about one thirty-eighth part when first drawn from the cow, of contained gases, which readily pass off by a free exposure to the air. Of the first ten component parts mentioned, not one is simple or elementary, all being compounds of a more or less complicated character.

It is a law of matter in chemistry as well as in mechanics, that the most highly organized and complex, are the most readily disturbed and deranged. The more complicated the structure, the weaker the affinity and the more readily and rapidly will it be decomposed."

The fact of the presence of nitrogen should be remembered as it enters quite largely into the different kinds of food.

One peculiarity of milk which deserves notice is its peculiar gaseous condition when first drawn from the cow, carrying it as it does animal heat and animal odor. This animal odor is supposed to be derived from the waste material of the cow's body and is thrown off as dead matter in the form of gas, the direct result of decomposition and decay. When

we consider that the milk secretions do, as is abundantly proven, not only throw off the good qualities mentioned but to some extent the germs of disease which may exist in the mother, we at once see the necessity of maintaining as great a degree of health and vigor as possible in the dairy cow. We also readily infer the rapidity with which a composition thus impregnated will pass on to its own decomposition if those destructive elements are not destroyed.

Having examined the composition of milk thus far and learned its complex nature, we at once see that the investigation of the second branch of our subject—how to produce the greatest quantity and best quality of milk from a given number of cows—is no small task.

Some very interesting experiments have been made upon the relation of food and drink to the quantity and quality of milk and an investigation of some of them would be of interest, but cannot be made in this paper. I shall only give results as briefly as possible.

One thing should always be remembered, which is, that the cow appropriates what she needs for her own support first and we thus get little or no return, except for the surplus we give her over and above her own wants. Several German and English chemists have experimented largely in trying to vary the constituent elements of milk by a variation of food, but without success, all their experiments going to prove that the composition of the milk of any individual cow being fixed, cannot be materially changed by a temporary change of food. Heavy or light feeding will affect the quantity but not the quality of milk.

Some of the conditions which are found to effect the quality are :

First—scarcity of food. The cow not only takes what she needs for her own use but she takes the best. The milk of a half fed cow is not only small in quantity but poor in quality.

Second—the length of time from calving. We all know that milk is richer in fall than spring.

Third—old pastures thickly set with fine sweet grass, such as white clover and June grass, appear to yield more and better milk than new pastures. It has long been supposed that an extra supply of water increased the quantity of milk but at the same time made it poor in quality, but recent experiments, as stated by Prof. Miles, of Michigan Agricultural College, have proven that the quality remains unimpaired—a strong argument in favor of an abundance of good water.

There is such a variety of soils that it is impossible to say that any one grass or plant is best for all locations. A particular grass may do well, giving abundant growth in one location and in another be a total failure. But one principle holds true in every location. Whatever promotes the comfort and health of the cow tends to the production of good pure milk. Such food then as she will relish best, and which will give the different functions healthy and vigorous action should be freely given. To this end cows should not be confined to one particular diet but allowed a variety of food, as she will then have an opportunity to change from one to another and select that which suits her best as her dainty appetite may require.

Pastures should be so arranged that some one or more kinds of grass are approaching maturity throughout the season, as in that way a continuous flow of milk is secured. In this respect we are far behind the farmers of the old country, who have long been noted for their fine pastures. In a prize essay by Prof. James Bushman, of the Royal Agricultural College of England, the grasses are classified and arranged and we find that about thirty and perhaps more are in general use. Our pastures are commonly composed of two or three, which in the best pastures of the eastern states have been increased to six or seven.

To aid in procuring this variety, pastures should not be broken up unless absolutely necessary, as grasses work in of themselves, not only giving variety but producing a better turf than can otherwise be obtained.

In regard to the kind of grasses and grains best adapted to dairying, I shall give you the result of experiments made at different times and in different localities and the opinions derived therefrom.

Willard in his Dairy Husbandry, says: White clover, wire grass and June or Kentucky blue grass, are valuable for producing milk and generally abound in old pastures, where they seem to thrive best. M. Hamoir, a writer in the French Journal of Practical Agriculture, observes in relation to the sugar beet, that in its raw state it cannot be made use of unless with great caution, as it often produces intestinal irritation. With milch cows it often decreases the quantity of milk and affords butter of an inferior quality. On the contrary, when cooked it increases the quantity of milk and affords butter of an excellent quality.

Mr. Harris, in the American Dairyman's Association called attention to the influence of grass and other feed on the flavor of cheese (carried of course by the milk). All herbage has such an influence and he had found sweet vernal grass to give cheese a desirable fragrance. June grass he thinks possesses and imparts the finest aroma, timothy, and red top next, and red clover but little.

J. R. Chapman sowed four acres of orchard grass some years since and there happened to be in the seed some seed of sweet vernal grass. This latter ripening so much earlier than the common grass has spread considerably. It now scents his mows and is eagerly sought by his stock. The English meadows contain numbers of flowering plants of delicious fragrance which scent all the hay with their nice aroma.

Upon page 105 of Willard's Dairy Husbandry can be found

a table, showing the comparative equivalents of different kinds of cattle foods, giving the per centage of flesh forming and of fat forming, with the total of both. With the aid of such tables as the one just referred to, all the time bearing in mind the fact that such food should be given both in summer and winter as will best preserve the equilibrium of the physical system, a compound of pasture and meadow grasses may be made which will produce good results.

We have thus far been considering the means of producing good milk. Impure or bad milk may now claim our attention for a few moments. We have learned that desirable flavors of grasses are carried by milk to cheese and butter. Bad ones may be carried in the same way. X. A. Willard says the bitter taste in cheese that puzzles many, comes from the daisy and other weeds, and at certain seasons is very offensive. You do not often get this kind of flavor in English cheese, because the Englishmen are careful to destroy and uproot all bad weeds. Here is another reason for sowing a variety of grasses and getting a thick turf. It will prevent the growth of weeds.

The questions of soil, hay, grass, etc., are constantly changing in different localities, but there is one question which applies to all dairymen alike—good and pure water. Some men appear to think if they have good water in one place on the farm which their cattle can reach, though they must make a long journey to it, that is enough; but that is not true. The cow is not particular about the quality of water she drinks, and we often see her drinking from pools of standing and impure water when she could easily get that which is pure. The best of water should be provided at different points, easy of access, and all stagnant or standing water be drawn off by draining or other means, so that the cow cannot possibly drink of any but the best. Bad water will destroy human health. It will destroy that of the cow more rapidly as she requires such large quantities of it. Pure

water should be of easy access, as the cow is a quiet animal, inclining to rest when satisfied with food, and exercise in going to and from water tends to heat the milk, and thus it comes from the cow carrying more animal heat and odor, which just so much facilitates decomposition.

