PREMIUM LIST.

The annexed is the premium lists proposed by a committee appointed by the Agricultural Society and Mechanics' Institute of Rock County, for the Fair of 1851:

1st. Farm.
The best managed Farm of not less than forty acres of land, reference being had to the general system of management and profits obtained, rather than to natural advantages and expensive improvements. 2nd best as above.

2d. Gardens.
The best managed Garden and Door Yard, not exceeding one acre of land, reference being had to usefulness and beauty of arrangement. 2nd best as above.

3d. Field Crops.
Best 5 acres of Winter Wheat. 2nd best of same.
The best 5 acres of Spring Wheat. 2nd best of same.
The best 5 acres of Oats, Barley and Corn. 2nd best of same.
The best half acre of Flax and Potatoes. 2nd best of same.

4th. Farm Stock.
Horses.—1st, 2nd, and 3d best Stud Horse; 1st, 2nd and 3d best Breeding Mare with foal at her side; 1st, and 2nd best span of Gelding Work Horses; 1st and 2nd best span do. Pleasure Horses; 1st and 2nd best 1 year old Colt; 1st and 2d best 2 years old Colt; 1st and 2nd best 3 years old Colt.

Neat Cattle.—1st and 2nd best Durham and Devon Bulls; 1st and 2nd best Grade Durham and Devon do.; 1st and 2nd best Native Bulls, 3 years old or under; 1st and 2nd best Durham or Devon Bull Calf; 1st and 2nd best grade, do.; 1st and 2nd best Native Bull Calf; 1st and 2nd best Durham, Devon and Native Milch Cows; 1st and 2nd best pair Working Oxen of four years old and upwards; 1st and 2nd best pair of three years old Steers; 1st and 2nd best pair of two years old Steers; for the best fat cattle, from one to five head.

Sheep.—1st and 2nd best Merino South Down and Leicestershire Bucks; 1st and 2nd best do. Ewes; 1st and 2nd best do. grade Bucks; 1st and 2nd best do. grade Ewes; 1st and 2nd best flock of Sheep of not less than twenty.

Hogs.—1st and 2nd best Berkshire Boar; 1st and 2nd best breeding Sow; 1st and 2nd best grade Boar; 1st and 2nd best grade breeding Sow.

Poultry.—For the best lot of Poland Fowls; grade do.

5th. Dairies and Their Products.
The best dairy of not less than ten cows, reference being had to the quality of the cows and the general management of the same; 1st and 2nd best 25 and 50 lbs. of Cheese; 1st and 2nd best 5 and 10 lbs. of Butter.

6th. Domestic Manufactures.
1st and 2nd best piece of home made Fullen Cloth of not less than ten yards; 1st and 2nd best piece of Rag Carpeting of not less than 20 yards; 1st, and 2nd best piece of Linen home made cloth of not less than ten yards.

7th. Miscellaneous Articles.
Bed Quilts; Patch Work; Coverlets: Comfortables; Blankets; Socks, linen.
woolen and cotton; Mittens; Hearth Rugs; 
Woolen Yarn; Needle Work, &c.
8th. MECHANICAL DEPARTMENT.
The best Threshing Machine; do. Reaper; 
Fanning Mill; Plough, Breaking and 
Crossing; Cultivator; Hay and Manure 
Fork; specimen Edge Tools; Wagon; 
Buggy; Sawing Machine; piece of Cooper 
Work; specimen of Tin Ware; Copper 
Ware; Book Binding; Pamphlet Printing; 
Card or Handbill; Hat and Cap; pair of 
Boots and Shoes; specimen of Tailor Work; 
Stone cutting and Brick Making; Penmanship; 
Saddle, Trunk, Harness, single and 
double; set of Chairs, Rocking Chair and 
Sofa; Bedstead and Dining Table; piece of 
Broadcloth and Satinet; Architectural 
Drawing; Landscape Drawing, Painting; 
3 best plans and elevations of a Farm 
House, Cottage and Villa; best plan of 
Barn, Cowhouse, Piggery and Hen House; 
 specimen of Millinery and Dress-Making; 
barrel Flour; Confectionery, Crackers and 
Bread; Sash, 12 by 18, eight paneled 
Door; Cooking Stoves; Window Blinds.
That competitors may understand the 
manner in which premiums are to be pro- 
vided, the following sections from the by- 
laws of the society are appended:
Section 3. The president of the society 
shall deliver an address on the first day of 
each annual fair, immediately after which, 
the treasurer of the society shall report the 
amount of funds on hand, the manner in 
which money has been expended, and in 
general to make a full exhibit of the finan- 
cial state of the treasury.
Sec. 4. The board of managers or a 
committee appointed by them, shall, imme- 
diately after the closing of the fair, proceed to 
apportion the funds in the treasury to the 
respective competitors who shall be enti- 
tled to premiums.

By Order of the Committee.

RACINE AGRICULTURAL 
SOCIETY.

At an Adjourned Meeting of the execu- 
tive Board of the Racine County Agricul- 
tural Society, held at the house of J. D. 
Sears, in the town of Yorkville, on the 10th 
day of June inst., the President and Vice 
President being absent, Ezra Burchard was 
elected President pro tem; E. W. Wash- 
burn, Secretary.

The object of the meeting having been 
states, the following classes of articles for 
which premiums will be awarded were 
formed, and the respective Judges elected, 
viz:

COMMITTEE TO AWARD PREMIUMS,

1st class. Best cultivated 

farms, $10 00 5 00 
Best reclaimed marsh of not 
less than 3 acres 4 00 200 
Judges—Ruben M. Wait, 
W. H. Roe, J. Scott.

2nd class. Best field of 
Indian Corn, not less 
than 1 acre, 6 00 3 00 
Best field of winter wheat, 
not less than one acre, 5 00 2 50 
Best field spring wheat, not 
less than one acre, 5 00 2 50 
Best field of oats not less 
than 1 acre, 3 00 1 00 
Judges—Peter Van Vliet, 
S. E. Chapman, Peter 
VanAlstine.

3rd class. Best field pota- 
toes, not less than ¼ 
acre, 4 00 2 00 
Best field carrots, not less 
than ¼ acre, 2 00 1 00 
Judges—Samuel N. Balsey, 
James Weed, John App- 
pleyard.

4th class. Best working 
oxen, 5 00 2 50 
Best steers, 4 years old, 4 00 2 00 
" steers, 3 years old 3 00 1 50 
" yearlings, 2 00 1 00 
" calf, 1 00 1 50 
" bull over 3 years old, 5 00 2 50 
" yearling bull, 3 00 1 50 
" bull calf, 2 00 1 00 
" native milch cow, 5 00 2 50 
" native heifer, not over 
3 years old, 4 00 2 00 
" native yearling, 3 00 1 50 
" calf, 2 00 1 00 
" blood cow, 5 00 2 50 
" heifer not over 3 
years old, 4 00 2 00 
" blood yearlings, 3 00 1 50 
" blood calf, 2 00 1 00 
Judges—Phinnaes Cadwell, 
Thos. West, Wm. Bal- 
lack.
<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
<th>Prize</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th Class</td>
<td>Best stallion for draught, 4 years old and over</td>
<td>5 00 2 50</td>
</tr>
<tr>
<td></td>
<td>Best stallion for carriage, over 4 years old</td>
<td>5 00 2 50</td>
</tr>
<tr>
<td></td>
<td>&quot; stallion, 3 years old</td>
<td>4 00 2 00</td>
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<tr>
<td></td>
<td>&quot; gelding for draught, 3 years and over</td>
<td>4 00 2 00</td>
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<td></td>
<td>&quot; gelding for carriage, 4 years old and over</td>
<td>4 00 2 00</td>
</tr>
<tr>
<td></td>
<td>&quot; breeding mare</td>
<td>5 00 2 50</td>
</tr>
<tr>
<td></td>
<td>&quot; sucking colt</td>
<td>2 00 1 00</td>
</tr>
<tr>
<td></td>
<td>&quot; gelding or mare, 3 years old</td>
<td>3 00 2 00</td>
</tr>
<tr>
<td></td>
<td>&quot; gelding or mare, 2 years old</td>
<td>3 00 2 00</td>
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<tr>
<td></td>
<td>&quot; yearling gelding or mare</td>
<td>2 00 1 00</td>
</tr>
<tr>
<td>Judges</td>
<td>Thaddeus G. Kellew, Wm. Smith, David S. Tefft</td>
<td></td>
</tr>
<tr>
<td>6th Class</td>
<td>Best buck</td>
<td>3 00 2 00</td>
</tr>
<tr>
<td></td>
<td>Best ewe</td>
<td>2 00 1 00</td>
</tr>
<tr>
<td>Judges</td>
<td>Thos. Hackney, James Catlin, Robert Thompson</td>
<td></td>
</tr>
<tr>
<td>7th Class</td>
<td>Best boar</td>
<td>2 00 1 00</td>
</tr>
<tr>
<td></td>
<td>Best sow</td>
<td>2 00 1 00</td>
</tr>
<tr>
<td>Judges</td>
<td>L. P. Brown, Rufus Waldron, James A. Neil</td>
<td></td>
</tr>
<tr>
<td>8th Class</td>
<td>Best 12 lbs. butter</td>
<td>2 00 1 00</td>
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<tr>
<td></td>
<td>Best cheese, not less than 10 lbs.</td>
<td>2 00 1 00</td>
</tr>
<tr>
<td>Judges</td>
<td>Eliphalet Cram, Ossian Sheldon, D. D. McCauchon</td>
<td></td>
</tr>
<tr>
<td>9th Class</td>
<td>Best ploughing</td>
<td>1/2 acre in one hour</td>
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<tr>
<td>10th Class</td>
<td>Best plough</td>
<td>2 00</td>
</tr>
<tr>
<td></td>
<td>&quot; ox yoke</td>
<td>1 50</td>
</tr>
<tr>
<td></td>
<td>&quot; churn</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>&quot; threshing machine</td>
<td>5 00</td>
</tr>
<tr>
<td>Judges</td>
<td>S. D. Clough, Ezra F. Weed, William Stock</td>
<td></td>
</tr>
<tr>
<td>11th Class</td>
<td>Best printing</td>
<td>1 00</td>
</tr>
<tr>
<td>Judges</td>
<td>Mark Miller, S. O. Bennett, John Hockins</td>
<td></td>
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<tr>
<td>12th Class</td>
<td>Best cabinet work</td>
<td>1 00</td>
</tr>
<tr>
<td>Judges</td>
<td>J. I. Case, L. S. Blake, J. D. Sears</td>
<td></td>
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Resolutions:

**Resolved**—That the Secretary be authorized to procure 500 Circulars for distribution.

**Resolved**—That persons intending applying for the premiums on cultivated farms, and reclaimed marsh land, will notify the Judges before the first day of August next, in order that the lands may be duly examined.

