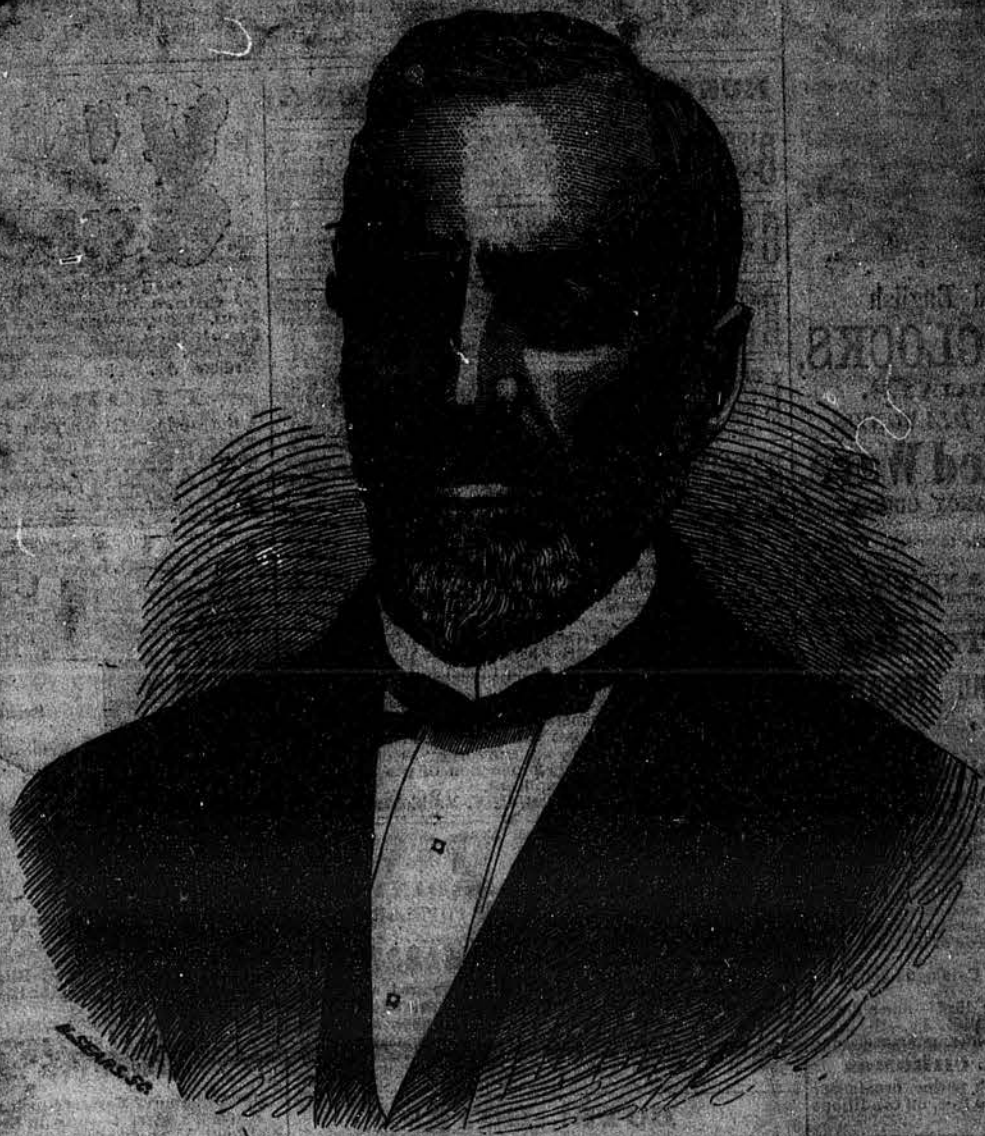




JOSEPH DENISON, D. D., PRESIDENT STATE AGRICULTURAL COLLEGE.—SEE PAGE 8.



IX
1.

LEAVENWORTH
JAN. 1, 1872.



American, Swiss and English
WATCHES & CLOCKS,
 WATCH MATERIALS,
 FINE GOLD JEWELRY, DIAMONDS,
Silver and Plated Ware,
 PLATED JEWELRY AND FANCY GOODS.

Jewelry of every description made to order. Country orders promptly attended to.

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Catalogue of Flower and Vegetable
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Summer Flowering Bulbs for 1872

Now ready, Consisting of over 130 pages, on rose-tinted paper, with upwards of 400 separate cuts, and *Six beautiful Colored Plates*. Cover, a beautiful design, in colors. The richest Catalogue ever published. Send 25 cents for copy, not one-half the value of the colored plates. In the first order, amounting to not less than \$1, the price of Catalogue, 25c., will be refunded in seeds. New customers placed on the same footing with old. Free to old customers. Quality of seeds, size of packets, prices and premiums offered, make it to the advantage of all to purchase seeds of us. See Catalogue for extraordinary inducements.

You will miss it if you do not see our Catalogue before ordering seeds.

Either of our Chromos for 1872, size 19x24—one a flower plate of Bulbous Plants, consisting of Lilies, &c.—the other of Annual, Biennial and Perennial Plants, guaranteed the

MOST ELEGANT FLORAL CHROMOS
 ever issued in this country. A superb parlor ornament; mailed, post-paid, on receipt of 75c.; also free, on conditions specified in Catalogue. Address,

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600 Acres. 21st Year. 13 Greenhouses.

10,000 Apple Rootgrafts, strong, \$40; extra, \$50
 1,000 Pear, Plum or Cherry Rootgrafts, 20
 1,000 Std. Pear, extra, 1 year, 8 to 4 ft., 160
 5,000 Silver Maples, average 1 foot, 10
 10,000 Osage Orange Plants, 1st class, 20
 5,000 Concord Grape or Willow cuttings, 8
 100-Page Illustrated Catalogue, 10 cents.
 Flower and Vegetable Seeds, large stock.
 Colored Plates, Fruits and Flowers, 4 samples by mail, \$1.
 Wholesale Price List Free.
 Jan-1-10t **F. K. PHOENIX, Bloomington, Ill.**

NEW AND RARE VEGETABLES.

MAKE THE SEED OF NEW AND RARE VEGETABLES a speciality. Catalogues sent free to all. My customers of last year will receive it without writing for it.
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\$375 A MONTH, EXPENSES PAID—MALE OR
 Female Agents—Horse and outfit furnished
 Business new. Circulars free. Address,
 dec-8t **NOVELTY CO., Saco, Me.**

"KANSAS PACIFIC,"
 A Complete and Perfect Stove, for Wood or Coal, Six Sizes.



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 P. ESTES, V. Pres't. } **LEAVENWORTH, KANSAS.** } JOHN WILSON, Treas'r.

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 Our Stoves are for sale by dealers generally in the West. dec-5m

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BIDGOOD NURSERIES.—APPLE TREES A SPECIALTY. Pears, Dwarf and Standard. Concord Grapevines. Peach, Cherry, Plum Trees, and Nursery Stock, at lowest figures. oc-1y **J. W. BIDGOOD, Leavenworth, Kan.**

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I INVITE ALL WHO HAVE BEEN IN THE HABIT OF buying their garden seed from boxes left at the stores, to give my seed a trial, side by side, and mark the difference in their germinating, and in the purity and quality of the vegetables raised from them. I have made it my mission for several years past to drive bad seed from the market, and so save farmers and gardeners the immense loss they annually suffer from the purchase of it.