We read of different kinds of patent filters for purifying water. Some men seem to think that the cow is simply a self-adjusting filtering machine constructed by the Almighty, intended to filter and purify all the slops and dirty, slimy goose-pond ingredients they may see fit to feed it; thinking I suppose, that the bad portions will be thrown off and the good returned to them; forgetting that the milk secretions are one of the means by which the cow's system is relieved of the waste material not needed for its own support, and they thus get to some extent the bad and not the good. We have seen that milk is of 87-100s water. How can a cow produce good milk when using such water? It is simply impossible.

Let us follow this point a little further. Chemists tell us that good cheese is composed of 34.100s water. We see then that every pound of good, soft, buttery cheese is one third water.

Let the man who allows his cows to drink at dirty pools and frog ponds, remember that about one-third of his cheese is extract of frog pond, and then if he does not happen to exactly like its flavor, perhaps he will not be very severe upon his cheese maker.

SUMMER FEED FOR COWS.

BY N. ELDRED, IOWA FALLS, IOWA.

Read before the Northwestern Dairymen's Association.

This question, "Summer Feed for Cows," is of more importance than the casual observer will at first acknowledge,

and that it is of importance much beyond the appreciation of most of the dairymen of the northwest, is proved by the results of their dairy operations. Else how is it, that here and there an isolated dairyman makes, for the season, 600 pounds of cheese per cow, or a corresponding amount of butter, while nine-tenths of them only make 300 to 350?

I acknowledge this greater yield may be accounted for, in part, by the difference in the milking qualities of the dairy stock; yet the feed, summer and winter, particularly the summer feed, has more to do with it than most dairymen imagine. I need not here say that the cow is a chemical laboratory, used for converting food into milk; that a certain amount of food is necessary to sustain the wear and tear of existence; that it is only from food consumed above this that she can manufacture milk. These propositions have passed into axioms, and have been so often repeated that they have become familiar to us all as household words, and yet we do not profit by them as we ought.

As long as lands in the northwest are cheap, and labor dear, pasturage must continue to be the main reliance for summer feed. From the late report of the Commissioner of Agriculture, we learn that the pasturage, or that portion of the grass crop which is annually grazed by domestic animals, is of more value than the entire cotton crop, the wheat crop or the corn crop of the United States. If this be true, and our pasture lands can be improved 20 per cent. in their productive capacity, how great in the aggregate will be the amount of wealth added to the pockets of the dairyman and the grazier?

How to improve our pasture lands, although a little outside the question under discussion, may well claim a moment's thoughtful consideration. First, in seeding our land intended for pasture, we use too little seed, and too few varieties, usually timothy and clover only. Now we all know that these grasses (I use this word in its common, rather than its

scientific sense) do not form a compact sod, and that they kill out easily, both by the frosts of winter and the droughts and heat of summer. We should add blue grass, red top, white clover and many other kinds, (if the seed can be had) so that all the space may be occupied, and a firm and compact sod formed. And then we injure our pasture very much by over stocking during the summer droughts. By close feeding, we leave no foliage to protect the grass roots from the burning heats of the sun, and many of the plants are killed out. Besides it is a law of all plant life, that there is a mutual relation and a mutual dependence also, between the top and the root. Remove the top of a tree and the root dies or is greatly weakened. This law holds good in regard to the grasses. By close cropping we weaken the vitality of the root, and render it incapable of producing strong and vigorous plants. Again, in late autumn we feed our pastures too closely. In this climate where the snows are light, and the little we have is usually driven into heaps by the wind, a little foliage is a great protection to the grass roots during winter. To avoid close feeding during the summer droughts, I would recommend a system of soiling or half soiling. In central New York a dairyman would almost as soon think of wintering his cows without shelter, as to omit the yearly sowing of his pastures with gypsum. The testimony in regard to its value as a fertilizer in the Northwest is conflicting, and its use thus far has been limited. It should be more thoroughly tested, and used where found beneficial. Asking pardon for this digression, I return to the subject under consideration, "Summer feed for cows." It should be abundant. I want to repeat this with emphasis. It should be abundant. A. L. Fish, of Herkimer Co., N. Y., known to me personally (as his farm adjoined that of my honored father), and known doubtless to most of this convention by his writings on dairy subjects, if not personally, was milking, year after year, sixty cows, and making 350 pounds of cheese

per cow. He decided to sell half his cows and endeavor to make the thirty remaining, consume the entire product of the farm. The experiment was a success, and his cows made him a little more than 700 pounds of cheese each the first season.

Allow me to repeat once more, the feed should be abundant. It should be of a quality suited to the production of milk. In the dairy cow it is milk we are working for, not beef. The chemist tells us that milk is about eighty-eight per cent. water, hence any food to be suitable for the production of milk, must contain this element largely. We all know how suddenly and bountifully our cows increase their flow of milk, when their feed is changed from dry hay to the fresh spring grasses. Why is this? Hay is nothing but grass deprived of a portion of its moisture. Ah! that is it. It is because it is deprived of its moisture, that your cow cannot make the same quantity of milk from it that she can from the fresh, juicy spring grasses.

As already intimated, in order to attain the best results in dairying, a system of soiling or half soiling must be adopted for a part of the season. I shall not attempt to instruct you as to the best crop for this purpose. You know as much about it as I do, and many of you much more. My experience in this line is limited to two or three months in the summer and autumn of 1871, with a very limited dairy (little more than sufficient for family supplies). The results were more than satisfactory. The labor was less than I had anticipated, and the increased flow of milk was (to use an indefinite word) considerable. I used green corn mostly (drilled two feet apart) also a little Hungarian grass.

You all know the story of the man who went to mill with his peck of corn in one end of the bag and a stone in the other. There are those who claim that it is not profitable to feed dairy stock grain (ground of course) during the summer. I am not one of those. Most strongly do I believe that the

cow should have her "mess," night and morning during the entire milking season, and that it pays. And just here I apply the little story referred to, for I must acknowledge that as I have not been engaged in dairying since I have been in the west, this belief is founded mainly on the results and the experiences at the "Old Homestead" where for more than thirty years this practice was followed, and not one year of the thirty but over 500 pounds of cheese per cow was made, and some years as many as 600. And I believe further, that this feed should be given wet.

I was surprised to learn during my attendance in this convention two years ago, that it was the practice almost universally in the northwest to feed dry. Wheat bran, shorts, rye, barley, buckwheat, are among the best articles for this feeding. Give the corn to your hogs, or beef cattle.

It may cause a smile, if I mention water under the head of "summer feed for cows." But why? Is not milk the object of all summer feed? And is not milk largely composed of water? And can your cow manufacture (or secrete) milk without water? It should be pure. It should be abundant. It should be easy of access.