**Resolved**—That the Executive Board adjourn to meet at this place on the 1st Tuesday in September next, at 10 o'clock A. M.

Ezra BhrCUard Pres't pro tem.
E. W. Washburn, Sec.

**IOWA COUNTY AGRICULTURAL SOCIETY.**

Saturday, July 19, 1851. Pursuant to adjournment, the Society met at the Court House in Mineral Point, for the purpose of receiving the Report of the Committee on "Articles of association, Rules and regulations of Premiums, and nomination of officers."

Francis J. Dunn Esq., was appointed Chairman and

Gen. Wm. R. Smith, Secretary.

The object of the meeting was fully stated by the President. W. R. Smith, as Chairman of the Committee appointed on
the 10th of June last, to report at this time, made report of "Articles of association of the Iowa County Agricultural Society."

Which were severally considered, amended and adopted. The report of the same committee on nomination of Officers was read, and a vote having been taken separately on the names proposed, the following officers were declared duly elected:

H. L. LEFFINGWELL President.
Vice Presidents:
HENRY M. BILLINGS, JOHN HAND,
LEVI STERLING, FRANCIS J. DUNN,
PATRICK O'DOWD, GEO. GOLDTHORP,
SAMUEL CRAWFORD, Treasurer.
WM. R. SMITH, Secretary.

ARTICLES OF ASSOCIATION OF THE
"IOWA COUNTY AGRICULTURAL SOCIETY."

Article 1. The Society shall be called "The Iowa County Agricultural Society" and shall hold semi-annual meetings at Mineral Point on the second Fridays and Saturdays in May and October in each year, and extra meetings may be called at any time for special purposes, on notice of two weeks being given by the President and Secretary, and published in the Mineral Point newspaper.

Article 2. The officers of the Society shall be elected by the members of the same at the first annual meeting in each year; and shall consist of a President, six Vice Presidents, a Secretary and Treasurer. Standing committees on Premiums shall be appointed at each semi-annual meeting of the Society.

Article 3. The duty of the President shall be to preside at the meetings of the Society—to call special meetings when necessary—to appoint all committees, except committees on Premiums, in which latter appointment the concurrence of at least three of the Vice Presidents shall be required. The duty of the Vice Presidents shall be the same as that of the President, at the meetings in his absence. The duty of the Secretary shall be to record all the proceedings of the Society; to receive all moneys due to the Society; to pay the same to the treasurer, taking his receipt therefor; and he shall receive for his services such sum annually, as may be awarded by a vote of the society at its meeting in October, in each year. The Treasurer shall receive all moneys belonging to the Society; keep accurate accounts of his receipts and disbursements, and exhibit the same to the Society at its semi-annual meetings, and at any other time when required—He shall pay all premiums awarded by the committee, on orders signed by the President and attested by the Secretary. He shall receive such sum for his services annually as may be awarded by a vote of the society at its meeting in October in each year.

Article 4. Every member of the society shall pay into the Treasury the sum of one dollar annually, and shall be entitled to all the privileges of voting and serving as members of committees at the meetings of the society. A failure to pay annual contribution shall be deemed a forfeiture of membership.

Article 5. The society shall hold a semi-annual Cattle Show and Fair on the second Fridays and Saturdays in May and October in each year, at Mineral Point or elsewhere in the county of Iowa, as may be determined on by a vote of the members of the society at each semi-annual meeting.

At each of such Fairs, Premiums shall be awarded to the exhibitors of the best Horses, Cattle, Sheep, Swine, Farming Implements, Crops, Articles of Home manufacture, and such other discretionary premiums as may be determined on by the committee.

Persons competing for premiums shall in all cases be the owners, raisers, manufacturers, producers or inventors of the subject matter of the premium. If in any of the grades of Horses, Cattle, Sheep or Swine, the exhibitor shall be entitled to more than one premium, he shall receive a certificate to that effect instead of the premium. All persons exhibiting farming implements must test them in the presence of the committee as far as circumstances will permit. Premiums on Crops and Seeds will be awarded at the May meeting, for the year preceding. All persons competing for premiums on grains, roots, &c., must make an affidavit to the committee of all facts relating to the management of the land, measurement of grain and roots, &c., likewise the kind of seed, soil, and mode of cultivation, and said statement must be placed in the hands of the committee on or before the meeting of the society in May annually. No person will be permitted to compete for
a premium unless he become a member of
the society by the payment of a dollar on
or before the day previous to the Fair. No
animal or article having been taken the first
premium in any class of a previous show of
this Society, can take it again in the same
class, but may if the committee consider it
entitled receive a diploma certifying the
same.

Article 6. Until otherwise provided for
by a vote of the Society the following shall
be the amount of premiums to be awarded to
each specified class and grade of animals
and articles exhibited at each Cattle Show
and Fair subject to the decision of the com-
mitees thereon as to the propriety of award-
ing the same.

**HORSES.**
Best stud horse, 10.00
Best brood mare and colt, 8.00
Best colt two years old, 6.00
Best pair of matched horses, 6.00
Best three years old colt, 6.00
Best single horse, 6.00
Best year old colt, 4.00

**CA T T L E.**
Best Durham Bull, 6.00
Best Devonshire Bull, 6.00
Best Grade Bull, 6.00
Best Durham Cow, 4.00
Best Devon do, 4.00
Best Milch do, 4.00
Best Cow of any breed, 4.00
Best Durham heifer under 3 yrs, 4.00
Best Devon do, 4.00
Best Grade do, 4.00
Best Durham Calf und. 9 mos. old, 2.00
Best Devon do do do, 2.00
Best Grade do do do, 2.00
Best yoke of Durham work oxen, 4.00
Best do Devon do do, 4.00
Best do working oxen any breed, 4.00
Best do Fat Cattle, 4.00
Best yoke of three year old steers, 2.00
Best do two do do, 2.00
Best do yearling do, 2.00

**SHEEP.**
Best Saxon Buck, 4.00
Best 4 Saxon Ewes, 4.00
Best 5 Saxon Lambs, 2.00
Best Merino Buck, 4.00
Best 4 Merino Ewes, 4.00
Best 5 Merino Lambs, 2.00
Best Buck of any distinct breed, 4.00
Best 4 Ewes do do do, 4.00
Best 5 Lambs do do do, 2.00

**SWINE.**
Best Boar, 8.00
Best Sow and Pigs, 4.00
Best Welsh, 6.00
Best pair of working Mules, 4.00

**FARMING IMPLEMENTS.**
Best Lumber Wagon, 4.00
Best Plough, 6.00
Best Horse Rake, 2.00
Best Corn Sheller, 2.00
Best Fanning Mill, 2.00
Best Straw Cutter, 2.00
Best Vegetable Cutter, 2.00

**ARTICLES OF HOME MANUFAC-
TURE.**
Best piece of Flannel not less than 12
yards, 4.00
Best piece of Woolen Cloth, 4.00
Best piece of Woolen Carpet, 4.00
Best Counterpane, 2.00
Best pr Woolen Stockings, 2.00
Best Sample of Needlework, 2.00

**CROPS.**
Best 3 acres of Winter wheat, 8.00
Best 3 acres of Spring wheat, 8.00
Best 3 acres of Barley, 8.00
Best 3 acres of Oats, 8.00
Best 3 acres of Corn, 8.00
Best 3 acres of Potatoes, 8.00
Best bushel of Clover seed, 4.00
Best bushel of Timothy seed, 4.00

**DAIRY.**
Best sample of Butter, not less than
10 pounds, 2.00
Best sample of Cheese, not less than
10 pounds, 2.00

In all cases of awarding premiums, it
shall be discretionary with a Committee to
award to the second best of each class of
animals and of articles exhibited, a premi-
um of an approved work on agriculture.

Article 7. The committee of premiums
shall make a report of their proceedings and
awards, at each semi-annual meeting of the
Society, and upon their awards so made,
others shall be drawn on the Treasurer, and
certificates issued, signed by the President
and attested by the Secretary.

Article 8. All premiums awarded by
the committee may be paid in money if re-
quested by the Exhibitor, but otherwise
shall be paid in such Piece of Silver Plate, honorary Medal, or other article of equal value with the premium awarded, as may be selected by the committee; and in all such cases, suitable inscriptions shall accompany the premium awarded.