The public have well appreciated my efforts and I have now fifty thousand customers in the United States and Canada. I sell no seed I do not warrant, and what is the real pith of the matter I stand by my warranty; to enable me to do this I grow myself a large proportion of the seed I sell. Catalogue sent free to any applicant.

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IN THE WORK OF PUTTING OUR POPULAR AND EL-
 egant

"QUEEN OF THE LADIES' MAGAZINES"

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Who Wants a Tool Chest?

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LEAVENWORTH, KANSAS.

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LEADING VARIETIES OF APPLES, ONE, TWO AND THREE years old, including Cooper's Early White; Pear, Plum, Cherry; Concord and other standard Grapes, Eumelan, Martha, Agawam, Goethe and other Rogers' Hybrids; also, Arnold's Autochon, Cornucopia, Brant and Othello. &c., &c. Small Fruits in variety. Linneus Rhubarb, Asparagus, Roses, Shrubs, Evergreens and Greenhouse Plants. Prices low, for cash in hand. [dec-6m] **D. C. HAWTHORN.**

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LEFFEL'S CENTRAL-OPENING, MOV-
 able Comb Bee Hive, Italian Queens,
 Alsike Clover Seed, pure bred Poultry, Pigeons, Rabbits.
 Agents wanted. Send stamp at once for circular to
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FLORAL
GUIDE FOR 1872

OVER ONE HUNDRED PAGES—PRINTED IN TWO Colors, on superb TINTED PAPER. Four Hundred Engravings of Flowers, Plants and Vegetables, with Description, and TWO COLORED PLATES. Directions and Plans for making Walks, Lawns, Gardens, &c. The handsomest and best

FLORAL GUIDE

In the world. All for Ten Cents, to those who think of buying Seeds—not a quarter the cost. 200,000 sold of 1871. Address

JAMES VICK, Rochester, N. Y.

dec-8t

THE NEATEST
CHEAPEST,
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Summer and Winter
HIVE!

Securing the straightest Combs in the Frames, and
 The Easiest Frame to Remove, with the Largest Space for Surplus Boxes, is the

DIAMOND FRAME
HIVE!

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IT HAS TAKEN MORE PREMIUMS IN THE LAST three years than any other Hive, and for Extractor "can't be beat."

Send for Circular, giving description of Hive, which is acknowledged by every person using it to be the "best" in use.

Choice Colonies Italian Bees, in Movable Comb Hives, at \$18 each.

Full line of Nursery Stock always on hand—prices low. Mitchell's First Lessons in Bee Culture, 100 pages, "best book out." Every bee-keeper wants it. Mailed, post-paid, for fifty cents.

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 nov-6m

Evergreen & European Larch Seedlings.

12 MILLION EUROPEAN LARCH SEEDLINGS;

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200,000 Transplanted Larches;

200,000 Seedling and Transplanted Mountain Ash.

The above are all grown from seeds on our own grounds, and are better and cheaper than imported stock.

aug- **ROBT. DOUGLAS & SONS, Waukegan, Ill.**

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Apple Grafts, put up in good order, per 1,000 7.00

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THE KANSAS FARMER

DEVOTED TO THE FARM, THE SHOP AND THE FIRESIDE

[ENTERED, ACCORDING TO ACT OF CONGRESS, IN JANUARY, 1872, BY GEO. T. ANTHONY, AT THE OFFICE OF THE LIBRARIAN OF CONGRESS, AT WASHINGTON.]

VOL. IX.—NO. 1.]

LEAVENWORTH, JANUARY 1, 1872.

[\$1.50 A YEAR.

The Kansas Farmer

GEORGE T. ANTHONY, Editor.

A. G. CHASE, ASSISTANT EDITOR.
MISS M. E. MURTFELDT, ENTOMOLOGICAL EDITOR.
B. S. CHASE, VETERINARY EDITOR.

Published Monthly, 75 Delaware Street, Leavenworth.

WHICH IS IT?

In the December number of the *American Agriculturist*, on page 458, is an article headed, "Drying up Cows," that says:

The common idea that it is necessary to dry off a cow two or three months before calving, is really not only erroneous but a very unprofitable one.

The writer goes on, in a very sensible style, to prove that the better practice is to milk up to the time of calving.

But on page 442 of the same number we find the opposite practice recommended, as follows:

Milk cows, if fed liberally, may be milked until within six weeks of calving. In ordinary cases, however, it is better to let them go dry for two months or ten weeks.

The italics are ours, in both cases. Now, gentlemen, who are we to believe? Both practices are claimed to be the best by the same journal, though, no doubt, written by different editors. But it seems to us that such contradictions are not admissible in a paper that claims to teach, and both theories emanating from the editorial pen.

Our own experience in the matter confirms that of the writer first quoted. As it is a matter of considerable importance, we shall be glad to have it discussed in our columns; and perhaps we can aid the *Agriculturist* in solving the knotty problem.

THE DUTY OF FARMERS' CLUBS.

One of the most important duties of Farmers' Clubs is the discussion of legal points that affect their interest; and we would suggest that, as another term of our Legislature is rapidly approaching, it would be well for these Clubs to look over the ground carefully, and see what legislation is needed for their benefit.

We do not believe in special legislation; for when it comes to the test of the courts, it must go down, as our Constitution requires all legislation to be general; and we have numerous laws upon our statute books that would undoubtedly be declared null, if brought before the Supreme Court.

But there are laws needed to be made and unmade, for the benefit of the Agricultural community at large; and there is no better place to develop those laws than in a well regulated Farmers' Club.

But, to have effective action throughout the State, these Clubs must act in concert, and this can best be done by corresponding with THE FARMER. Each Club can then see what the others are doing, and regulate their action accordingly.

ONE DAY of efficient work by every subscriber, would give THE FARMER a circulation of 40,000.

ANOTHER INDUCEMENT

LARGE PAY FOR A LITTLE WORK

WITHIN THE REACH OF ALL

Big Pay for Rainy Days!

EXAMINE THESE ARTICLES CAREFULLY!

SEE WHAT WE OFFER!

EXPLANATION.—In the following premium list, all subscriptions sent by one person, count, though from different postoffices. With the first list of names sent, indicate what premium you are trying for. Always send the exact amount of money with each list of names sent. Send in the names as fast as subscriptions are received. This offer remains open until March 1, 1872. Money should always be sent by Postoffice Money Order, Registered Letter or Express. Sent in either of these ways the money is at our risk.