Salt is another element that does not come strictly under the head of "summer feed for cows," yet it is almost as essential as grass itself. They should have it every day. A friend of mine a few years since, made the following experiment with his little dairy of five cows: He salted them every morning for a week. The next week they received no salt. The third week they were again salted every morning; the fourth week no salt, and thus he continued for twelve weeks, the milk being weighed night and morning, and a record kept. I regret that my memory is not good enough to enable me to give the exact ratio of increase for the weeks the cows received salt, yet it was — to use a provincialism — considerable, and my friend was of the opinion that this increase in the milk secretions was caused by the cows tak-

ing more water the days they were receiving salt. Whether the theory be correct or not the fact remains.

X. A. Willard, in his work on "Dairy Husbandry," in speaking of water as an incitive to the milk secretions, uses this language: "Upon this point we have some interesting experiments by M. Dancel, as communicated to the French Academy of Sciences. He found that by inciting cows to drink large quantities of water, the quantity of milk yielded by them can be increased several quarts per day without materially injuring its quality. "The amount of milk obtained," he says, "is approximately proportioned to the quantity of water drank." Cows which, when stall fed with dry fodder, gave only from nine to twelve quarts per day, at once produced from twelve to fourteen quarts daily, when their food was moistened by mixing with it from eighteen to twenty-three quarts of water per day. Besides this water taken with the food, the animals were allowed to drink at the same intervals as before, and their thirst was excited by adding to their fodder a small quantity of salt. The milk produced under this regime, after having been carefully analyzed and examined by a competent chemist, as to its chemical and physical properties, was adjudged to be of good quality, and excellent butter was made from it.

To recapitulate: The feed should be abundant; and that it may be abundant, a system of soiling should be adopted during the summer drought and autumn. It should be of a nature suited to the production of milk. The "mess" of ground feed should not be omitted night and morning. An abundance of water should be given, and the cows should be induced to take large quantities of it. Salt every day.

Now in all this there is nothing new. I have only repeated old truths. It is all I have attempted. If I have so produced them as to impress more deeply upon your minds their importance, and the dairymen before me shall thereby be induced to better their practice, I shall be satisfied.

BUTTER-MAKING AND MARKETING.

BY DR. R. R. STONE, ELGIN, ILL.

Read before the Northwestern Dairymen's Association.

When we consider that in the aggregate about three times the value of butter is sold and consumed in the various markets than there is of cheese, it would seem highly proper in a dairymen's convention like this, that the art of butter-making and marketing should receive a proper share of consideration. The very important subject of cheese-making with its latter day improvements, has absorbed so much of the time in previous conventions, that the subject of butter-making has perhaps been somewhat neglected.

There is, at the present time, such a wide difference in the price of butter in all of our leading markets, which is becoming more striking each year, that it is eminently proper and necessary for our future profit, that the cause should be discovered, that the remedy may be applied. You have only to go into any of the butter markets and run your tryer into a row of promiscuous butter that has arrived fresh from the country, to become astonished that so many varieties of color, flavor and quality can be produced from a substance originally so near alike. The difference is not so much in the material from which butter is made as in the mode of manufacture. According to one system butter is produced worth, in the markets at the present time, from ten to fifteen cents; in the other, forty cents per pound. According to one system dairying is a very poor, non-paying business; in the other it is very attractive and profitable.

At the present time when so much is being said by the agricultural classes about the unproductiveness of labor, it would seem the difference of from one to three hundred per cent. in the price of an agricultural product, of as much importance as that of butter, would command the serious

attention of dairymen. Still, to tell any butter maker or farmer's wife, who has lived in the Empire or any of the New England States, anything about the art of butter making or its improvements, they would tell you they understood it perfectly well, for they had made butter all their lives. Still, where one pound sells for forty cents, I presume one hundred sell for less. This loss, and it really is a loss o both capital and labor, in the aggregate, is immense — would amount to enough in a little while to pay our national debt. A great deal is being said now-a-days about railroad monopolies and rings, and monopolies of every kind. The farmer feels keenly that his produce does not bring him enough to properly compensate him for his capital and labor. Whether we shall succeed in breaking up all the monopolies or bursting all the rings, I am unable to say, but where more can be realized, and a greater price can be obtained by improving any agricultural product to the amount of twenty-five or one hundred per cent., which will sell for so much more in the market, then so much the farmer or dairyman is sure of. He has it in his pocket.

The quality and price of cheese has improved largely since the introduction of the factory system. The quantity made is enormous. Still I don't think the markets of the country were ever as bare of cheese as they are at the present time, and the price of both butter and cheese, if of fine quality, at the present time is higher in proportion to their cost than any other agricultural product.

The factory system has produced a great revolution in the art of cheese making. The same system is teaching a great many facts in the art of butter making. I can tell you how to make forty cent butter; and I can tell you how to make twenty cent butter. One way is about as easy as the other, only the forty cent butter requires less labor in working and churning than twenty cent butter.

If we are going to make butter that will readily command

a high price in market we have to begin right and keep right all the way through. In the first place it is very important to make a proper selection of cows. The milk of some cows is much more naturally adapted to butter making than cheese making, while the milk of others is of little value for butter, but very valuable for the manufacture of cheese. The microscope here comes to our aid and teaches us how to make our selection. It is found that the number and size of butter globules varies very much in different breeds of cows and even different cows of the same breed. For example, in the Jersey cow the globules are very large and abundant, and at a temperature of 65 or 70 degrees, the cream will nearly all rise in four hours. The cream requires but little churning, is easily worked and possesses a very fine flavor. The Ayrshires come next; the butter globules not quite so large, but still far above the average. Cream rises quick, requires little churning, and makes very superior butter. The Devons perhaps come next, then the Short Horns, and lastly the native stock. The latter are much better adapted to cheese than butter making.

Now it is much better to keep cows of these breeds separate than to mix them. The reason is very evident. The milk containing large globules will rise quickly and after putting into the chuan will quickly be changed into butter, while the globules of the smaller kind require double the time to rise and double the amount of churning. After the butter of the large globules has come, it becomes oily or salvey by over-churning. The result is, the whole mass is more or less imperfect. The buttermilk from the butter partly "come," remains in spite of washing or working with the butter that has now become oily, the product has lost its fine flavor, and readily passes into what we may call second grade. This may be partially remedied by taking only the first risings of the cream in our large factories, say what rises readily in eight or twelve hours. In this way you will

get only the larger globules which are valuable for butter and of much less account for cheese.

In a herd of dairy cows it is a very easy matter to select those that are best adapted to butter making. You have only to take a sample of the milk of each cow and put it into test tubes; let them stand four to six hours in a temperature of about 70 degrees and they will very quickly tell you which cows to select for butter making.