Article 9. Suitable Certificates and Diplomas, for distribution by the Committees on Premiums, shall be procured by the Secretary, and when issued to such Exhibitors to whom they shall be awarded shall be signed by the President and attested by the Secretary.

The following Resolutions were adopted.

Resolved, That each member of the Society act as an agent to procure the names of additional members and subscriptions to aid the funds of the Society and report the same to the Secretary.

Resolved, That Francis J. Dunn Esq., be requested to deliver a discourse at the next meeting of the society on the subject of Agriculture, and the object and purport of this association.

Mr. Dunn stated that he would comply with the request.

Resolved, That every member of this society be requested to contribute all such information, on the subject of Agriculture and the objects of this association, as may be in his power, in order that the same may be published in the “Wisconsin Tribune.”

The meeting then adjourned until the second Friday in October next.

F. J. DUNN, Chairman.
WM. R. SMITH, Sec'y. Tribune.

JANESVILLE, June 16th, 1851.

Mr. Editor:

After all the doubt and fear about crops, we are likely to have a pretty good season. Wheat looks well. A good deal of winter wheat was killed, and some was ploughed up, which was supposed to be dead, but would have borne a fair crop if left alone.

This may be a caution for the future.

It is generally true that Wheat should be sowed early. If as early as the 25th of August it will not do as well as the first week in Sept. There is occasionally a season when late spring wheat succeeds better than early, but this is an exception to the rule.

It has been suggested that oats sowed with winter wheat will sprout up before the wheat and protect it from freezing out—Has any one tried it?

Scattering straw over winter wheat will shield it from the frost. There is another benefit in using straw in this manner—it promotes an immediate and vigorous vegetation. Better use straw in this way than dissipating its useful gasses into the air by burning.

Corn is backward, but is coming forward finely. Probably some of your readers were late in planting their corn this year. It rained and kept on raining, till the time past when corn could be safely planted.

Better be a little to early with corn than too late. If you are too early, you can re-plant—if too late, you may plant, but your corn may be destroyed by autumn frosts and all your labor of cultivating lost.

It is generally supposed that there is a great deal of lime in our prairie soil. May this not be a mistake? Prairie soil is porous and the subsoil is mostly gravel—rain percolating through soil carries off lime in solution—in this way it is not possible that too much is carried below, and that our soils need replenishing with lime? I have seen a great deal of sorrel growing on our prairies which indicates a want of lime.

There may not be anything very original or striking in what I have written above, but I wanted to say just about so much, by way of breaking the ice, and setting an example of writing for your paper which may be followed by abler pens than mine, among the intelligent farmers of Rock.

Almost any one, as may be seen above, can say something, if he will only take up his pen and “let drive” with his ideas. It is a good time for farmers to compare notes and decide where they are, for some of them have been at sea, for some time. Every one can do something towards arriving at a correct course, if he will write and give the public the advantage of his observations.
INSECTS ON FRUIT TREES.

Mr. Miller:

Sir—I have been a subscriber the past year for your valuable Agricultural paper, and I think I have not seen anything in it, in regard to the little green Insects, that have been very troublesome to the apple trees in this section of the country, for the two past seasons. I am trying to raise a few thousand Apple trees, but these Insects have made such havoc among them, that they look as though they had been hard dealt with. I should think that they had killed some three or four thousand, within the last two years. The last year, they came onto the young and tender shoots the fore part of June, and covered the part that had grown that season, as thick as they could lay. They seemed to suck the sap from the young twigs for about ten or fifteen days, and then they left, and another recrutch came on, and they remained about the same length of time, and then they left, and then the third recrutch came on, consequently, the trees did not grow but very little for the season. What there are that have not been killed, are so stunted that they do not look very promising. To get rid of them, I dipped them in strong lye, and then I wet the trees and sprinkled on dry ashes, on some, and dry lime on others, but neither had the desired effect. I then applied strong soap suds to some of the trees, and this also was of but little use. I then boiled some tobacco, and bent the trees into a kettle of strong juice of the tobacco; this had but little effect. I next tried Anguinitum, I took a sharp pointed pen-knife, and stuck into the Anguinitum, then through the bark on the body of the tree, and in less than twenty-four hours, there was not an insect to be seen on one of the trees, that I had applied the Anguinitum to in this way. I tried some more the second day, with the same result, and in one or two days after this, they all left the rest of the trees, I hope never to return. But in case they come on them this summer, I shall apply the Anguinitum immediately. Now, if my experiments will be of any benefit to you, or any of your numerous readers, it is at your disposal, to do with it as you see fit.

Can you, or any of your readers, state the cause of their troubling the trees, year after year, or tell me of any better remedy? It will be thankfully received.

Your Respectfully,

Wm. C. WOLCOTT.

Eldorado, Wis., May 1st, 1850.

CIRCULAR.

To the friends of Agricultural pursuits in Wisconsin.

A State Agricultural Society having been organized, the proper officers elected, and the first Annual Fair and Cattle Show appointed to be held at Janesville, on the first Wednesday and Thursday of October next, the Executive Committee now invite all friends of Agriculture and the Industrial pursuits, to immediately become members of that organization. It has been well and truly said, that the cause of Education is the cause of all mankind, and we are to change the phraseology, and apply it to the cause of Agriculture, we would express a truth both forcible and of the most vital importance to the best interests of the whole people. It is from a successful cultivation of the soil that we must all look for a permanent foundation—and a living spring, to our prosperity as a State.

Agriculture is a science—should be taught as a science, and carried out and practiced on scientific principles. Then, and not till then, will its importance be fully developed, and those who till the soil, reap the reward of well directed labor. It is to aid in bringing about so desirable a state of things, that an Agricultural Society has been organized, and the friends of the enterprise invited to become members and attend the first fair at Janesville as above stated, at which time an appropriate address will be delivered by the Hon. John H. Lathrop, Chancellor of the Wisconsin University.

Owing to the absence of the requisite amount of funds, the Executive committee
have deemed it advisable as yet to prepare a list of premiums, which must of necessity, be small the present year, and limited to the product of certain departments of Agricultural Science. Such, for instance, as the best specimens of stock, of manufactures &c., and the best samples of grains or vegetable products, will be considered, where it is the result of careful, scientific culture, and accompanied by a written statement of the exact process of cultivation by which it was produced.

These are some of the brief outlines by which the committee will be governed in arranging and awarding premiums. A full and complete list will soon be prepared and forwarded to each member of the Society.

But it shall be borne in mind that no specimens of stock or manufactures, or samples of grain or other vegetable products will receive any premium at the Fair, unless the owner, manufacturer, or producer, first becomes a member of the Society.

As the only fund at present in possession of the Society, from which to award premiums, is that arising from the initiation of members, the early attention of farmer in the State is called to the provisions of article 1, of the constitution, which is to be found below.

By a proper effort on the part of the friends of Agriculture and all Industrial pursuits throughout the State, we can yet secure a very respectable fund from which to award premiums at the First Annual Fair; thus placing the Society in a position to give an enlivening, vivifying influence to the cause of Agriculture throughout our beautiful Wisconsin.

EXECUTIVE COMMITTEE.
Erastus W. Drury, Roswell C. Otis,
Chauncey Abbott, Royal Buck,
Timothy Burns, Adam E. Ray,
Henry M. Billings, Wm. F. Tompkins,
Albert G. Ingham, H. Johnson,
Andrew Palmer, John H. Rountree,
Art. 1st of the Constitution reads as follows:
The Society shall consist of such citizens of the State as shall signify in writing their wish to become members, and shall pay on subscribing not less than one dollar, and annually thereafter one dollar; and also of honorary and corresponding members.

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

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

P. S. Persons desirous of becoming members of this Society, will please forward their names to the Recording Secretary, Albert G. Ingham, at Madison, Wisconsin, who will enter them upon the books and remit a certificate of membership.

HOW TO ENLARGE VEGETABLES.—A vast increase of food may be obtained by managing judiciously, and systematically carrying out for a time the principles of increase. Take for instance a pea; plant it in very rich ground; allow it to bear, the first say half dozen pods only; remove all others save the largest single pea of these; sow the next year, and retain of the produce three pods only; sow the largest of the following year, and retain a pod; select the largest, and the next year the sort will by this time have trebled in its size and weight. Ever afterwards sow the largest seed, and, by these means you will get peas, or any thing else, of a bulk which we have at present no conception.—[Boston Cultivar.

ENCOURAGEMENT OF AGRICULTURE IN INDIANA.—The Legislature of Indiana, at their late session, provided for a State Board of Agriculture, with auxiliary societies in each county. The following liberal provisions have been made: Whenever thirty or more residents of a county have organized themselves into a county society and raised fifty dollars, they may draw on the county treasury for a like amount, to be paid out of funds collected for license of menageries, circuses, shows, &c. This fund is to be appropriated for premiums at a fair, to be held annually, and reports of their proceedings are to be made to a State Board of Agriculture. Each county society may send a delegate to the State Board, and the State Treasurer may pay the ordinary expenses of two meetings per year of said Board. They are to hold a State Fair, and report the proceedings annually to the Legislature, together with an abstract of the county reports. One thousand dollars per annum is appropriated out of the
State treasury to carry out the objects of the bill.

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**Farming and Farmers**

Can a young man, who intends to pursue farming, afford to spend the time and money necessary to attain a knowledge of scientific Farming? The common opinion among our farmers think they can afford to give their sons some education above what is necessary to transact the ordinary business of the station. The old notion that a young man who has cyphered as far as the Single Rule of Three, knew enough, is now fortunately exploded. But if any additional education is to be given a young man, why not give him that which will be of benefit to him in after life? If mental training is sought, the study of Agricultural Chemistry will give him that, and besides fit him for practical business.