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No. of Prem.	Names of Premiums.	No. of Sub's at \$1.50 each.	Price of Prem.
1	Pocket Knife	5	\$ 1.50
2	Pocket Knife	5	2.00
3	Pocket Knife	6	3.00
4	Set Knives and Forks	8	3.00
5	Set Knives and Forks	11	5.00
6	Set Knives and Forks	16	8.00
7	One doz. Teaspoons	11	5.00
8	One doz. Tablespoons	24	12.00
9	One Set Table Forks	14	6.00
10	Garden Seeds, 40 varieties	11	5.00
11	Flower Seeds, 100 varieties	11	5.00
12	Washing Machine	30	15.00
13	Clothes Wringer	18	9.00
14	Blanchard Churn	16	8.00
15	Double-barreled Gun	60	30.00
16	Family Scales	28	14.00
17	American Watch	50	25.00
18	American Watch	60	30.00
19	American Watch	70	35.00
20	Gold Pen, with holder	8	4.00
21	Gold Pen, with holder	12	6.00
22	Worcester's Dictionary	20	10.00
23	A \$5.00 Library	10	5.00
24	A \$10.00 Library	20	10.00
25	A \$15.00 Library	30	15.00
26	A \$20.00 Library	40	20.00
27	A \$25.00 Library	50	25.00
28	A \$30.00 Library	60	30.00

All of the articles in the above list are genuine. We know that every article will give satisfaction.

We send all of the articles, except Nos. 12, 13, 14, 15 and 16, free of charge, on receipt of the amount specified in the list.

Nos. 12, 13, 14, 15 and 16 will be sent from the manufactory direct to the persons entitled to receive them, and they will have nothing but the freight to pay.

DOUBTFUL.

That prized exchange, the *Western Rural*, of Chicago, makes a statement under the head, "Take Care of the Swine," that we think would puzzle the writer to substantiate. It says:

It seems somewhat paradoxical, yet it is true, that during low prices for pork (if long continued) when the net profit depends upon the extra care given the hogs, disease is more prevalent than when high prices prevail. This is mainly due to the fact that farmers, as a rule, neglect that branch of agriculture which does not give the greatest immediate returns.

The sentence that we take exception to is the one we have placed in italics. During the past ten years, previous to this, pork has commanded large prices; and no previous decade, taking the country over, will show so great a loss from disease among hogs, as will this; and no previous term of years will begin to compare with this one in the prices hogs have brought.

Farther on in the same article, the writer alludes to hog cholera; and we infer that cholera was the disease he had in mind in the above extract.

The first season that cholera attracted marked attention throughout the country, was in the Winter of 1859-60; and prices had been on the ascending scale for two or three years.

We do not believe that there has ever been a term of years when hogs have received so much care and attention as they have in the past ten, especially throughout the West, which is the principal hog-producing section; and yet, as we have said, if disease among swine has not been on the increase, it certainly has not decreased.

The writer has founded a theory upon a false assumption of facts, with the best of intentions, no doubt, but false, nevertheless.

In another place, in the same article, the writer enunciates a fact that we can heartily endorse:

However, it is a matter of great importance that swine of all ages should have access to a more bulky and rougher food, in connection with corn, than is generally allowed; so that the muscular action of the stomach and intestines are rendered more complete in preventing costiveness, which is the first indication of disease, and of unprofitable growth in the animals.

The muscular coats of the stomach and intestines are strengthened only by being brought into use; and this can only be done by feeding the animal at least once a day with such articles as will distend them. Of this class of food are cooked potatoes, beets, turnips, slop, &c.

Of dry corn, even when fattening, we usually feed but eight or ten ears to the hog, and often not this. When ground up by the animal, this amount of corn will not make more than six or seven quarts, while the hog's stomach has a capacity for twelve or fifteen quarts, and even more than this. This will explain the writer's idea; and we believe it to be correct.

We have long thought that if a coroner's jury were to sit upon the bodies of all the hogs that die from disease, the verdict in most cases would be, "Died of too much corn!"

SUBSCRIPTIONS are still in order. Organize Clubs at every postoffice, and send in the names as fast as obtained.

European Correspondence.

THE CATTLE PLAGUE IN FRANCE.

PARIS, FRANCE, December 2, 1871.

There is a prospect that the cattle plague in France will only cease with the extinction of the last beast. The distemper now exists in more than one-half of the country, and since the government has resolved on publishing every ten days as complete information as it can gather, from indolent or indifferent officials, the march of the plague appears to be as fatal as it is rapid. About 1,200 animals daily succumb under the malady or are slaughtered as suspected. The French will not adopt the preventive measures that have succeeded in England, Belgium and Germany, viz: Incessant supervision in the transport of stock, isolation of patients in the care of infected districts, and no scruples in killing suspected beasts. Since the Germans have occupied Alsace and Lorraine, they have stamped out the cattle plague. In the townlands where it existed, they placed soldiers to prevent the departure of live stock. Out-offices, where the diseased animals are lodged, are not only disinfected with strong solutions of carbolic acid, but the walls are scraped, the wooden fittings burned, the flooring renewed, and even the stores of fodder have been delivered to the flames. The government orders and compensates. In France, the prohibition to move cattle through infested localities is not observed. The veterinary surgeons are lax in the discharge of their duties. Upwards of 25,000 cattle have been ordered to be slaughtered by the authorities, the average compensation being 180 frs. per head, so that the sum of five millions, voted by the Assembly for this purpose, may be considered exhausted. The flesh of slightly distempered cattle as food finds few purchasers. The laws and regulations adopted by England for the extinction of the pest, are being translated into French, and are intended to be scattered broadcast over the country. Meantime meat, milk, butter and cheese must soon be considered as luxuries. In the multitude of cures advanced, the following is to be regarded rather as a preventive; proved to be salutary where distemper threatens: Dissolve two ounces of sulphuric acid in one quart of soft water, mix well, and throw a glassful of the mixture in every bucketful of water served to the animals. For horses, it is also an agreeable addition to the meal drink. The buss horses in Paris have even their drinks sharpened with vinegar, and their mouths are sponged with a strong solution of the same, during Summer, while the vehicle stops at the offices for passengers. During the late campaign, the Prussians gave their patients, affected with fever and small pox, a beverage of sulphuric acid and water, with success.

There are most important changes rapidly making their way in the rural manners and customs of France. Large proprietors are disappearing; feudalism will soon have not even a dismantled donjon to represent its past. Since the laws of primogeniture were abolished, eighty years ago, the proprietors of broad acres are becoming rare, and are being succeeded by three classes of landowners, holding sixty, twenty and five acres respectively. It is not uncommon, on the death of a parent, to see a field staked out into five equal portions, representing the number of children, each heir being free to sell or retain his succession. The desire of the peasant is to own his holding; he will for years "skin flints" to save up the purchase money, and dies happy as a proprietor. It is the tendency for small farms to be still more subdivided, for landlords, as a class, to disappear. The price of land is now triple what it was five and twenty years ago, and the manners of the town are pushing aside the primitive tastes of the country. It may be said a peasant is no longer distinguishable from a citizen; a countryman from a townsman. Not a petty village but has its grocer's and draper's shops. Hitherto the peasant breakfasted on potatoes and milk, but

there is the grocer, who has taught him the use of coffee and sugar, and the draper, with the tailor and dress maker, to clothe a population in fashionable materials that formerly was content with a blouse and home-spun robe. The boys take to billiards where nine-pins contented, and go to college; the girls take to music, attend the convent school, secure husbands if possible, or become nuns. The laborer formerly brought his flail at four in the morning and worked till nine at night—there is no "short time" movement for this class even now—had two meals and received his twelve sous. At present, in Winter, he commences work at seven, in Summer, at six, and finishes at five or seven o'clock, has four meals instead of two, and from thirty to forty sous instead of twelve. Seventy years ago, the farmer presided at the repasts of his men, served on a rustic bench; now he takes his meals apart, and the laborers join the servants in the kitchen. How far these social changes are ameliorations, time, and not long, will show. The rural districts, disgusted at the recent political conduct of civilians, are determined to make their voice heard; hence a new element in the transformations which French country life is undergoing.