After you have selected the proper cows for your purpose, it is necessary they should be fed on rich, nutritious food and have plenty of pure water. You can always make cheese better from poor milk than you can butter. I consider it absolutely necessary that cows should be well fed for the successful butter maker. It is this extra feeding of rich, carbonaceous food that gives to milk an extra amount of large globules and that peculiarly fine flavor to the butter. Extra pains should be taken of course that cows should have clean, airy stables, and good timothy pastures.

The milk should be properly aired and cooled. Cans, pails or pans, or anything the milk comes in contact with, should be kept scrupulously clean, and no bad or unwholesome flavors come in contact with it at any time, for should the milk possess any taint or bad flavor it is sure to pass off a large proportion of it in the cream, which is peculiarly susceptible to absorb any flavor with which it may come in contact.

Milk should be set in a room of even temperature, of about fifty-five to fifty-eight degrees in summer, and fifty-eight to sixty in winter. I don't consider it so very important, whether the deep or shallow setting be adopted, as each have its advocates. A proper temperature and a pure atmosphere is much more important. At such a temperature, the cream producing the finest butter, will rise in about twelve hours. The cream should be removed, under any circumstance, as soon as the milk begins to get sour. After the

cream is removed it should be put in pails or cans and placed in water or a room of a temperature of about sixty-five degrees, and kept until a proper amount of acid is developed in the cream, which will usually take about twenty-four hours after skimming. The cream from different settings of milk of different degrees of acidity should not be mixed together, but each setting should be churned by itself.

When a proper degree of acidity is developed in the cream it is placed in the churn — of what variety or patent I am not particular, as each has its advocates. If everything is favorable the butter will come in about forty-five minutes. After the butter has all come and formed in distinct globules, which will usually be nearly as large as a kernel of corn, the churning is stopped, and after standing a few minutes the buttermilk is drawn off by means of a faucet at the bottom of the churn and its place supplied by a few pails of cold water, without ice, when gentle churning for a minute or two is resumed. The water is then drawn off from the bottom. A second and sometimes a third washing is necessary to remove all the buttermilk. In creameries, usually from fifty to one hundred pounds is so brought at one churning and this is done generally by steam power.

After washing in this way, the butter is taken out and placed on a large butter worker (of which there are various patents) with an inclined bottom, so the buttermilk will drain off, and usually worked with a lever. When butter is washed in this way it requires but little working; in fact, it is a great injury to work it much. It is then salted at the rate of about three-fourths ounce to one pound of butter, with pure ground salt, which is done with but little working. It is then put into a vessel and placed in pure spring water for twenty-four hours, in order that the salt may strike all through it, when it is again worked until it is all of uniform color and appear-

ance, when it is packed in vessels ready for market. If this plain and simple course is adopted, I will guarantee you always a ready sale and the highest price for your butter.

It may be a little more difficult perhaps, to tell you how to make fifteen or twenty cent butter, for you will find very few who make that kind, but you will usually find the markets full of it and slow sale at that price. The system is very much mixed, according to different tastes and fancies of different nationalities. It is commonly done by having a small number of cows of mixed breeds, and manner of feeding. Churning is done once or twice per week, from half a dozen, perhaps, of different settings, with cream of various degrees of acidity, some of which by long standing may become bitter. Churning is long and tedious, for part of the cream is reluctant to come. The working is consequently long, as the buttermilk is determined not to come out. But in order to have good butter, the good lady spares no time and labor, for she gives it a good long working, and then, perhaps salts with coarse common salt, as her husband will furnish no other, and she is too good natured to make a fuss about it. But in order to compensate for the neglect she puts in a good deal of it, for she does not mean that her butter shall spoil for want of salt; as it is not over expensive. It is packed immediately after salting. No regular system need be observed in this kind of butter making, but the common result is generally reached, a small amount of butter per cow, and a small price for butter, and farmers disgusted with the business.

The art of butter making has seemed to have lain dormant as it were, for a long time, for it reaches back to our earliest history. Within the last year it has received a new impulse. Since the creamery or factory system has been adopted some very superior butter has been made, which has brought fancy prices. As it goes into use a more refined taste is acquired. Persons after using really fine butter, will not

consent to go back to the old kind again as long as the finer qualities can be obtained. This exquisite taste is extending to all sections where such qualities are introduced. Butter is a luxury; much more so than cheese. The latter is a staple in its fullest sense. You may set the table with the finest products of the farm, add the fruits and spices of the finest importations if you please, if the plate of fine butter is wanting, a proper appreciation of the whole is lost, but with its defects in other articles can be easily overlooked, but the defects in butter, seldom.

The reputation of Illinois and Wisconsin butter makers is extending not only over the far west but eastward. I have known sales within the past year of Illinois butter, that fully equalled if not excelled some of the best brands of the Empire state. When the reputation of one dairyman is obtained, the whole section in his vicinity is benefitted. If any of us have any superior knowledge in the art, it is to our advantage to impart it to our neighbor.

The associate system of dairying, I think in the end, will prove the most successful. The farmer that has but five or ten cows, cannot make as good butter as the one who makes it a specialty, and uses the milk of fifty or one hundred cows; and it is not the fault of the farmer either, for you cannot expect to succeed well in making high priced butter, unless sufficient cream is obtained from each setting to make a churning, and this is why the factory system succeeds so well. It is not so much on superior skill that success depends, as a proper condition of the milk and cream when manipulated.

There is another almost indispensable thing in the success of a factory, and that is a pure running spring of water. A few favored sections have these, and then with proper soils and climate, such institutions must be a success.

THE ENGLISH CHEESE MARKETS.

BY H. C. WILDER, EVANSVILLE, WIS.

Read before the Northwestern Dairymen's Association.

Since the organization of this association very many questions of much importance to its members have been discussed and many of them have been satisfactorily answered, and are now no longer questions. It is no longer a question whether the soil and climate of the northwest is adapted to the production of the finest cheese. It is no longer a question whether its production can be made profitable to the dairyman. And it is no longer a question as to its being produced as cheaply and as good as in any other country.

But one of the questions now most puzzling to the minds of dairymen, one of the questions of most importance, is, what shall be done with the large and increasing quantity of cheese produced? Until we produced more cheese than would supply our western markets there was no trouble; but since there has been more made than could be disposed of here at home, buyers have had their own way and some no doubt have taken advantage of those who were over anxious or obliged to sell, which is always the case in an overstocked market, and as long as we are obliged to sell in such a market, so long are we at the mercy of the buyer, and the only remedy is to be able to send our goods to a better market.