But cannot the young man devote a little additional time to studies of this kind with benefit? Which is best, for a young man to learn his trade fully of a competent workmen at a greater expense even, or to learn it of a bungler? In which way will he be likely to accumulate the most property? And to be the most successful?

But we are told that farming won't pay. Now will any half-learned trade pay? —

The results of the labors of those who have prosecuted farming on scientific principles, show conclusively that farming may be more profitable. And if one does not properly understand his business, he most assuredly ought to expect failure rather than success. The clerk is willing to spend time to acquire a knowledge of his business, before he can reap any profit from it, and the professional man is obliged to spend years, and be at a heavy expense in getting his profession, which when he has got, hardly pays him a better per cent. than many of the well cultivated farms do their owners. But the value of a scientific knowledge of farming is not a vain or an imaginary thing. Many men have taken the pains to acquire such knowledge, and by the application of it to the farming business are far outstripping in the point of profit, those who have not acquired it.

But to acquire this knowledge it is not necessary to spend years at our colleges.

The means for attaining this, which are within the reach of all, have been already alluded to in a previous number. But we are told, a man who spends all his time reading books won't know how to carry on a farm. Nor will one know how to carry it on properly if he merely reads books. There is a science in farming, and he who best knows its principles and how to apply them will be most successful in business.

Some provisions ought to be made then in our Academies, and higher Seminaries, by which our young farmers can have an opportunity to gain a knowledge of these principles. But when shall it begin? Will the farmers call for it? — If there is a demand, there will doubtless be a supply. — Nor in fact do I imagine the time is far distant, when Agricultural Chemistry will become one of the studies usually pursued in our Academies. This, if properly taught, would doubtless be of very great benefit to the largest, and in many respects by far the most important class in the community.

—[Weekly Eagle.

**Analysis of the Apple.**

A paper on the analysis of the fruit of the apple, by Dr. Salisbury, furnishes some facts worthy of notice. Owing to the lateness of the season (in spring,) before the analysis was commenced, the following sorts only were examined, viz: Swaar, Kilham Hill, Rhode Island Greening, English Russels, and Talman Sweeting. From the numerous table of results, the following facts are drawn:

The English Russet contains less water and more dry matter than any of the other sorts. This is doubtless the reason why this variety is so hard to freeze. The Talman Sweeting contains more, the Greening still more, and Kilham Hill most of all; ranging in all these from 79 to 86 per cent. A fresh potato contains about as much water as the Russet. These results show the reason that apples, when manufactured into cider, produce nearly their own bulk of juice, a fact which has often puzzled, many who merely regarded the solid nature of the fruit.

A striking difference in the composition of the apple and potato, is the entire absence of starch in the former, while in the latter it constitutes about one-half of the
solid part. The apple contains about twice as much of the compounds of nitrogen as the potato.

The Russets were found to contain a larger portion of tannic and gallic acids than other sorts. These acids impart astringency, and are indicated by the black color given to a knife of iron or steel used in cutting this fruit. The apple is rich in phosphoric and sulphuric acids and potash and soda. Hence we may infer that bone dust, ashes, salt and plaster, would be likely to prove useful as portions of the manure applied to a bearing tree, in addition to what is already contained in yard manure.—Trans. N. Y. Ag. Society.

TO PLOW IN CLOVER, WEEDS, &c.

Those who have undertaken to plow in green crops, know the difficulty frequently attending the operation, on account of the liability of the plow to be clogged, and the vegetable matter being left uncovered. A correspondent of the American Farmer gives the following description of a contrivance he has adopted, which is stated to answer the purpose completely:

Saw off a block from some hard, durable and heavy wood, say about ten inches long, and three and a half or four inches in diameter; then take a piece of trace chain, about three feet long, confine one end to the block, by driving a staple in the end, having first passed the staple through the end link of the chain. Point the other end of the block, and attach a large chain in the same manner to that. Tie the short chain (attached to the square end of the block) to the rod which passes through the mould board at that place; drop the block in the bottom of the furrow which has been already opened, (of course on the mould-board side,) draw up the long chain, and attatch that to the clevis; be sure that you have both chains just tight enough to permit the block to lie in the furrow; allow no slack. The short chain gathers the clover, weeds, &c., and bends them down; the weight of the block prevents the chain from raising; and the plow lays the dirt over the weeds, whilst they are in a recumbent position. I am this day turning under weeds as high as the heads of the plowmen, which are almost wholly concealed.—Columbus Enquirer.

BUTTER MAKING.


There is so much time misspent, and labor lost in the making of poor butter, that we feel it to be an imperative duty to endeavor to impress the minds of farmers, and of their wives and daughters, with the importance of giving heed to this subject.—There are some things in relation to it so well settled as to be universally known by all those who have any knowledge in the matter. There are others on which there remain great difference of opinion and variance of practice; as for instance, in the statements before us, we find some of the makers of butter apply cold water freely to the butter, both before it is taken from the churn and afterwards; "to aid in extracting the buttermilk, and to harden the butter," as they say. Others bring it into form without the use of water, and say that its use impairs the flavor, and essentially injures the quality and quantity of the butter.—How shall it be determined which of these are right? This is a practical question, applicable to every churning—quite too important, therefore, to be left in doubt.—Probably most persons do as their mothers used to do, without inquiry whether there is a better mode of proceeding. In an intelligent article upon this subject, from one of the most successful makers of butter in this country, (see Transactions for 1840, p. 72,) we find this sentence:

"More depends on this than any part of the process of making good butter. If our dairy women would apply double the labor to half the quantity of butter, and thereby thoroughly remove all the particles of buttermilk, this one-half would be worth more than the whole, in the condition it is usually sent to market."

Mr. Howard of the Albany Cultivator, authority second to none in the country, says:

"According to our experience, the best butter is not produced by a very short nor a very long period of churning. If it is churned too quick, the separation is not complete, and the butter besides being less rich, is deficient in quantity—if the process is continued too long, the butter is likely to be oily. We think our best butter makers would decide churning for ordinary quan-
tities, say from ten to twenty pounds, should occupy from thirty to fifty minutes." This corresponds entirely with the opinion expressed by Mrs. Nathaniel Felton, who said she did not want the butter to come in less than thirty minutes—it is not so good when it comes in a shorter time."

We are informed, by some of those who have been most successful in the management of their dairies, that they look more to the quality of the milk given by the cow, than the quantity; and in selecting their cows to be kept for this purpose, they choose only those which give milk adapted to the purpose. It is unquestionably true, that one quart of milk from some cows, will yield as much, or more butter than two quarts from others. In selecting cows, therefore, the quality of their milk should be tested, either by making butter from it, or by the use of a lactometer, which shows the comparative thickness of the cream that will rise on similar quantities of milk. Mr. Holbert, an experienced farmer in New York state, says, "I find, by churning the milk separate, that one of my best cows will make as much butter as three of my poorest cows, giving the same quantity of milk." We have heard the same thing substantially, from dairy women themselves. Let those cows which abound in quantity only, be turned over to those who care only for filling their measures—and let those that afford substance, as well as show, be kept to supply the churn.

To Farmers, Teachers, & Editors.

We invite the special attention of farmers, teachers, and editors to the following articles on "Agricultural Geology."—They are so simple, direct, practical and elementary, as to afford both interest and instruction to farmers, now so generally seeking the science of their art—Scientific Agriculture. If generally inserted in papers and read in schools, newspapers would become school books, and much of the surplus boy power, now exhibited in lawlessness, violence, and rowdism, would be converted into practical science—the worst boys in many cases, changed into the best:

Agricultural Geology—No. 1.
BY JOSIAH HOLBROOK.

No class of the community have an equal interest in geology with farmers. No science is so interesting to farmers as geology, in connexion with chemistry. The two sciences cannot be separated and justice done to either. While the elements of our globe, especially of soils, require chemical tests to determine their character, these very elements are absolutely essential for experiments to determine the fundamental principles of chemistry. Oxygen, the most abundant agent in creation, is also the most chemical element in rocks and soils. The one as an element the other as an agent, are alike essential to each other, and both indispensable, as at the foundation of all agricultural science.

A knowledge of each is as feasible as it is important—entirely within the comprehension of a child six years old. Each is a science of facts more than abstract reasoning—of facts, too, equally instructive and delightful to every young mind.

Take an example: The child has placed before him two glass tumblers—the one containing quartz, the other lime or sand and chalk. The name of each is as readily learnt as the name of iron, lead, gold, tree, horse, or any other object in nature or art. Into each tumbler is poured some sulphuric or muriatic acid. In the tumbler of lime the pupil observes an action—in that of quartz no action. He is told this action is called effervescence. He hence learns to recognise lime and quartz, and the more certainly from the recollection that the one effervescences with acids and the other does not.

Here is an example of geology and chemistry, alike useful to the farmer and interesting to the farmer's child, or any child. The same simplicity and direct fundamental instruction run through the whole of both of these exceedingly practical sciences.

I may hereafter point out a few of the leading principles of these two sciences; their connexion with each other: their essential importance to all classes, and most of all farmers; their exercising fitness for the early instruction of children, and the entire feasibility of having them among the "first lessons" taught in each of the eighty thousand American schools.

Agricultural Geology—No. 2.
BY JOSIAH HOLBROOK.

Oxus is the Greek word for acid; gno-mai, in Greek, means make; hence the lit-
oral meaning of oxygen is acid maker.—
Combined with sulphur it forms sulphuric acid; with nitrogen nitric acid: with carbon carbonic acid, &c. Respiration, combustion and fermentation are the three principal operations producing the combinations of oxygen and carbon; the results carbonic acid.