LEAVENWORTH, ST. LOUIS AND CHICAGO
MARKET REPORTS.

[CORRECTED TO DECEMBER 25TH, 1871.]

	Leavenworth.	St. Louis.	Chicago.
Apples, per bbl.	\$3 00a 00	\$1 75a 00	\$1 50a 50
Bran, sacked, cwt.	70a 75	90a 95	
Buckwheat, per bu.	50a 75	80a 85	
Barley, Spring	25a 53	40a 80	57a 60
Butter, per lb.	15	20a 40	20a 25
Country Cheese	37a 32	38a 43	
Corn, in ear	110a 120	125a 135	
Corn Meal	8		
Dried Apples, per lb.	8a 9		
Dried Peaches, per lb.	32	28a 30	27a 28
Eggs, per doz.		63	
Feathers, live geese			
GAME—			
Prairie Chickens	2 50a 3 00	3 15a 4 00	5 00a 5 50
Quail, per dozen	1 00a 1 10	1 35a 1 50	1 25a 1 50
Squirrel, per dozen		5 00a 6 00	
Rabbits, per dozen		1 40a 1 50	
Buffalo, per lb.	4a 5	6	
Deer, per lb.		4a 6	
Venison, Saddle, per lb.		9a 12	
Turkeys, Wild, each	1 00a 1 75	1 25a 1 75	1 25a 1 75
Hay, Prairie, loose, ton	6 00a 7 50	10 00	9 00a 10 00
Hay, Timothy, baled		20 00a 24 00	18 50a 15 00
Hemp, undressed, ton		1 00a 1 40	
Hemp, dressed		210 00a 215	
Hides, Green Salted, lb	9 1/2	10	10 1/2a 11 1/2
Hides, Flint	18	20	19a 20
Lard, Choice	7 1/2	8 1/2a 9	
Potatoes	65	1 00a 1 25	95a 1 10
POULTRY—			
Chickens, per doz.	2 50	2 00a 3 00	1 75a 2 75
Ducks	3 00a 3 50	3 25a 4 00	3 50a 3 75
Geese	5 50a 7 50	6 00a 9 00	
SEEDS—			
Clover	8 00	6 50a 7 50	6 50a 7 50
Timothy	3 75a 4 00		3 00
Blue Grass	2 00a 3 50		
Osgood Orange	8 00		
Orchard Grass	3 00		
English Blue Grass	5 00		
Red Top	2 50		
Millet	1 00		
Hungarian	1 00		
Broom Corn	75a 1 00		
Flax	2 00		
Hemp	2 00	1 50a 1 55	
Castor Beans	7 1/2	8 1/2	
Tallow	67a 70	63a 70	50a 75
Wool, Tub Washed	30a 40	50a 55	50a 55
Wool, Fleece Washed	38a 42	38a 42	30a 45
Wool, Unwashed			

Furs and Skins.

	Leavenworth.
Wolf, Grey	\$ 50a 50
Wolf, Prairie	25a 75
Badger	10a 30
Raccoon	15a 50
Fox, Grey	10a 40
Fox, Red	15a 75
Skunk, Striped	10a 40
Opossum	5a 10
Muskrat	5a 10
House Cats	1 00a 2 50
Mink, Dark and Glossy	1 00a 2 00
Mink, Pale	10a 50
Mink, Culls	1 00a 5 00
Otter	75
Beaver, Prime, per lb.	60
Beaver, Heavy, per lb.	50
Deer Skins, Dressed per lb.	75
Antelope, Dressed per lb.	40
Elk, Dressed per lb.	25
Deer, Undressed, per lb.	25
Antelope, undressed, per lb.	15
Elk, Undressed, per lb.	15
Sheep Pelts, Large	1 75a 2 00
Sheep Pelts, Medium	1 00a 1 25
Sheep Pelts, Small	40a 75
Sheep Pelts, Shearings	20a 30

FORTNIGHTLY RESUME OF THE MARKETS.

MONETARY.

The telegraph reports of the last ten days indicate a general stringency in the money market throughout the country. Within that time Gold has not varied much from 8 1/2c. The

rates of interest in the large cities have been high for two weeks past, with some increase in currency. In St. Louis the past week, call loans to customers were made at 10c, and to outsiders at 12 1/2c.

Advices from Chicago report a continued movement of currency from that point toward the country, and bankers have been compelled to order a supply from New York. Similar reports are also received from Louisville, Ky., while our New York advices report a continued stringency in that market, and a disposition upon the part of some to lock up greenbacks. Some bank failures have been reported in the latter city within the past few days.

COMMERCIAL.

The Hog market, at this writing, seems to be in an unsettled condition. The report has been very generally circulated over the country that there was an unusual number of Hogs being slaughtered this season, and this affords packers an excuse, if one is needed, for keeping prices down. We quote the following from the circular of the 16th of December, issued by KERCHEVAL & SON, of St. Louis, who probably handle as much pork as any firm in the country: "Within the week the work of packing has been progressing with more than usual activity. Every town, however small, proposing to do anything has been at work, and the number of hogs cut in the cities and large towns has been swelled beyond that at a corresponding date of last year, but to what extent it is impossible to say, as packers, generally, decline to report their operations. And it is known that many hogs, in consequence of the inequality of prices, are reported twice, if not thrice, at the West, and thus go to swell the nominal packing, which it is important to represent as large, that being, in the interests of the packers, a 'knock 'em down' argument against any advance." The same firm claims that there is less hog product in the country than there was twelve months ago. In most of the large pork-packing cities, such as Chicago, St. Louis, Louisville and Cincinnati, there is a stubborn fight maintained between packers and holders; the former refusing to advance prices and the latter refusing to sell at the present figures. What the result will be, it is difficult to say, but incline to the opinion that an advance may be looked for after New Year. From the 20th to the 23d of December, the bulk of the sales in St. Louis were made at \$4 15a 4 30; some choice lots going at \$4 50 gross weight. The latter figure was paid for a few lots that averaged near 400. In the Chicago market, prices have ruled a shade higher; good lots having brought \$4 50 gross weight, within the dates mentioned above; \$4 20 @ 4 30 were the ruling figures, with the market closing dull. In Louisville, Ky., prices at the same date were \$4 40a 4 65 gross weight. In Leavenworth the market has ruled lower than at any point we have quoted. This is in part due to the fact that packers in the large cities have a larger proportionate demand for the ribs, tenderloins, heads and feet, than the smaller cities, being able to sell them at fair price. In addition, the high freights of our Western railroads militate against our Western packers, and still we do not believe that they have yet paid as much as the markets elsewhere justified. They should remember that they can only build up a market and a trade by paying fair prices. We quote prices here as follows: Common to fair, \$3 25a 3 35; fair to good, \$3 35a 3 50; choice, \$3 50a 3 75, gross. We quote in this market, Mess Pork, clear, \$15 00 (300 pounds per barrel, net); Mess Pork, \$12 50; Prime Mess, \$10 50; Breakfast Bacon, \$9 50 per cwt.; Bacon, clear sides, \$6 50; Hams, \$12a 14; Shoulders, \$6 75.