The best market is generally the one that uses or disposes of the largest quantity. There is a market for every kind of product, that has a controlling influence over every other market, and that market is generally, if not always, the one that disposes of the largest quantity of that product, and to that market is the surplus of every other market must find its way.

England, consuming a larger quantity, by far, of cheese than any other country, is now the controlling market for

cheese, and although (as at the present time) there may be, for a short time, a better price obtained in some other market, yet, as a general thing, the returns from that market will be larger than any other. To that market, then, should we look for the disposal of a large part of our cheese, and, as I have already inferred, our surplus cheese must find its way there.

Many of us have already shipped or sold cheese for that market, enough at least to know that the expense of shipping whether it is sold a dozen different times before it reaches the market, with a profit at each sale, whether it is shipped as many different times, with a commission and a local freight tariff to be paid each time, or whether it is shipped direct from the producer to the consumer, with only one tariff of freight—a through and cheap one—and one commission, the expense, whatever it is, is always taken from the profits of the producer.

Knowing this, and expecting to ship more in the future, I thought it best to visit the markets there and find out their wants in regard to shape, size, color, texture, etc.; to get acquainted with the dealers in the different markets and the agents of the different shipping routes, so as to be able to make cheese suitable for the market, to send it to dealers that will be responsible and deal honestly, to choose routes of shipment that will subject the goods to the least amount of damage in shipping, and to be able to get the lowest rates of freight. To each of these subjects I have devoted the utmost care and attention while absent, and I am now satisfied that I will be able to do much better than I had even anticipated.

I did not expect to visit the dairy farms, as it is not the time of year to find them at work, yet I saw and talked with several dairymen. I learned more, however, by seeing the different kinds of cheese in the markets and talking with the dealers in regard to the wants of consumers. I visited and

became acquainted with some of the principal dealers in seven of the largest markets in England.

I found the size, shape, texture and flavor that would bring the highest price in any one of them that was required by all and that is the size and shape of a cheese that is fifteen inches in diameter and weighs sixty pounds. Smaller cheese of that shape would not be objectionable. The texture must be close and solid and the flavor mild.

I heard nothing said against sending cheese too green, but very much said against sending too old, sharp and strong in flavor. I think the best age at which to ship it in warm weather, is from 15 to 20 days from the hoop. In no market do they want a cheese that is colored deeper than a bright yellow, and most places require them colored. A few, however, require them perfectly white.

There is quite a difference in the markets in regard to the price of the same quality of cheese; in some the finest quality brings a higher price than the same would bring in another market, and the same is true with poorer qualities perhaps in another market.

The English cheese dealers, like other Englishmen, tenaciously adhere to old rules and customs in their way and manner of doing business. In some places the custom is to give 120 lbs. for one hundred weight; while in other places 112 lbs. is called a hundred weight. In some places cheese is weighed in bulk, i. e., four or five at a draft; in other, but one cheese at a time; and in others one pound is thrown in for every hundred weight, giving full weight and weighing snugly. In each place, whatever the custom, it is strictly adhered to.

Cheese is sold on time, and if one wishes to pay down he gets a discount according to the rate and time customary in the market in which he buys. In some markets four months is the custom, in others two.

There is a difference in dealers in regard to reputation for

honesty and fair dealing ; perhaps as much so there as here; but there are firms, and many of them that have had the reputation for years of honesty and perfect soundness and responsibility.

In regard to shipping routes, there are four competing routes from Chicago, which are via Montreal, Boston, New York and Philadelphia. In each of these there need be but one transshipment to Liverpool, and by some of them but one to London and Glasgow. The matter of trans-shipment is quite an object to be considered, especially in hot weather. In some places the cheese must be carted some distance, while in others the cars run into the warehouse from which the steamers are loaded, thereby saving breakage and the possibility of the cheese laying some time in the hot sun. I expect to perfect arrangements so as to draw advances upon shipments here at home, also to receive and send telegrams via Atlantic cable at very low rates.

With all these different points well understood, I believe it possible for us to compete successfully in the English market. Eastern dairymen have the advantage at present in that they have secured a reputation for their cheese, so that agents are sent there to buy and pay for them at their nearest stations. This is quite an advantage, yet I think we can gain the same if we take the right course.

If we sell our cheese here or send them east to be assorted, and the best sold as eastern and the poor sold as western, as we have been doing, we can never accomplish it, but by putting our cheese as they are, in proper hands in the English market, they will very soon be known as (although western) equal to any, and that they are made in quantities large enough to induce buyers to visit us as they now do eastern factories.

I have the promise from a few firms that they will visit our section sometime during the next season, but I think we should not wait until our cheese is too old and sharp to bring

the highest price in the English market, for buyers to come to us, but put our cheese in the market at the proper time, which I think I can now do safely and at much less expense than we have heretofore done. I made a calculation this morning upon a bill of sales received last summer from London, and can safely say that in freight and commissions, I can save over five per cent.

SELLING WESTERN AS "NEW YORK" CHEESE.

BY E. BUCHANAN, HEBRON, ILL.

Read before the Northwestern Dairymen's Association.

Five years ago this coming spring, I left the rock strewn hills and dales of my native state, New York, and emigrated to the fertile prairies of this noble state. Although I was born and raised in that aristocratic dairy state, and was a cheese maker by profession, I did not come here believing I knew all that was to be learned about cheese making. How well the facts of the case have borne out my impressions you may judge, when I tell you one thing which I have learned, is, that just as good cheese can be made in the west as can be made in the east.

There is one other fact that I have learned, and that is, that nearly all good cheese which is made in the west and goes into the hands of the western dealers, is sold as New York cheese. And now, gentlemen, what is the logical conclusion to be drawn from such a state of things? Is it not that New York makes all the good cheese and the west makes the poor? This is an absurdity too monstrous to be entertained by any one except he be a cheese buyer. It seems to me the western dairymen are suffering wrongs that should be righted, which never will take place until we make an

earnest, united, and persistent effort in our own behalf; demanding and insisting that we are justly entitled to the honor of producing all the good cheese that we make, which is now given to a sister state, through the mercenary motives of our own western dealers, who should use every honorable means within their power to assist us in establishing a reputation for our own goods, thereby placing them upon a permanent footing with the cheese of the east where their excellence really entitles them to stand.

Go east and what do you find? Talk to an eastern dairyman; suggest to him the possibility of our cheese being as good as theirs. He will show at once that he is hit in an exceedingly tender place; he will tell you that you do not possess the grasses, the water, the climate, nor the skill, all of which are highly necessary to make a first-class cheese. Talk with the buyers and you are met with the same everlasting arguments, which might have had some truth fifteen or twenty years ago, but which are all false to-day, as a close observation of the real facts of the case will show.