Acids combine readily with metals, earths and alkalies—as iron, lime and potash. By chemists these combinations are called salts, designated by the termination cite. Sulphuric acid combining with various bases, produces sulphates: nitric, nitrates; carbonic, carbonates. Sulphate of lime is gypsum or plaster of Paris; sulphate of iron, copperas; of soda, glauber salts; of magnesia, epsom salts. The carbonate of lime is common limestone, marbles, chalk, and many beautiful crystals. Carbonates of iron, copper, and lead are ores of these metals.

About a century ago water was found to be composed of oxygen and hydrogen, and common air of oxygen and hydrogen. About half a century ago oxygen was found by Sir Humphry Davy to be an element of rocks, of course of soils, as it was of the alkalies, combined with oxygen, were found by the same great chemist, to be metals very peculiar in character.

It hence appears that oxygen is an element in air, earth and water, existing abundantly in solid, liquid and aerial forms. In the whole it constitutes nearly half our globe. It is, of course, the most abundant element of the material world. It is also the most important agent in producing changes in matter essential to human existence. It is very appropriately called vital air, as neither animal life nor any life can exist without it. It is no less essential to combustion than to life. It also acts with great energy upon metals and other solid substances. In this action it produces three very large and very important classes of bodies—oxides, acids and salts. Iron rust is the oxide of iron; the dust of lead, the oxide of lead; burnt lime, the oxide of calcium; pure potash, the oxide of potassium; pure soda, the oxide of sodium; silex or flint, the oxide of silicium. The combination of one part oxygen and one of nitrogen constitutes the atmosphere; three parts oxygen and one nitrogen form nitric acid, aquafortis. Combined with other substan-

ces, it forms numerous acids. Saltpetre is the nitrate of potash. The large quantity of oxygen it receives from the nitric acid fits it for a material in gunpowder—giving to that powerful agent its principal power.

A plate, tumbler and scrap of paper, with a little water, will enable any teacher or parent to perform an experiment on oxygen equally simple, instructive and interesting. In a deep plate pour some water. On the water place a scrap of thick paper, piece of cork, or other light substance; on that another piece of paper or cotton moistened with oil. On lighting the paper or cotton, place over it a large empty tumbler. The combustion continues for a few seconds, and when it is extinguished the water occupies about one fifth of the space in the tumbler, showing the necessity of oxygen for combustion, and that it constitutes about one fifth the air we breathe. What man, woman, or child would not like to be familiarly acquainted with an element so abundant and agent so active as oxygen, especially when such an acquaintance is equally simple, useful and delightful?

Agricultural Geology—No. 3.

BY JOSIAH HILBROOK.

Rocks are the oxides of metals. Silex, the most abundant ingredient in rocks, mountains, and soils, is the oxide of silicium. This oxide constitutes nearly one half of the solid matter of our globe. It is the principal element of quartz, in all its varieties, which are exceedingly numerous, and some of them very beautiful. Quartz is the only mineral found everywhere. Sand is powdered quartz. Pebbles are fragments of quartz, rounded by attrition. Gunflint is quartz, breaking with a conchoidal (shell like) fracture. Jasper is red quartz, with a fine compact texture. Amethyst is purple quartz, frequently found in six-sided crystals, which is the common shape of quartz crystals in its different varieties. Agate is clouded quartz, in numerous varieties, some of which are much used for watch-seals, finger rings, breast pins, and other ornaments. Carnelian is quartz, of a fine texture and of a yellowish red color. Chalcedony, bloodstone, catseye, and many other gems, are varieties of quartz.

Most, perhaps all, the gems used in the breast-plate of Aaron, the high priest, were quartz of different textures, colors, and
hues. The precious stones presented by the queen of Sheba to the King of Israel were probably quartz. The stones mentioned in the Book of Revelations as forming the streets of the New Jerusalem, with all the gems referred to, were but varieties of stones used for paving our streets, and to the earth moved to the plow and the hoe of the farmer, and for the dirt carted for filling our docks.

The coloring matter giving most of the beautiful hues to gems, and an endless variety of colors to quartz, is the oxide of iron. The oxide of silicium and the oxide of iron are hence united in this same most abundant mineral in the world.

Next to quartz feldspar, or clay formed by the decomposition of feldspar, is the most abundant element of soils. This, too, is composed of several oxides of metals in chemical combination. Feldspar is also very extensively united with quartz in the formation of rocks, not by chemical combination, but mechanical mixture. The feldspar and the quartz can be separated by the hammer. Not so with the oxygen and silicium, forming silex. Chemical agency alone can separate chemical combinations. Such combinations in rocks, soils, and other mineral bodies, are exceedingly numerous, complicated, and delicate. The most common stone that meets the eye in any part of the world is composed of two oxides.—The oxygen and metals are each united by chemical affinity, and then the two oxides are again combined by the same agency to form a “common stone,” evidently worthy of more respect than it commonly receives.

An experiment: Pour upon a little perlsh in a tumbler some strong vinegar. An effervescence will follow producing carbonic acid. A burning candle immersed will be extinguished, showing that carbonic acid is fatal to combustion. It is equally so to life.

Flax Cotton.—Buffalo seems to have taken the lead in the manufacture of this new article. The editor of the Republic of that city says he has seen a specimen, spun at the factory and under the superintendence of Mr. R. H. Heywood, of that city, from flax taken from the field and rotated in six hours. The yarn can be spun as fine as No. 60. It consists of five-eighths flax and three-eighths cotton, and makes an excellent article.

From the London Chronicle

Flax Cotton.

The experiments at Rochdale connected with the adoption of flax to cotton machinery, we are happy to state are progressing in the most favorable manner. In addition to the proceedings connected with the spinning of the yarn in different portions of flax and cotton, and from the pure fibre, and the weaving of some considerable quantities of hose, flannel, and other fabrics from the yarns so produced, we are informed that several pieces of calico are in a state of great forwardness, and will be completed in a day or two. Within the last few days it has also been satisfactorily demonstrated that long fibre can be prepared from the flax with as much ease and advantage as the short fibre, and that prepared upon this process, it is capable of being spun dry, instead of by the present process of wet spinning. The benefits of this invention will be, therefore, not simply confined to the cotton and wool manufactures, but the flax spinners themselves will eventually find in the discovery the means of most materially improving their present system.

We have hitherto, abstained, for obvious reasons, from alluding even to the principle upon which the flax fibre is treated so as to bring it into a substance similar to cotton, and capable of being spun either alone or in combination with cotton or wool; and if we do so upon the present occasion, it will be simply for the purpose of showing to persons who may have heard of or read of previous attempts and failures to transform flax into cotton, how widely different is the principle adopted by Chevalier Clausen to that of other persons who have come forward with the same subject.

Persons in the slightest degree conversant with the subject will know that there is a vast difference in the structure of the fibre of flax and cotton; and we were not surprised that our announcement of the practicability of substituting the one for the other was received at first with a considerable degree of hesitation. The fibre of cotton is what may be termed “silken formed,” while that of flax is cylindrical.

We were fully aware of this material difference in the two articles; but we also knew that the mode adopted in the prepar-
cation had the effect of completely changing the matter of the flax as to make it a matter of the utmost difficulty to distinguish it, when properly prepared from cotton. Upon the removal of the woody substance, which forms one of the component parts of the stem of the flax plant, there remains a quantity of fibre held together by the gluten, or gum resin, which adheres to them. In order to separate these fibres it is necessary to employ fermentation, or other chemical agency, which will have the effect of dissolving the glutinous matter, and of setting the fibres free, and in such a state as to fit them for the further manipulation required in the processes of manufacture. These fibres, when so separated, are, however, coarse, harsh, and elastic, as compared with cotton, and their length would evidently unfit them for spinning in the existing cotton machinery. If their length, however, were the only obstacle, it is obvious that there are many modes by which that difficulty might be obviated; the great points to overcome being their harshness and elasticity.

By the present mode of steeping in hot or cold water, and the subsequent operations of “breaking and scutching” usually resorted to, a partial decomposition of the resinous substance and separation of the fibres takes place, sufficient to adapt them to the linen and other manufactures in flax is now employed. But, for the reasons above indicated, it is requisite that a more complete separation should take place before the material can be operated upon for the purpose of adopting it as a substitute for cotton. A complete division of the fibres and removal of the resinous matter is therefore the first step resorted to by Chevalier Claussen. This is affected by him either by operating directly upon the flax stem as it comes from the field, or upon the fibre, after it has been cleared, by purely mechanical means from the woody portion of the plant. The present modes of steeping are entirely dispensed with, and one of the greatest obstacles to an extension of the growth of flax is thus effectually removed. The grower is not required to transform himself into a clumsy chemist, or to resort to tedious and expensive process in order to prepare his produce for the market. He may, where convenient, dispose of his flax in the straw, or by simple mechanical means he may move the wood from the plant, which will form valuable food for cattle, and thus facilitate the means of transporting by reducing its bulk. That which under the present system is imperfectly done at great expense, and in periods ranging from two or three days to as many weeks, is accomplished by Mr. Claussen, by chemical agency, in less than three hours, and without deteriorating or injuring the material. Complete, however, as may be the integration obtained by this process, the cylindrical flax fibres still possess all that harshness and elasticity which is necessary to remove before they can be adopted as a substitute for cotton. In order to effect this removal the inventor splits the fibres into a number of small ribbon-like strips, possessing flat sides and ragged edges, of a gravity somewhat less than cotton, and which examined under the microscope, present all the appearance of that material. We are not at liberty at present to state further than that this result can be effectually obtained by the application, in a very ingenious and simple mode, of electro galvanic or chemical agency. It is in this part of the process that the really valuable part of the invention comes into action; and those who are acquainted with any of the other systems of which flax has been endeavoured to be transformed into cotton-like substances, such as boiling in sea-water, lime, or other solutions of a similar character, will at once perceive the great difference in the mode of treatment adopted by Mr. Claussen, and that of other persons, for the purpose of affecting that object. It is obvious, therefore, that any argument which might be drawn from previous failures in similar attempts can have no weight whatever in the decision on the merits of an invention, the principle and details of which are so perfectly unique in their character.