In Cattle there is but little doing, and prices are nominal. KELLY & PEET, of this city, quote Extra Christmas Beef at \$4 50a 6 00; fair butchering Cattle, weighing from 1,000 to 1,200, \$3 25a 3 50; Texas, good, \$2 50a 3 00; fair, \$2 00a 2 25. In Chicago, the market was dull, without a positive decline. Some extra Cattle, on Eastern account, brought \$5 25a 5 75; choice, \$4 00a 5 25; the bulk of the sales ranged from \$3 40a 4 75. The St. Louis market is reported at \$2 25 for fair Texas, to \$8 00 per cwt for choice Christmas Cattle; the bulk of the sales were made at \$3 75a 6 50, for good to choice, which represents Cattle weighing from 1,400 to 2,000 lbs. gross.

Sheep are quoted in fair demand in Chicago, with prices unchanged; common, \$3 50a 3 75; medium, \$4 00a 4 25; good to choice, \$4 50a 5 00. In St. Louis the market was good, with a better grade of Sheep than usual, and prices about the same as Chicago. The Leavenworth market is somewhat below both, owing principally to the fact that the bulk of our Sheep are inferior to those sent to Chicago and St. Louis. We quote here, common, \$2 00a 2 50; good to fair, \$2 75a 3 50; choice, \$4 00a 5 00; Christmas, \$7 00.

Wheat is looking up in this market, with a fair prospect of an advance in price. Our mills are running to their fullest capacity, and turning out a large quantity of excellent flour. As usual, most of our farmers have sold their Wheat too early. We quote choice White Winter Wheat, full weight and over, \$1 35a 1 40; Red Winter Wheat, same quality, \$1 30a 1 35; fair to good, \$1 20a 1 30; inferior, \$1 00a 1 10. In St. Louis the market is reported quiet, with an expectation of higher prices after New Year; but little doing in the city mills, and no quotations given. In Chicago the market was tolerably active, with a slight decline. In this market the bulk of the Wheat handled is Spring grain; the quotations given are for that grain; the prices to date range from \$1 09 @ 1 23 1/4. Chicago has advices from New York that there are 7,000,000 bushels of Wheat within easy reach of that port by

rail, and that there are now in transit for Europe 10,000,000 bushels. On December 10th there was in store in Chicago 115,516 bushels of Wheat; 1,885,386 bushels of Corn; 552,682 of Oats; 484,132 bushels of Barley.

KANSAS STATE HORTICULTURAL SOCIETY. FIRST DAY'S PROCEEDINGS.

The Fifth Annual Meeting of the above body met in Lawrence on Tuesday, December 19th, at nine o'clock, A. M., and was called to order by the President.

Prayer was offered by Rev. HARVEY JONES.

The address of welcome was made by Hon. T. DWIGHT THACHER, editor of the *Lawrence Journal*, in which he extended the hospitalities of the city in a graceful manner, and hoped that the visit of the members would prove as pleasant as it was likely to prove profitable. He spoke of what Kansas had done in the way of developing its fruit resources in the past, and expressed the opinion that the State was destined to be recognized in the future as the very best for fruit growing purposes. He spoke of the immense sums of money that had heretofore been sent out of the State to buy fruit, and that, hereafter, Kansas will, as it has this year export thousands of dollars worth of apples, peaches, grapes and pears. At the close of the address the speaker was enthusiastically cheered.

The President followed with the annual address.

Mr. E. SNYDER, of Highland, one of the *Ad Interim* Committee, made an oral report from his section of the State upon the condition of fruit, trees, &c., the past year. Apples and, in fact, fruit of all kinds ripened prematurely, and decay of most kinds set in soon after ripening. Fruit trees have retained their leaves for an unusual length of time this Fall.

Dr. STAYMAN thought this was caused by late growth.

S. T. KELSEY thought not, as he never had fruit ripen up better than this Fall.

Mr. MAXWELL thought it was owing to sudden change from warm to cold. Others expressed opinions similar to the above.

The condition of the fruit buds was reported on by several, all concurring that they are comparatively uninjured to date.

AFTERNOON SESSION.

Mr. SNYDER read a report upon Meteorology. It was carefully prepared and rich in sound ideas.

A committee of five was appointed to report upon the best six varieties of pears for general cultivation. LINES, GODDARD, BRACKETT, SNYDER and KELSEY were appointed.

The cultivation of the strawberry was then taken up and fully discussed. It was admitted upon all sides that mulching was necessary to successful cultivation, and deep trenching or under draining was valuable.

EVENING SESSION.

The President made some reports upon the profits of fruit growing, but advanced no new idea. Following this was a general discussion upon primary trees, after which the meeting adjourned.

SECOND DAY'S PROCEEDINGS, DEC. 20TH.

Society opened with prayer by Rev. E. GALE, of Manhattan, followed by a report of the Committee having the Kansas fruit in charge at the Richmond meeting of the National Pomological Society, which was read and received without remarks. At the completion of the report the Diploma, the tobacco and the money, were presented to the Society. The tobacco proved to be too heavy for the Society, and a lively discussion was raised by the motion of Dr. HOWSLEY, "That the tobacco be put up and sold to the highest bidder." Several members opposed this, and took high moral ground against the Society lending itself to propagating so great an evil. Capt. CHRISTIAN and others favored the latter.

An amendment was made that the tobacco be forever kept in the archives of the Society, which was carried.

R. S. ELLIOTT, Industrial Agent of the K. P. R. R., read an interesting and scientific paper entitled "Notes upon Extremes of Temperature," which

showed careful investigation and great research. Mr. ELLIOTT proved conclusively that the cold weather of November last is not without its parallels. He cited as especial instances the Winters of 1851 and 1852, 1835, 1830 and 1831. The Winter of 1818 was especially cold in some sections. At Marietta, O., the mercury fell to twenty-two degrees below zero. In 1796 and 1797 the Winter was very severe, all the Western rivers being frozen up, and the Mississippi and Ohio rivers were frozen to their junction. As a matter of record, the paper was valuable throughout.

Hon. WELCOME WELLS, of Pottawatomie county, Chairman of the *Ad Interim* Committee, reports that fruit in his section the past season was injured by late freezes in the Spring. Wood has made an excellent growth and is ripened up well. No blight upon the pears.