If there is a buyer in the west who really buys New York cheese he has an undoubted right to brand them as such, but, if on the contrary, he comes to our factories, and buys our cheese, he has no such right. In the first place he is placing honor where it does not belong, and secondly, he is practicing a gross deception on the purchaser, neither of which he has any right to day. As a cheese maker I do not know as I would make any serious complaint if the whole thing could be summed up with the loss of the general reputation which we sustain. The consciousness of having made a good season's run is really praise enough to satisfy my ambition as a cheese maker.

The humbug of the New York brand by which the retailer has been duped, is of small account with him, as he has paid no more for the goods than they are really worth. He gets his profits and that is about as far as his interest goes. But

it is not so with the dairy farmer; the pleasant deception which has been practiced on the retailer, and has cost him nothing, has actually robbed the dairy farmer of a portion of the benefits he should have received for his daily toil, in dollars and cents.

An extended reputation is worth a great deal of money to any man having goods to sell, by enabling him to take the advantage of the foreign or far off markets whenever there may be a surplus in those nearer home, but how I ask can this be done by the western dairyman when New York has the credit of making all the good cheese that is made, and the west all the bad? If our goods have no reputation at home, how can we expect they will be looked upon with any favor abroad? Look at this matter as you may, you will be forced to acknowledge, that just as long as you permit the western buyers to place a false brand upon your cheese as it leaves his hands you will have no general reputation for the excellence of your goods in the eastern markets, and further you will have nothing but a bad reputation at home among those who actually consume your cheese, and called it good while eating it, but remember they called it by another name supposing it to be such, as they were not acquainted with the tricks of the trade, and the very next piece they bought would call for some more of that New York Factory cheese.

Education goes a great ways, and after a man has been buying this falsely called, and fraudulently branded N. Y., cheese for a few years, you might place the same cheese before him in its true light and very likely he would refuse to buy.

We certainly have a strong local prejudice to overcome among the eastern buyers and consumers, before we can place our cheese upon their markets. Being virtually shut out of the eastern markets by prejudice, which the western buyer has helped to create, and is still fostering, we are in a measure confined to our home markets. No matter how

large a surplus we may have, or how short the supply on sale may be, we have the unreasonable prejudice to contend with at home that we meet with abroad. The laws of supply and demand do not regulate the price, but we are forced to accept of one or two cents per pound less for our goods than they are actually worth, which goes into the pockets of the buyer, instead of the producers where it belongs. Are there any dairymen here who are so verdant that they suppose these wrongs will ever be righted until they make an earnest effort to bring it about? If there is, I am not of that number.

In my estimation, there is no way to do this except to have every factory in the northwest supply itself with a factory brand, and brand every cheese and box that leaves the factory with the name of the factory, its owner and post-office address. By so doing, if our cheese are good, we shall build up a reputation that will go as far as the cheese goes, and establish a trade that will send more of the money into the hands of the producer, where it justly belongs. I shall always be of the opinion, until convinced to the contrary, that those factories who supplied themselves with proper factory brands years ago, and failed to use them because they met with opposition from the cheese dealers of the west, committed a very grave error, one that will cost the dairy farmer of the west thousands of dollars to have righted, which must surely be done before we can ever command that respect at home and abroad which the quality of our cheese justly entitles us to.

Perhaps, when cheese making in the west was in its infancy, we did not have the necessary skilled labor, and had not given cheese making and dairy farming the amount of thought which its importance demanded, and which is absolutely necessary for the production of good butter and cheese. As all must creep before they can walk, so must all agricultural interests have a starting point. It seems to me that cheese

making in the west is no longer an experiment, but is an established fact. What we lacked in the beginning we have made up with our money and close application to our business. The quality of our own cheese is such that it will command respect and a ready sale in any of the eastern markets, it can only rescue them from the odium of being made in the west, and there is no way to do this except to boldly place our brand upon every cheese that leaves our factories; stop selling all our good cheese as New York factory, and all the poor as Western factory.

DAIRYING IN WINNEBAGO COUNTY.

BY J. G. PICKETT.

From Correspondence of the Northwestern.

UTICA, WIS., August 14, 1874.

Twenty-eight years ago the present season, the writer was present at a law suit held in the town of Black Wolf, before his honor, Esq., Howard, then the only magistrate in the county south of the river, if not in the whole county. The occasion was the settlement of a little unpleasantness between two citizens of Utica, and was the first case of assault and battery which the officers had been called upon to settle in the county. In attendance at court was the entire male population of our town, and although his Honor held office in a small "pre-emption" log shanty, the court room was not uncomfortably crowded. At the close of the trial the losing party paid the whole costs of the court by delivering to his Honor three small

WHITE OAK CHEESES,

kindly loaned the unfortunate party by our townsman, Mr. H., the same being the first cheese made in the county.

But a very small corporal's guard of those present at the

memorable gathering are now living in the County, but doubtless your P. M., has a distinct remembrance of assisting in the division of that cheese among the proper Officers, Attorney's, &c., by the active use of a Cooper's froe.

This little incident is recalled to memory as I sit down to write out the notes of what I saw in a recent visit to the cheese factories of Winnebago County, or those of the number located south of Fox river.

There are probably but few of your readers who realize the magnitude of the dairy interest of our county, or the important position it occupies in the food producing industries of the rural population. It is not an easy matter to correctly estimate the amount of butter manufactured in the county, but certain it is that more than enough is yearly made to supply the demand in the several towns and cities, and leave a large amount for export.

But a few years since, all the factory, or Hamburg cheese, as it was called, which was sold in our towns was imported from the eastern states, principally from New York.

At the present time, although the consumption of cheese has increased more than four fold, it being used as a staple article of food by all classes, the whole demand is supplied by factory made cheese, manufactured in our own county, and of a quality equally as good as that manufactured at the east, besides leaving a large surplus which goes to supply the Lake Superior trade, as well as many tons annually shipped to the N. Y. market.

THE MUNSILL FACTORY

is located in the thriving little town of Elo, at the center of Utica, and is surrounded by probably the finest area of farming land in the county, if not in the state. The soil is admirably adapted to dairy farming or when properly cultivated will produce the heaviest crops of grain of all kinds.

There are but very few farms in the surrounding country

but what are supplied with pure running water for the use of stock, and where the exception is found the want of it is nearly perfectly supplied by the modern and nearly perfect wind-mill, enabling the farmer to furnish at all times a bountiful supply of the purest well water for his stock just where he wants to use it, and at no cost after the erection of the mill.

The factory is owned by Mr. R. Munsill, on whose beautiful farm it is located, and is leased for a term of years by Messrs Seals & Ellsworth.

The factory was built last season and did a very large and profitable business for the proprietors, the season's make, I believe, amounting to nearly

60,000 POUNDS

of prime cheese, a large portion of which was sold in New York.