The fibres having been split, and their cylindrical character thereby completely destroyed, they are in a fit state for the ordinary treatment required in placing cotton upon the machinery. In addition, however, to this change of structure in the material, and its consequent adaptation to cotton purposes, another very important article is at the same time removed. Owing to the great difference in the relative gravities of the two materials, and the advantage in the length of fibre which could be obtained
from a given weight of cotton, as compared with flax, it would be obvious that, in an economical point of view, the latter could never be substituted for the former, unless a considerable diminution in the cost of the one, or increase in the price of the other, were to take place. Thus 1 lb. of “fair bowered Georgia” cotton, consisting, say 8 d. per lb. spun into 30’s, would yield 25,200 yards; 1 lb. of flax, however, costing the same price, 8 d. per lb., spun into 70’s, that number in “fine” being about equivalent to 30’s in cotton, would produce but 21,000 yards, being a difference in length of yarn, in favor of cotton over flax, of upwards of 4000 yards, or about 20 per cent; but the cotton yarn could be prepared at a cost which would admit of its being sold at 11 d. while the “fine” yarn would not be sold for less than 18 d., being a difference of 7d. in the pound in favor of cotton. By the process above described, however, the produce in yarn, of a pound of flax, is increased from 50 to 100 per cent over the old mode of treatment; and by regulating the proportions and strength of the agents employed, it can be increased to a far greater extent. It is not requisite, however, that the finer and higher priced flax should be procured and used for this purpose; but on the contrary, by this mode of treatment the full ripe and coarser kind of flax is that which can be used with the greatest advantage. This is a circumstance highly favorable to the extension of the growth of flax, as the grower will not be under the necessity of pulling his flax before the seed is fully and completely ripened.

Flax vs. Cotton—Comparative cost of Production.

The Maysville. (Ky.) Eagle, in reference to the experiment now making to substitute flax for cotton, says:

“We have a sample before us of flax cotton,” which is as white and soft, and fine as any cotton, but of a richer and more glossy, silk-like appearance, and which evidently can be spun into very fine yarns, as cheaply as cotton. Now this material can be produced from unrotted flax, for seven cents per pound! and we know that unrotted flax can be procured so that the lint shall stand at one and a half cents a pound, leaving a pretty wide margin for the preparation to bring the material to seven cents. It is known that there is no object in growing cotton for a less sum, so it is far from being an impossibility that linen may yet be produced as cheap as cotton.”

The inventor, Mr. Leavitt and his associates, are making arrangements to introduce its manufacture as immediately and extensively as possible. The Glasgow, (Scotland) Post says:

“We have had handed to us a piece of fine lawn muslin, figured with the flax cotton, and it is no exaggeration to say that the flowers have all the lustre and glossy appearance of silk. This, we believe, is the first time in which the flax cotton has been used for the purpose of figuring fine muslins, and the result, we understand from practical parties, is most satisfactory and conclusive. Independent altogether of the opinions which may be entertained as to the effect which the general substitution of home-made flax for slave-grown cotton is calculated to produce, the invention by which the material is animated gives it a superiority over cotton which cannot fail to secure its general adoption by parties engaged in the silk, woolen and linen trade.”

From the Albany Cultivator.

On the Nutritive Value of Oat Hay.

LETTERS FROM PROFESSOR NORTON—NO. 8.

ANALYTICAL LABORATORY, YALE COLLEGE.

New Haven, Conn. July, 1850.

EDITORS CULTIVATOR:

In the January No. of the Journal of Agriculture, published by the Highland Agricultural Society of Scotland, I notice an article “on Oat Hay, and the nutritive value of oats cut green and fully ripe,” by Dr. A. Voelcker, Prof. of Chemistry in the Royal Ag. College at Cirencester. The subject is one which has long interested me, and I call attention the more readily to the statements made here, inasmuch as Dr. Voelcker is an old friend, in whose results I have much confidence. We have worked together in the Laboratory of Malder, where he was first assistant, and I am sure that he will benefit the cause of agricultural science, now that his whole energies are devoted to it.

The idea of cutting grain, while yet green, and of making it into hay in the
same manner as grass, is not by any means entirely novel. Experiments of an imperfect nature have been made before the present ones, with this same end in view. Some of these have perfectly succeeded, while others have, if not unsuccessful, been at least less striking in their success. We have needed in the occurrence of these unsatisfactory experiments, some general principles upon which to reconcile them, if possible, or at least discover the source of error, or by means of which we might more fully attain our object of inquiry. We need also the union of scientific with practical knowledge. Upon this subject, in order to the certain determination of many points, I will copy two or three sentences from Dr. Voelcker's paper.

"On the other hand, I am convinced that practical men will remain in the dark on many of the most important points of agriculture so long as they despise the aid of chemistry, and persist in solving inquiries connected with agriculture by mere blind experimentating; by experiments I mean made without plan, or anything clearly defined and distinctly understood. If those engaged in such random trials would bear in mind that nature does not give a precise answer to an indistinct question; and if they would be candid enough to believe, in all cases in which an experiment has failed to answer their expectations, that the experiment itself, or the anticipated result, must be false in principle, and that consequently the fault is their own, and not on the part of nature—a great deal of good would be effected. Unfortunately, however, most men are as quick in condemning the value of the materials used in a bungling experiment, as they are eager to praise and enthusiastic in recommending every result when the experiment proves favorable to their views; and when such an experimenter has some kind of theoretical notion in his head with which the experiment can be made to tally, the case is still worse. In this way a great deal of harm has been done, and the progress of scientific agriculture retarded instead of advanced."

There is much of sound practical sense in the above remarks, and every person who has studied over the numerous unprofitable and wearisome discussions, which fill up many of our agricultural papers, will fully appreciate it. It is for want of knowledge as to what they are about, that the contradictory results of most experimenters are to be ascribed.

In the present Dr. Voelcker seems to have happily united science with sound practical views, and we consequently have intelligible and reliable statements from him.

The first point to which attention was directed, regarded the proportion of water contained in the straw and grain of the ripe and unripe oat respectively; both samples being of the same variety and taken from the same field. As might have been expected, the green oats contained most water; this is shown by the following table:

<table>
<thead>
<tr>
<th>Oats fully ripe.</th>
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</thead>
<tbody>
<tr>
<td>Per centage of Water.</td>
</tr>
<tr>
<td>Straw.</td>
</tr>
<tr>
<td>38.48</td>
</tr>
<tr>
<td>57.50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oats cut green.</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.50</td>
</tr>
<tr>
<td>63.63</td>
</tr>
</tbody>
</table>

I have taken the mean of the various results given, as some discrepancy appears in the single determinations. By this table, several general conclusions are indicated—

1. That the proportion of water in the unripe plant is greatest.
2. That the proportion of the dry straw in the unripe plant is greatest.
3. That when the plant is dry, the grain bears a larger proportion to the straw than would have been imagined; being, even in the green plant, more than one-third of the whole weight, and in the dry plant nearly one-half.

The next step taken by Dr. Voelcker was to determine the nutritive value of his several samples. In this case regard was had only to the amount of nitrogen contained in them, that being considered the most important ingredient, in estimating any particular variety of nutritious food.—He calls the body in oats which contains nitrogen, by the general name of protein; this name applying to a class of bodies that contain about as much nitrogen, and that are about as nutritious, as lean meat when it is dry.

The proportions, or per centages of protein obtained by Dr. Voelcker were as follows:

I. Oats fully ripe—Mean results.
II. Oats cut Green.

No. II. was cut when the stalks and leaf were yet quite green, and the grain quite
milky, but fully formed. They were cut at the same time, the green oats having been sown about one month later than the others.

The conclusions to be drawn from the above results are not only extremely interesting in a scientific point of view, but are of much practical importance.

1. We see in comparing the numbers in the ripe and unripe straw, that the latter contains 3 1/2 per cent more nitrogen than the former.

2. That the unripe grain also contains more nitrogen; this may seem a very strange result, but may be explained when we consider the fact, that the unripe oats, although they had not attained their full bulk, had received most of their nitrogenous compounds, and that the after increase while ripening, must have consisted mainly in an accumulation of starch, and other non-nitrogenous bodies.

In addition to the facts established by these analyses, it is to be borne in mind, that the unripe straw is also much richer in starch, gum, sugar, and other compounds of the same nature, all of them both nutritious and easily digestible, but which are for the most part in ripening, gradually converted into woody fibre.

Here too the larger quantity of water, which has been already shown to exist in the unripe straw, is to be brought into account. This water helps to render the food more soluble, and more easily digestible by the animal. We find then that an equal weight of the unripe straw and grain, contains more nitrogen, more sugar and gum, and also more water; so that while it is more nutritious, it is also at the same time more easily assimilated and digested by the animal. This last is a point of more importance than is usually imagined. Of two kinds of food containing equal quantities of nitrogen, one may be vastly superior in its effects when fed, and this simply because it can be readily digested; a large portion of the other may even pass through the body unaltered.