REPORT OF SPECIAL COMMITTEE ON BEST SIX VARIETIES OF SUMMER, FALL AND WINTER PEARS, FOR GENERAL CULTIVATION IN AN ORCHARD OF ONE HUNDRED.

Hon. C. B. LINES, the Chairman, opened the report with some excellent and almost poetic remarks, upon the great value of the pear compared with other fine fruits. He spoke of the Bartlett as being the king of the pears. He submitted the following list, always remembering that there are many things to be taken into consideration, such as location, soil, demand of the market, &c.:

The Committee advise that pear culture be not attempted on bottom land, and think that a soil with little alluvial elements in it, the best.

S. T. KELSEY thought the most essential element to pear culture is thorough drainage; a sandy sub-soil answering the purpose. Thinks the cause of orchards on clay soils not bearing is from the want of good drainage.

The following are the varieties as adopted:

Early Pears—Bartlett, Howell and White Doyenne; with a minority in favor of substituting Belle Lucrative for the latter.

Winter Pears—Vicar of Winkfield, Lawrence and Easter Buerre; with a minority in favor of the Winter Nelis.

S. T. KELSEY, a member of the Committee, stated that the Committee thought there was too large a proportion of Winter pears, but rendered the report in accordance with the demands of the Society. Also thought that the cultivation of Winter pears might be very profitably cultivated by enterprising, intelligent growers near large cities.

Mr. BRACKETT says pears succeeded well with him. Thinks the Bartlett the best pear in cultivation, but needs great care in picking and ripening, and commands the highest price in Lawrence markets. For Winter pears, favors the Glout-Morceau, grown as a dwarf. Spoke well of the Howell, but had not fruited it. Comes into market just after the Bartlett; the tree sometimes lopping over. The Lawrence is, in his judgment, the coming pear for Winter use, and that pear culture is more profitable. A gentleman asked if the Howell succeeded well as a dwarf. Mr. LINES replied that it succeeded equally well both ways.

A motion to adopt the report of the Committee was made, and carried. Meeting adjourned.

AFTERNOON SESSION.

Reports of officers being called for, S. T. KELSEY, Treasurer, reported, and showed the finances to be in a good healthy condition.

Dr. J. STAYMAN delivered an essay upon Grape Culture, which was listened to with marked attention. Did not think the foreign varieties of grapes valuable for cultivation in this country. Could recommend but two varieties of our own grapes for general cultivation, Concord and Ives' Seedling.

There were many others that were valuable for special purposes, such as Catawba, Goethe, Herbamont, Clinton, &c. He cited some interesting facts in relation to effects of heat, soil, climate.

Following the essay came the election of officers. For President, Wm. M. HOWSLEY was elected, no

other nominations being made. J. C. VINOENT was elected Vice-President; G. C. BRACKETT, Secretary; S. T. KELSEY, Treasurer; E. SNYDER, Highland, E. GALE, Manhattan, Wm. MAXWELL, Lanesfield, Trustees.

Following the election of officers, a discussion was had as to what constituted a membership and at what time the annual membership ceased, which was, after some discussion, laid upon the table.

Discussion upon grape culture came up. C. W. MURTFELDT took exceptions to STAYMAN's rule, that Ives' Seedling was valuable for general cultivation. Stated that he had examined many vineyards, and this variety had invariably lost its foliage, and exhibited signs of disease.

STAYMAN insisted that grape culture on the Mississippi was different from grape culture in Kansas.

Mr. SNYDER, of Highland, said that the gall louse was affecting the Clinton vine to an alarming extent. Delaware does well with him under favorable circumstances. Iona, if well sheltered, does well, but does not succeed on the open prairie. Hartford Prolific ripens first. Eumelan ripens two weeks later. Ives' Seedling has not succeeded well.

Capt. CHRISTIAN thinks the Martha the best grape we have. Thinks it sweeter than the Delaware, as hardy as the Concord and a rampant, vigorous grower.

A resolution was adopted to cause all memberships to cease on the morning preceding the election of officers at the annual meeting, and that those who join the Society at any semi-annual meeting shall extend over one year from that date.

Mr. E. R. STONE, of Topeka, read a paper upon certain legislation for nurserymen, to protect them from losses through neglect of parties who had contracted for trees, and then refused to take them upon delivery. From estimates, Mr. STONE thought, there was thousands of dollars' worth of trees killed this year through failures of parties to take them when delivered according to contract.

Our columns are too crowded to publish the paper entire.

W. MAXWELL offered a resolution to the effect that this Society, in making up a list of apples, do so entirely upon the basis of location, and that they name ten varieties for high ground, six for low ground and ten for intermediate. Also the same number for eastern and northwestern exposures; all on the basis of an orchard of one hundred trees. He supported the resolution in an able manner, which was finally referred to a committee of five, with instruction to report to-morrow.

[NOTE.—Owing to the crowded state of our columns we are compelled, against our will, to await the remainder of this report until our next issue.—ED. FARMER.]

ILLINOIS STATE HORTICULTURAL SOCIETY.

The Sixteenth Annual Meeting of this Association was held in Music Hall, in the city of Jacksonville, Ill., December 12th, 13th, 14th and 15th, 1871.

The Hall appropriated to the use of the Society was centrally located, large, and with convenient ante-rooms for committees. The walls had been tastefully adorned by the citizens with wreaths of evergreens and autumn leaves and pictures. Over the officers' platform, or stage, an arch was formed by the word "HORTICULTURE" in large letters, ingeniously and beautifully devised in amaranths and other immortelles, scarlet seeds, pods of pepper, and popped corn—a very tasteful and appropriate motto.

The meeting was called to order Tuesday A. M., at 9 o'clock. Hon. A. C. BRYANT, President, in the Chair; O. B. GALUSHA, Secretary; H. J. DUNLAP, Assistant Secretary; JONATHAN HUGGINS, Treasurer.

Prayer was offered by Rev. Mr. WASHINGTON; which was followed by a brief address of recommendations, by the President, in reference to the action to be taken by the Society, in regard to vari-

ous interests connected with Horticultural pursuits. Secretary's and Treasurer's Reports were read. The latter showed the Society to be on a firm financial footing, and the moneys appropriated by the State and collected in membership fees, to have been judiciously and economically expended.

Appointment of special committees.

Prof. J. B. TURNER, of Jacksonville, delivered the address of welcome, and an invitation to the members of the Society to visit the various public institutions, for which the city is famous, previous to adjournment.

SAMUEL EDWARDS, of Lamoille, Vice-President of the Second District, then made his Report as to general state, progress, encouragements and discouragements of Horticulture, in his section of the State. Many points of interest in regard to certain fruits were brought forward in this paper, which were afterwards discussed at some length by the members.

Adjourned till 2 o'clock, P. M.

TUESDAY AFTERNOON.

The Society convened at two o'clock.