We found Mr. S. Butts, a graduate from some of the best factories of Oneida county, N. Y., presiding over the cheese vats, and as capable of entertaining visitors as he is of making a good quality of cheese as goes upon the market.

The farmers are many of them this year pursuing a

SUICIDAL POLICY

in regard to the business, providing they wish a factory sustained for their accommodation, the high price of butter this season having tempted many of the patrons of the factory who should give it a liberal support to manufacture milk into butter at home. A factory to remain permanent should receive a good patronage; and in this instance those farmers whose interest it is to encourage the proprietors who have invested their money for the farmers benefit, may awaken to the fact that a factory cannot live without patronage. This factory is making an excellent quality of cheese which finds a ready sale.

There is delivered at the factory daily 2,200 pounds of

milk by sixteen patrons. Greatest distance milk is carried is two miles. Will probably make 30,000 lbs. of cheese.

From Elo we follow the Oshkosh road to Fisk's, a R. R. station located on the extreme northern limit of the Prairie region of Wisconsin.

Going north from here we see a marked difference in the soil, as well as condition and variety of crops.

The black loam of the prairie with the immense fields of wheat extending as far as the eye can reach, gives place to a heavy clay soil which is better adapted to grass and grazing purposes than for raising grain.

Soon after passing Fisk's we came upon the general level of

FLOWING WELLS

by which nearly every farm is supplied with the purest running waters. We are now in the vicinity of the

KNAPP'S CHEESE FACTORY

which this season is not in operation. Mr. Knapp is the pioneer in the business of Associated Daries in the county, and from this factory has been taken some of the best quality of cheese sold in our markets. The Knapp brand is well and favorably known by all dealers.

The farmers in this vicinity all show the thrift and tidiness of appearance which is characteristic of all dairy countries.

The farm buildings are commodious and well arranged for convenience.

The land is much of it seeded to grass, and the growing crops all show a careful and systematic course of farming, which is always remunerating.

THE HUMPHREY FACTORY.

In the S. E. corner of the town of Omro, a new factory was built this spring by Mr. Henry Alberts, one of the business men of Oshkosh. It is located on the farm of Mr. S. H. Humphrey and is known as the Humphrey factory.

There is probably no factory in the state which has started

under more favorable auspices than this. The farmers appreciating the fact that the proprietor has expended a large amount of money in an enterprise for their convenience, and which has enhanced the value of all farm property in the vicinity, are in return giving the factory a liberal patronage. At other factories we heard complaints that farmers only sent their milk when the price of butter was below a paying price but at this factory many of the patrons are buying their butter for family use in order that the factory may do a successful business.

The building is the most conveniently arranged of any we have visited. Pipes are laid through the building through which is constantly running a stream of pure fountain water nearly ice cold, which is a great convenience, and almost a necessity in the business. All the fixtures are new and of modern improvement.

The superintendent of the factory is Mr. E Roberts, whose reputation as a cheese maker is known wherever the Knapp cheese has been sold, he having run that for several years.

The factory receives daily 4,000 pounds of milk from twenty-six patrons, the greatest distance milk is drawn being three miles, and will manufacture this season 20,000 pounds of cheese.

THE OMRO CHEESE FACTORY,

located in the village of Omro, was built last season by Mr. D. Grossman, and is now operated by him. He is doing what all factory men should do in order to be successful in their business—acting as his own foreman—and as a consequence it would be difficult to find a factory better conducted or manufacturing a better quality of cheese than this.

The whole building, which is a very large one, was neat and clean and as devoid of offensive odors as is the dining room of a well kept farm house. It would delight the eyes of any one to see so large a show of excellent cheese.

THE CURING ROOMS

are located on the first and second floors, and are provided with tables about fifty feet in length, upon each of which are four rows of cheese of very uniform size, and nearly a perfect uniformity of quality.

All the cheese in the factory are so well cared for that they show a polish like marble. Visitors are at all times welcome and the proprietor justly takes pride in showing his work and explaining to them the details of cheese making.

The factory has a stream of pure fountain water running through it, and is supplied with a steam boiler of eight horse power.

It has the largest patronage of any factory in the country, receiving daily 6100 pounds of milk. The greatest distance drawn is forty-one miles.

Mr. Grossman will manufacture this year 70,000 pounds of cheese.

From Omro we drove up the Fox River Valley to the

"EUREKA FACTORY,"

located in the village of Eureka. This is the only factory in the country operated upon the eastern plan, of joint stock association by the patrons of the factory.

A number of farmers last year erected a convenient building, which is supplied with entirely new fixtures and machinery. Mr. Charles Vedder, the foreman, can show no graduating diploma from eastern factories, but is simply a Winnebago County cheese maker.

The quality of his work may be judged from the fact that the proprietors are paying him I think higher wages than is secured by any other cheese maker in the State — something more than one hundred dollars per month. There may be plenty of factories making as good a quality of cheese as this, but certainly from outside appearance the cheeses are faultless. It is very seldom that in a collection of five or

six hundred cheeses the eye is unable to detect the slightest difference in size or shape.

THE CHEDDER-SHAPED CHEESE

is exclusively made here—in size about fifteen inches in diameter by nine inches high, and will weigh about fifty-five pounds each.

The reputation of the factory draws patronage from a long distance. The daily receipts of milk are 4600 pounds. The largest amount from one patron 440 pounds.

The greatest distance drawn, five miles.

The season's make will amount to 60,000 pounds.

From Eureka a very pleasant drive of five miles brings us to

WAUKAU FACTORY,

located in the village of Waukau.

This factory is surrounded by a section of the best dairying country. The soil, generally a stiff clay, is well adapted to the growth of grass. The farms are nearly all well watered by springs or small brooks. Flowing wells are also producible on most farms at a small cost.

The factory was built last season by Messrs. Garlick & Seoves. The building, though not so expensive as some in the country, is commodious and conveniently arranged. The proprietor last year and this secured the service of Mr. J. H. Pugh as foreman, who had had several years' experience in the business in the best eastern factories.

The writer from personal knowledge, by using and handling much of the Waukau cheese, can testify to its excellent quality.

The bulk of last season's make was shipped to New York, and sold but little if any below that of the best eastern cheese.

The business of the factory has greatly increased over last season, and as soon as the farmers in the vicinity can change

their course of farming from grain raising to stock growing and dairying, this factory will do a very heavy business.

There is received daily 5000 pounds of milk, the greatest distance drawn is five miles. Will make this season 65,000 pounds of cheese.