Dr. Voelcker gives, in addition to his theoretical results, two letters from farmers who have seen oat hay tried. One of them says, "that when cut fine, oat hay goes one-fourth farther than if the oats and straw had been allowed to ripen."

In many parts of the country, it is very difficult to produce grass for cutting, but easy to grow quite tolerable oats, at least so far as bulk of straw and appearance of head is concerned. The grain may not fill out as well if allowed to stand, but still would serve a good purpose as fodder when cut green and made into hay. There is no loss of the grain by shelling when cut in this way, and the hay would be highly relished by stock.

I have no doubt but the same system would do well in the case of rye, or other grains; hay made from them would also be exceedingly nutritive. The facts given in the report of Dr. Voelcker, are quite sufficient to warrant my calling attention to this subject, and recommending experiments in such districts as feel the need of good winter fodder, and this of a variety that can be obtained without great expense.

John P. Norcross.

Do Bees make Wax from Honey?

Yes, they do. Can they make honey from wax? We do not think they can, though one would be no more strange than the other.

It is generally believed that bees, in their collection and deposit of honey, do nothing more than collect little by little what honey is naturally secreted in flowers, and that they cannot and do not change this in any way. Admitting this to be true, they can nevertheless make wax out of it. This has been tried a thousand times by confining bees to the hive and feeding them with honey, or even sugar prepared into a syrup, and they will prepare and use it in the formation of comb.

How they change this we cannot exactly tell. The change produced is a chemical one. Honey and sugar, fat and wax, are all made up of the same materials. The difference consists only in the different proportions of these materials.

Prof. Thompson, in his experimental researches on the food of animals, speaking of the production of butter from the sugar of food—says—the connection between sugar, oil, and wax, is exhibited by the following formula:

<table>
<thead>
<tr>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Oxygen</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugar</td>
<td>44</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>Wax</td>
<td>44</td>
<td>44</td>
<td>44</td>
</tr>
</tbody>
</table>
EDITOR'S TABLE.

APOLOGY.

Again it becomes our unpleasant duty, to apologize to our patrons, and ask their kind indulgence, for the non-appearance of the Farmer for the past two months, or since the issue of the May Number. The reason is that our time and attention, has been so fully occupied in disposing of, and closing up a business of some years standing, that we could not control sufficient time to do any justice to the Farmer. In fact, we have scarcely been permitted to be at home more than one day at a time for two months past. However unpleasant, not to say annoying, this interruption in the publication of the Farmer may have been to its readers, we can assure them, that our inability to deal justly, and meet their wants, has been to us a source of painful anxiety.

We issue the present number for June and July, in some haste, and shall immediately issue another number for August and September. We adopt this course, because our time is limited, and we wish to be enabled to effect some arrangement for the enlargement and improvement of the Farmer, and also for its removal to a more central part of the State for publication. If this and the succeeding number, should appear somewhat deficient, we assure our subscribers that we will make up for the deficiency before the close of the current volume, by increasing the amount of reading matter, and the number of illustrations in the remaining numbers.

By making the enlargement contemplated, each number will contain a much larger amount of matter than has been given monthly, while the subscription price will stand the same as at present.

Of our plans and future course, in the publication of the Farmer, we shall speak more fully in the October number.

CINCINNATI, June 8, 1851.

Mr. Editor,—We send you by the bearer a specimen of an insect, that has commenced depredations on our apple trees. It came into the limb of the place where this year's wood had started, in many places cutting the twig entirely off. It also eats off new buds which have just started. But few of them have made their appearance. They are, however, very destructive.

If you can give any account of the habits and history of the animal, together with any means you may know of destroying it, you will much oblige your subscriber.

WRIGHT & BAKER,
Nurserymen, CINCINNATI.

We received the insect safe and sound, enclosed in a small wooden box, just large enough to hold it. At first sight we thought it might belong to the apple tree borer family. This was also the opinion of others who examined it, in whose judgment we placed more reliance than in our own opinion. We kept it tightly boxed for three weeks before it seemed to lose any of its activity, or show signs of parting with life. We then, through Dr. Hoy, of this city, sent it to Professor Kirkland, of Cleveland, for examination. He informs us that it is the Curculio Novoboracensis (or the Ithmus Novoboracensis of Forster), is rare, and nothing known respecting its depredations on fruit trees, or of its habits.

Inasmuch as it is a very rare insect, and judging from its mechanism, must be very destructive on whatever it may fancy to gratify its appetite, we hope our friends, Wright & Baker, will carefully observe its habits and let us hear from them again.

THE IMPORTANCE OF LEAVES TO PLANTS.—Leaves are the principal organs of nutrition through the pores, (stomates,) of which they receive a large proportion of their food. The number of absorbing pores upon a square inch, is shown in the following table, the chief part of which, it will be seen, are found on the under side of the leaf:

<table>
<thead>
<tr>
<th>Leaf</th>
<th>Upper side</th>
<th>Under side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vine</td>
<td>None</td>
<td>13,600</td>
</tr>
<tr>
<td>Rubarb</td>
<td>1,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Lilac</td>
<td>None</td>
<td>160,000</td>
</tr>
<tr>
<td>Cherry Laurel</td>
<td>None</td>
<td>90,000</td>
</tr>
<tr>
<td>Mistleto</td>
<td>200</td>
<td>20</td>
</tr>
<tr>
<td>Olive</td>
<td>None</td>
<td>37,000</td>
</tr>
<tr>
<td>Holly</td>
<td>None</td>
<td>62,000</td>
</tr>
<tr>
<td>Clove Pink</td>
<td>38,500</td>
<td>38,500</td>
</tr>
</tbody>
</table>
winter, therefore, by seeing my growing crop you will see that it had stood the severe winter without injury, while other sorts of wheat have much suffered. I have eleven acres sown on spring wheat and oats stubble land, and I invite all farmers wishing to raise good crops, to come and see the superiority of the ETRURIAN WHEAT over many other kinds. It is a white hard wheat, the stalk or straw does not grow very long, and is hard and early, and not liable to be injured by the rust. Twenty cents per bushel over spring wheat is an object, besides the increase in bushels in favor of winter wheat. I have two acres of said wheat sown after a machine of my own invention, and the growing wheat is worth seeing; there is not a square foot of land but what there is a stalk of wheat growing, I believe.

N. Le PROVOST.
Oakland Farm, Mount Pleasant, Racine Co.
June, 1851.

IMPORTANT TO FARMERS!
J. I. CASE'S
Lever and Tread Power
THRESHING MACHINES,
Manufactured at Racine, Wisconsin.

The important fact is now ascertained, that there is now manufactured and for sale at Racine, the best Threshing Machines that can be obtained this side of any place! I would particularly invite the attention of those who would make Threshing their business, to my Improved Two Horse Tread Power, with Separator. Having had more than ten years experience as a practical Thresher, and using all kinds of power both

LEVER AND TREAD,
I am prepared to warrant the Two Horse Tread Power with four good heavy horses, capable of doing as much business during the season of Threshing as any Eight Horse Lever Power that can be produced.

OVER TWELVE HUNDRED DOLLARS have been earned with one during the season of Threshing, with less than two dollar repairs on the Machine. I will also keep on hand and for sale, the most improved kinds of

LEVER POWERS.
Barber's Climax I consider the best. They run at least one-sixth lighter than the common power, and I warrant them against breaks for one year, with proper care. My largest size Separators, with three foot cylinder and elevators attached, cannot be beat. I will warrant them to clean grain fit for market, without waste, with any Eight Horse Lever Power in use.

RECOMMENDATION.
From the Chicago Prairie Farmer.
Editor of Prairie Farmer,—Allow me, through the columns of your paper, to introduce to the favorable notice of your numerous readers, the two horse tread power Threshing Machines with Separator, manufactured by J.

THRESHING MACHINES.
The subscriber has received a new supply of Wheeler's Celebrated Railroad Horse Power and Over-Shot THRESHING MACHINES, Adapted to the use of one or two Horses, made in Albany, New York, which he offers for sale at his shop in Waukesha, at ABBANY PRICES.

Adding transportation. Farmers and Thresher who study Economy, will find it to their interest to examine the above Machines—having obtained the Premium on Exhibition in New York, Pennsylvania, Ohio, Michigan, and other States, give it such character that further recommendation here is deemed unnecessary; also,

CORN STALK AND STRAW CUTTERS,
CORN SHELLERS & WOOD SAWS.
To be attached to said Horse Power, may be had of the subscriber. Said Machines will be delivered at any point in the State at reasonable charges.

We, whose names are hereunto annexed, being practical Farmers, and having used Case's and other Threshing Machines now in common use, do not hesitate to say that the above machine far surpasses any we have used or seen used in durability, cheapness, and ability to perform their work perfectly, which can be done with only from one foot to eighteen inches elevation.

John Thomas, Richard Smart, Howel Cobb, Nathaniel Walton, Adam Stultis, E. D. Clinton.
Waukesha, June 28th. W. D. Bacon.

SEED WHEAT.
WISCONSIN FARMERS, it is your interest to enquire for, and select the best seed heat, both winter and spring, but especially
The following is a postscript we find in a letter written and dated, Shanghai, Dec. 13, 1849, by Bishop Boone, to the Board of Missions of the Protestant Episcopal Church in the United States, and published in the May number of the Spirit of Missions, page 156:

"P.S.—I add a line to my hurried letter to request you to send on some Quinine and some Cholagogue.