Secretary read a communication from LOUIS ELLSWORTH, of Napierville, containing some happy suggestions and words of greeting for the friends whom circumstances prevented him from meeting at this time. The usual annual address was then made by the President, in which the history of Horticulture for the past twenty-five years was reviewed in a most interesting manner; the causes of early failures and later successes ably explained; and the present needs and future prospects of the beautiful art eloquently set forth. Among other things, the speaker thought that the farther Western States could and were profiting by the horticultural experiments of Illinois, while they would have fewer obstacles to contend with, as yet, in the way of worn out soils, noxious insects, &c.; and that was why Kansas was now one of the best, if not the best, fruit-growing States of the West. He thought, however, that Illinois was not quite ready to yield the palm to her younger sister, but that she had made, and could still make, many exhibitions equal to that of Kansas at the Pomological Fair.

Address referred to committee, of which PARKER EARLE, of South Pass, was chairman.

According to the printed programme, the report of the standing committee on Meteorology was called for. J. H. TICE, of St. Louis, being the only member of the committee present, said that he had had no conference with his colleagues, but that, if permitted to do so, he would introduce a set of resolutions drawn up by him and adopted by the Missouri State Board of Agriculture, with reference to the necessity and practicability of entering into such arrangements with the U. S. Signal Service, that farmers and horticulturists could be put in possession of reliable data in regard to approaching storms, and thereby be enabled to make such preparations and plans as would frequently save them from great loss.

Following these resolutions (which were adopted here also) Mr. TICE read a lengthy and abstruse paper upon the forces that govern the material universe, showing the intimate connection that exists between all physical phenomena; and especially the relations of the disturbances of the earth to the spots of the sun, aurora borealis, &c.; and showing what may be predicted in one portion of the earth, from the phenomena occurring at a certain time in another. The greatest obstacle in the way of applying the practical results of these discoveries and investigations, lies in the fact that farmers are so isolated and cut off from telegraphic communication with the meteorological observatories. This paper was almost too profoundly scientific, and dealt with problems too vast, for the limited apprehension of your reporter; hence, it is not claimed that the abstract given does justice to the original theories and philosophical conclusions of the writer.

Mr. JONATHAN PIRIAM was then invited by the Secretary, and unanimous vote of the Society, to

read a paper which he had prepared on "Timber Growing and the Destruction of Forest Trees." This essay was exceedingly interesting, and abounded in the most important and startling statistics. Mr. P. said that by the wasteful course hitherto pursued in cutting down forest trees, many sections of the country were rapidly bringing upon themselves two calamities at once, viz: want of fuel and scarcity of water. He then proceeded to show in what manner arboreal vegetation acts in modifying the violent atmospheric changes to which open countries are subject; and how, in many countries, and sections of this country, where once the climate had been delightful, it was becoming subject to fearful drouths and deluges, for want of the equalizing influences once exerted by forests; instanced Spain, California, &c.; while, on the contrary, in some portions of the United States, as, for instance, Denver, Colorado, and Utah, the cultivation of the once arid soil, and the planting of trees was rapidly bringing about wonderful results, in the amount of rainfall experienced there, and even causing streams to return to channels that had for years been dry. The destruction of forests for lumbering purposes in the United States, had been lavish almost beyond compute, and could not fail of producing serious results in many directions. The annual export of lumber from Michigan and Wisconsin alone was estimated at one billion seven hundred and fifty million (1,750,000,000) feet, and that to furnish this prodigious amount, three hundred and thirty thousand (330,000) acres are denuded every year!

The speaker then referred to the immense destruction during the recent terrible fires, estimated at a ten years' supply, and stated that the price of lumber had advanced seventy per cent. since then. Mr. P. proceeded to give the prices at which the wood of various trees was at present selling in New York and other markets, for building and manufacturing purposes—black walnut bringing as much as \$145 per thousand feet. From a money point of view, then, he could recommend no better investment of labor and capital, for the next twenty years, than the planting of forest trees. Dr. WARDER, for instance, had sold the locust timber from a single acre of ground for one thousand dollars.

The speaker proceeded to give many sanitary and aesthetic considerations in favor of his position. In order to secure the best results upon other vegetation, as well as upon animal life, one-fifth of all land should be planted to trees. There were kinds adapted to all situations, so that they could be grown upon hill-sides, and upon plains, along water-courses and highways. They are as easily planted as corn, and require but from three to six years' cultivation. The essay showed the enthusiasm of the writer in his subject, and was listened to with deep interest by all present.

A short discussion followed.

Mr. GALUSHA remarked, in regard to the destruction of timber by railroads, from sparks from the engines setting fire to young timber, and thus causing loss for the future.

Mr. — could see no way of bringing the importance of the subject before the agricultural community, unless the Government would offer premiums, &c.

Mr. PIRIAM thought it would not do to wait for Government aid. The frequent change of officers rendered each incumbent too much intent upon the interests and emoluments of the present, to admit of his being much interested in the future welfare of the country.

Mr. MURTFELT spoke of the vast amount of lumber annually used in fencing, which might be saved by an effective stock law.

Mr. EDWARDS thought that the late fires were sufficient to render all arguments in favor of tree planting superfluous. The Legislature of the State has been asked to enact some law to encourage the cultivation of forest trees.

After some further interchange of ideas, the subject of fruits was introduced.

A gentleman suggested that whenever any particular fruit was under discussion, specimens be produced, if it was possible.

Dr. HULL moved that only new varieties be discussed; that they had been over their present fruit lists often enough to bring out all the facts in regard to them.

[CONCLUDED IN NEXT NUMBER.]



ENTOMOLOGICAL TERMS.

While there is no branch of natural science that possesses more interest for farmers and horticulturists than that of Entomology, there is none, perhaps, about which they, as a class, have so little technical knowledge. Almost every one has sufficient command of botanical terms to comprehend a description of, or to describe with precision, a tree, a vine, or a herbaceous plant; but when they attempt to tell us about the organs of an insect, what a confusion of ideas and language at once ensues. We are reminded, just here, of a ludicrous blunder of an Eastern book-maker on horticultural subjects, who gave the world the benefit of a lengthy disquisition upon one of our common injurious insects, in which it transpired that the author had not been able to distinguish between the head and tail of the insect in question, and had actually, in his descriptions, been confounding the one with the other!

We know there is a very general, and most unreasonable, prejudice against scientific language of any sort, except among scientists themselves; but from the very want of appropriate terms in which to clothe their ideas, the world loses the benefit of many valuable observations and experiments, by that class of men whose interests are most affected by the developments of insect life.

The want of some work on the general principles or outlines of Entomology, which would be of convenient size, cheap, and written in a simple yet accurate style, is every year becoming more and more apparent. All the books now in use are too voluminous, too abstruse, and too expensive, to attract popular interest, or to serve as text-books in the school-room.

In order, therefore, to make our descriptions of various insects more satisfactory to our readers, we propose to define a few of the terms in common use by entomological writers.

The word *Insect* is derived from the Latin, and means cut into or divided, and refers to the insected or ringed bodies of this class of animals. A close examination of all insects, in all stages of growth, from the fat, legless maggot to the mail-clad beetle and the broad-winged butterfly, discloses the fact that their bodies, no matter how diverse in form, agree in this, that they are composed of many closely-connected rings or segments—the usual number is twelve, exclusive of the head.