From Waukau we drove in a south-east direction over a good road, lined on either side by well cultivated farms, over which the reapers were being driven, and dropping in regular rhythm the golden sheaves in lines often a half mile in length. A distance of seven miles brings us to

PICKET'S STATION,

in Utica. At this point A. Pickett & Son have this season erected one of the best factory buildings in the State. A three story building of stone and brick with a finish as good as the best dwellings. The factory is planned upon the theory that to manufacture the best quality of cheese the curing process must proceed slowly. For this reason dealers prefer fall made cheese to that made in the heat of the summer.

At this factory the cheese is kept in the basement, a cool, dry room, till about fifteen days old, when it is elevated to the second story, and afterwards to the third, where the curing process is completed. This plan of curing has given good results so far this season, when the extreme heat has been very trying to cheese in wooden buildings not properly protected from the heat.

The building is supplied with pure fountain water and many conveniences not found in other factories.

The proprietors propose converting the building into a

CREAMERY OR BUTTER FACTORY,

after the close of the cheese season.

The foreman in the factory is Mr. Morgan Bennett, an Oneida county cheese maker, whose work speaks well for his knowledge of the business.

The factory has thirty-three patrons, who deliver daily 5000 pounds of milk, the greatest distance drawn being five miles, and will probably manufacture this season 55,000 pounds.

The factories visited [are all located in the three towns of Omro, Rushford and Utica. The receipts of milk as given are the greatest amount received daily. The estimates of the proprietors of the above named factories, place the amount of cheese they will manufacture this season at

330,000 POUNDS,

Which at 12½ cents per pound gives it a valuation of \$41,250. This for a branch of farming which up to the present time has been but experimental, gives a good show of results.

Those farmers who have patronized these factories for a year or two have made the discovery that it costs them as much to send a car load of wheat to the New York market, worth at present prices say \$350, as it does to send a car load of cheese now worth \$2,500, or of butter worth double the amount.

Taking into consideration the fact that of late years the average yield of wheat in the country has not exceeded ten bushels per acre; that our farms are rapidly becoming impoverished and wheat sick, while dairy farming properly conducted is sure to be remunerative, and will at the same time improve the grain-producing qualities of the farm, it would seem that a change in our system of farming would be profitable and desirable.

DAIRY STATISTICS, 1873.

From the Northwestern Dairymen's Association.

The following will serve as sample reports; they certainly do not represent one-half the establishments engaged in cheese making in the northwest. From one county only, Sheboygan county, Wis., full returns of the cheese product are given. For this, thanks are due A. D. DeLand, Sheboygan Falls, Wis., Secretary of the County Dairymen's Association:

WISCONSIN.

NAME:	POST OFFICE.	COWS	CHEESE. lbs.	BUTTER. lbs.
<i>Sheboygan County.</i>				
H. Conover, -	Plymouth,		156,230	
Pierce & Strong, -	Sheboygan Falls,		100,000	
F. Mather, -	Sheboygan Falls,		98,000	
H. Smith, - -	Sheboygan Falls,		94,058	
A. G. Dye, -	Sheboygan Falls,		78,197	
Seth Conover, -	Plymouth,		77,494	
C. Harmon, -	Winooski,		75,040	
Holden Bros., -	Sheboygan Falls,		69,754	
D. Kints, -	Sheboygan,		67,000	
Andrew Dye, -	Onion River,		37,700	
A. E. Stoddard,	Greenbush,		30,148	
Mr. Greener, -	Schnopsville,		30,000	
S. Meade, -	Onion River,		26,200	
Gibbsville Factory,	Gibbsville,		25,000	
A. D. DeLand, -	Sheboygan Falls,		22,526	
J. A. Smith, -	Greenbush,		20,000	
James Slyfield, -	Hingham,		16,000	
H. Haverkort, -	Sheboygan,		14,600	
Wm. Springer, -	Sheboygan,		12,000	
H. Gilman, -			12,000	
G. W. Weeder,	Sheboygan Falls,		10,000	
C. B. Briggs, -	Cascade,		8,000	
<i>Fond du Lac County</i>				
Chester Hazen, -	Ladoga,	800	246,692	
Chester Hazen, -	Brandon,	200	50,938	
Bristol & Orvis,	Oakfield,	155	38,744	
John Schrooten, -	New Castle,	80	31,550	
Charles C. M. Hodge,	Oak Center,	40	8,136	1,550
Geo. D. Curtis, -	Rosendale,	25	7,500	1,600

NAME.	POST OFFICE.	Cows	CHEESE. lbs.	BUTTER. lbs.
<i>Kenosha County.</i>				
W. C. White, -	Kenosha,	100	54,290	1,287
W. J. Bush, -	Woodworth,	100	26,474	
* L. A. Havens, -	Salem,	150	50,781	
Wm. Munson, -	Salem,	250	74,500	
J. B. Vosburgh,	Randall,	220	80,078	
<i>Walworth County.</i>				
Joshua Greenwood,	Whitewater,	300	80,000	
Galloway's Factory,	Whitewater,	150	43,727	500
Joseph N Farnsworth	Darien,	10	1,500	800
<i>Jefferson County.</i>				
Steven Favill, -	Lake Mills,		170,000	1,000
Geo. R. Hoisington,	Farmington,	100	28,039	
S. T. Hoisington, -	Farmington,	13	4,376	1,194
<i>Miscellaneous.</i>				
New Glarus Factory,	Evansville,	325	80,000	
C. H. Wilder, -	Evansville,		35,000	
E. Devereux, -	Evansville,	200	72,256	
Melvin & Graves,	Brooklyn,	300	74,500	
A. Chapman, -	Columbus,	200	32,000	
M. S. Barrett, -	Burnett Station,	300	70,000	
J. B. Cochran, -	Beaver Dam,	450	116,000	
A. S. Davison, -	Fox Lake,	100	22,000	
Darien Factory, -	Darien,	275	70,000	
T. P. Davis, -	Allen's Grove,	225	50,000	
H. F. Dousman, -	Waterville,	300	94,000	
J. G. Carswell, -	Lone Rock,	55	21,000	
Thomas Dale, -	Union Grove,	10		2,275
John Porter, -	Mazomanie,	25		4,985
John Foote, -	Lodi,	18	4,600	300
Chipman & Curtis,	Sun Prairie,	148	19,367	
Louis Perrot, -	Greenville,	33	9,397	529
Geo. P. Winter,	Markesan,	57	17,346	769
C. P. Skidmore, -	Stockbridge,	15	12,000	600
Geo. Rogers, -	Oshkosh,	50	16,000	600
N. W. Morley, -	Baraboo,	85	27,289	400
F. B. Elsworth,	Weelaunec,		74,407	
Winslow & McNab,	Beloit,		105,000	
H. Winston, -	Belleville,		49,636	
Wm. Wilson, -	Token Creek,		6,000	
J. A. Wieting, -	Lodi,	100	25,395	

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