The India Cholagogue is prepared by Doctor Charles Osgood, a friend of our dear deceased brother Spaulding. Dr. Osgood was kind enough to send him six dozen bottles of this excellent medicine, as a present. We have used it very freely and with the greatest success. It has proved successful in many cases where quinine had wholly failed. Some notice should be taken of Dr. O's handsome gift, in the Spirit of Missions, and it was the intention of our dear Spaulding to have addressed you on this subject. I trust the Dr. will find a very extensive sale for his medicines, as I am sure it will do great good in these regions of the country, where intermittents prevail.

We have found it enabled its use extensively.

CAUTION.

It has been truly said that counterfeiters and imitators of a valuable medicine are more dangerous to society than the dealers in spurious coin. The latter only rob you of your property, while the former endanger your life. Be not deceived by numerous Cholagogues which have of late made their appearance. Every respectable druggist in the country will tell you that Osgood's India Cholagogue is the original and only genuine preparation. The imitations are but imitations in name, to steal a character for the spurious, which belongs only to the genuine. You may as well look to the Caesars and Cato's of the present day for the virtues of their illustrious prototypes, as expect to find in such compounds the valuable properties of the original Cholagogue. To protect yourself from imposition see that the label attached to each bottle has the written signature of the proprietor—Charles Osgood, M. D.—and you are safe.
SAND'S
SAR-SAPARILLA
IN QUART BOTTLES.
For Purifying the Blood and for the
UPRO
SCROFULA, RHEumatism, Stubborn Ulcers,
DIAPERIA, Salt Rheum, Fever, Sores,
ENTISPIELA, Pimple, Bites, Mer-
curial Diseases, Cutaneous E-
ruptions, Liver Complaint,
Bronchitis, Consumption,
Female Complaints,
Loss of Appetite,
General De-
blight, &c.

In this Preparation we have all the
restorative properties of the root, combined
and concentrated in their utmost strength and
efficacy. Experiments were made in the manu-
facture of this medicine until it was found it
could not be improved. Accordingly, we find
it restored to almost universally in cases of Scro-
fula, Liver Diseases, Salt Rheum, General pro-
stration of the vital powers, and all those tor-
menting diseases of the skin so trying to the patience
and injurious to the health. It is a tonic, sper-
ment and disinfectant. It acts simultaneously
upon the stomach, the circulation and the bow-
els, and thus three processes, which are ordin-
arily the result of three different kinds of medi-
cine, are carried on at the same time through
the instrumentalty of this one remedial agent.
There are many ways of relieving pain for the
time being, but there is only one way of remov-
ing disease. No palliative, no anodyne, no
tropical application will remove it. It must be
attacked at its source, in the fluids of the body,
which convey the poison to the localities where
it is developed in inflammation, sores, ulcers,
tumors, abscesses, glandular swellings, &c., as
the case may be.

These fluids must be reached, acted upon,
purified by some powerful agent. Such an ac-
genent in Sands' Saraparilla, which gently stimu-
lates while it disinfects and expels from the stom-
ach and bowels all that is irritating, and at the
same time restores their vigor and tone. Its
great merit is that it meets and neutralizes the
active principle of disease itself, and when that
is gone, the symptoms necessarily disappear.
The rapidity with which the patient recovers
health and strength under this triple influence
is surprising. Each new case in which it is
applied, furnishes in the result a new certifi-
cate of its excellence: and we have only to
point to the accumulated testimony of multi-
tudes who have experienced its effects to con-
vince incredulity itself of its real value.

Lient. Miller of the army has kindly seen
us the following letter from California:

MONTEREY, Jan. 18, 1850.

MESRS. A. B. & D. SANDS—Gentlemen—I
beg leave to add my testimony in favor of your
invaluable medicine, hoping it may lead some
other unfortunate being to try its effects, and
that they may be benefited as I have been.

I arrived here from the United States by the
overland route, about the first of October last.
A few days after I was attacked with a very
disagreeable eruption of the skin, which my
physician could not cure. I happened to find
your Saraparilla in a store in this place, and
remembering the popularity of the medicine at
home, I purchased three bottles, which had the
desired effect of removing my difficulty en-
tirely.

With high regards, yours, &c.

J. H. MILLER, U. S. A.

Prepared and sold, wholesale and retail, by
A. B. & D. SANDS, Druggists and Chemists,
100 Fulton street, corner of William, New York.
Sold by Druggists generally throughout the U.
States and Canada. Price $1 per bottle; six
bottles for 5 dollars.

EDWIN HUNT,
BRANCH OF THE WHOLESALE IMPORTING HOUSE
No. 20 Platt Street New York,
WHOLESALE AND RETAIL DEALER IN
ENGLISH, GERMAN AND AMERICAN
HARD-WARE.
Iron, Nails, Glass, etc., etc.
NO. 134 MAIN STREET,
AT THE SIGN OF THE RIM LOCK
RACINE, WISCONSIN.

ALSO AT
No. 79 Lake Street, Chicago, Illinois.

W. D. RUNYON,
EDWIN HUNT
134 Main Street, Racine.
August, 1850.
A. B. Van Cott,
WATCH MAKER AND JEWELLER,
No. 148 Main-street.
Inform his friends and the public in general, that he has just returned from New York city with the most splendid and extensive stock of gold and silver watches, with cylinder, anchor, and pallet lever escapements, selected by himself expressly for his customers and warranted.

Clocks in plain, Gothic and ornamental cases, running from 80 hours to 30 days, and the best materials, and warranted among the best in the world; also, Marine and Church Clocks.

Looking Glasses—a great assortment, with gilt mahogany frames, of various sizes and patterns, with polished plates, and warranted true Silver-ware—Tea, Coffee and Dessert Spoons.

Sugar Scoops, &c., warranted of the finest coin standard.

Lamps, a great variety of solar lamps of the most perfect instruction, securing a most beautiful and brilliant light, of various sizes and with elegant plain and cut glass shades.

MUSICAL INSTRUMENTS.

Guitars of superior tone and perfect workmanship; violins, the best assortment ever offered in the State, including some of great antiquity and value. Accordions of elegant tone and finish, German Flutes, Flutes, &c., instruments for Brasses, Violin and Guitar Strings, &c., and other appurtenances to music instruments.

Jewelry of the best quality, including Ear-rings of the Jenny Lind, German and other late and fashionable styles, Breast Pins, Finger Rungs, with diamond and stone settings; also fine coin wedding Rings.

Mr. Van Cott having long been a manufacturer of the above articles, in the city of New York, his knowledge and experience furnish him with excellent opportunities to select and recommend the best articles in his line.

Fancy Goods of all kinds, such as Silver and Buffalo horn Combs, Brushes, Spectacles, Guard Chains, and silver: British Tea Sets, Silver Cake Basket, &c., Cusors, &c.

Watches—Having secured the services of a proficient workman in the above line, in addition to his own, he is now prepared to make it a point of satisfaction in this line—Watches cleaned and warranted to keep time for one year, or the money refunded.

F. J. BLAIR,
AT NO. 161 WATER ST., MILWAUKEE.

Keeps constantly on hand, of his own importation, a large assortment of China, Earthen and Glass Ware, Looking Glasses, Looking Glass Plates, Tee and Cutlery, Silver, Poes, and common boxes, Wasters, Souffles and Trays, Britannia Ware, sets of COMMUNICATION SERVICE, &c.

Cornell's Patent and Suspending Lamps, (the best made in the United States,) Granadines, Vases, and Toilet and Parlor Ornaments generally; also, Wooden Ware and house-keeping articles generally.

The Goods in this establishment are all imported direct from the manufacturers, or purchased of the Manufacturers, thus saving one or two profits, and will be sold at wholesale or retail as low as at any similar establishment in the United States, and packed with care for the country trade.

S. JOHNSON, Sen., Wholesale and
S. Retail Dealer in Drugs, Medicines, Paints, Oils, Dye Stuffs, Gases, Fatty, Sash, Perfumery, &c., &c., in Allen's Brick Block, Racine, Wisconsin, is now receiving a large stock of Drugs, Medicine, Chemicals, Paints, Oils, Varnishes, Dye Stuffs, Window Glass, Brushes, Patent Medicines, &c., all of which have been selected with great care, and will be sold as low as at any other house west of Buffalo. Among his stock will be found Patent and Thompsonian Medicines, Shakers' Herbs and Extracts, Surgical and Dental Instruments, Glass Ware &c., Pure Liquors for medicinal purposes only.

Physicians' Prescriptions neatly and accurately prepared by an experienced hand, at all hours.

S. JOHNSON, Sen.
Racine, Jan. 1, 1851.

DURAND & HILL,
WHOLESALE AND RETAIL GROCERIES, RACINE.

OFFER for sale, at lowest prices, a stock of over One Hundred Tons of Groceries together with a general assortment of Staple Dry Goods, Boots, Shoes, Paints, Oils, Glass, Nails, Salt, Grind Stones, Cordage, Chains, Lumber Wagons, and other articles adapted to the Wisconsin Trade.

City Book Bindery.

Y. KOHLMANN & BROTHER,
ARE now prepared to execute all kinds of BOOK BINDING, in as good, neat and substantial a style as can be done in our Eastern cities, AND AS CHEAP!!

Magazines, Periodicals, Music, Pamphlets, Newspapers &c., bound to order, and old books re-bound. Messrs. Kohlmann will also give their attention to BLANK BOOK BINDING of every description. Fancy Card Boxes, and all kinds of Fancy paper and GILT WORK done on the shortest notice. All work warranteed to be pleased, or no charge.

They are also Publishers of a WEEKLY GERMANY NEWSPAPER, called the Wisconsin Bote.

Persons wishing anything in our line, will please call at 187 MAIN STREET, over M. Miller's Book Store.

VALENTINE KOHLMANN,
CHARLES KOHLMANN.
Racine, Jan. 1, 1851.