The principal anatomical divisions of the body of an insect are the *head*, *thorax* and *abdomen*, each with its characteristic appendages. In the perfect state, these various portions are separated from each other by deeper incisions than divide the other segments, and are thus easily recognized; but in the larva, all insects familiarly known as caterpillar or worms have no marked division between the thorax and abdomen, the head alone being distinguished from the rest of the body.

The appendages of the head, to which most frequent reference is made, are the *eyes*, the *antennae* and the *mouth*. All adult insects have two large compound eyes, one on each side of the head, and occupying a considerable portion of it. These compound eyes are composed of a great number of

small lenses, which, since they are immovable, in their sockets, face in all directions. Besides these eyes, many insects have a few little single eyes, *ocelli*, placed on the top of the head.

The most conspicuous organs of the head are the *antennae*, in which is situated the sense of touch, and (it is supposed) of hearing. They are pointed and flexible, and of many widely diverse forms, but for the most part long and slender, either feathered (pectinated) or thread-like (filiform). The *antennae* are of the utmost use in classification.

The mouth of insects varies greatly, with the nature of their food and the manner in which the latter is taken. It usually consists of an upper and under lip (*labrum* and *labium* respectively), a pair of horny jaws (*mandibles*) opening vertically and working from side; outside of these are the *maxillae*, moving in the same way, and two pairs of pointed feelers called *palpi*. All these organs are singularly modified, according to circumstances and various stages of development.

To the *thorax* are attached the six true or thoracic legs (which is the full complement in the perfect insect) and the wings—two pairs, in all orders except the *Diptera*, which have but a single pair developed. The upper and under wings are distinguished as *primaries* and *secondaries*, *anterior* and *inferior*, and in several other terms which do not require explanation.

Besides the six pointed, horny, thoracic legs, the larvæ of *Lepidoptera* and *Hymenoptera* have the abdomen supported by from two to seven pairs of short, fleshy legs, called *prop* or *prolegs*, the number and situation of which are important considerations in classification. Most insects, when closely examined, will be found to have along their sides nine pairs of little round openings, more or less minute. These are the breathing pores, called, in technical language, *stigmata*, or *spiracles*. In a few families of insects these *stigmata* are less numerous, and are situated at the posterior extremity of the body, in the larvæ; while water insects, in many cases, breathe by means of gill-like processes, in a manner similar to that of fish.

Insects, according to their obvious characteristics, are divided into seven natural orders, viz: *Lepidoptera*, of which butterflies and moths are representatives; *Hymenoptera*, bees, wasps and four-winged flies; *Coleoptera*, beetles, insects with shelly wings or wing-covers, enclosing a pair of membranous wings, used in flight; *Hemiptera*, true bugs, resembling beetles in outline, but with their wings crossed on the back and the tips usually membranous, or with wings meeting each other on the top at an acute angle, giving them a roof-like form, as in the seventeen-year locust, various leaf-hoppers, &c.; *Orthoptera*, which embraces the grasshoppers, katydids, &c.; *Diptera*, all two-winged flies; *Neuroptera*, nerve-winged insects, such as dragon-flies, ant-lions, and the like.

In future articles we shall, perhaps, refer more at length to the characteristics of these different orders.

CORRESPONDENCE.

A BELIEVER IN THE KANSAS FARMER.

BY B. F. BINGHAM.

EDITOR FARMER: I desire to renew my subscription for your valuable and always interesting FARMER for the year 1872, and enclosed please find therefor the sum of \$1.50.

I congratulate you upon the success of THE FARMER, as an Agricultural paper and a Kansas enterprise, and rejoice to know that you intend to enlarge and publish it twice each month on and after the 1st of January, 1872. In the past, as I am confident it will be in the future, THE FARMER has been devoted to the growth, development and prosperity of Kansas; its interests generally; and has gradually but surely won the respect and admiration of its many friends. It has been in the advance; "Progress" has been ever inscribed upon its banner, for

these many years, and in consequence, has been the means of doing its part in building up Kansas, making her stand where she does to-day, the pride of all her citizens, the wonder of the world, and the admiration of all who visit her broad, rich and deep prairies. And hereafter, if I may judge from the ring of your last editorial, your liberal inducements to subscribers, both new and old, and your promises as to what THE FARMER is to be, I am sure you and your able paper will not be behind-hand in helping on the "good work" to place Kansas in the front rank, in all respects, and making her one of the leading States of the Union.

I have taken and read THE FARMER during the past year, and every number has appeared better and fresher than the preceding one. After one has read your paper for any length of time, he cannot but see that you are a true friend and faithful advocate of Kansas, at all times and under all circumstances. And I presume to say that during the five years you have conducted THE FARMER, and while others were holding back, doubting and wanting in faith as to the future of Kansas, you have never doubted or held back; but, on the contrary, your faith was strong, because founded upon the rock, and you thoroughly believed in the merits of the soil of Kansas, and her ability, if properly brought out, to become one of the leading stock and agricultural States of the country. Hence, I think THE FARMER is not wanting in that just and true pride that fills the heart of every Kansas man, woman and child, as the State steadily but surely rises to greatness and increased prosperity. Such a paper as yours—a paper that has the spirit of progress stamped on every page and sentence—deserves well, because it does so much to build up and make solid the foundation of a young State.

Nature has wonderfully blessed Kansas, in giving her such a rich soil and delightful climate; and these, with the aid of willing hearts and strong hands, will yet bring to her greater prosperity as her resources, one after another, are developed.

I believe in Kansas. I watch her increasing growth and prosperity, from year to year, with new interest. You ought to be encouraged by every citizen of the State, especially the farmers, for whom you are doing so much, and meet with abundant success, as a deserved reward for what you are doing, through your paper, for the citizens generally, of free Kansas. I hope all your old subscribers will renew their subscriptions (I don't see how they can help it), as well as having a host of new ones from all parts of the State. Thus you will be encouraged to roll on the wheel of progress, through the columns of your well-conducted paper, realize your future purposes with regard to the "Queen of the West," and place your State well in the advance of her sister States. "Honor to whom honor is due," and success always to your noble work—that of editing THE KANSAS FARMER—is the earnest wish of the writer.

Washington City, D. C., December, 1871.

MATTERS IN JEWELL COUNTY.

BY A. W. MOORE.

EDITOR FARMER: Enclosed please find \$1.50 for your Boy. I am glad he is getting more weekly. If times were not quite so hard, I could do considerable for THE FARMER; but we are all just beginning, and generally have all we can do to get a living. But I hope to be able to increase the circulation of THE FARMER here yet.

Our Winter here set in very severe. Snow is six to eight inches on the level, and in places badly drifted. Owing to the severity and earliness of the Winter, and the fact that the range was all burned off, feed is high and scarce. The old settlers generally have enough, but those who came in too late to put up any hay, are going to see close times for feed.

Our sod crops were good, of all kinds that were planted; generally better than most of us expected. A great many did not have any faith in crops on

the sod, having lost their labor in other States, and the consequence is, they are as far off from a living as they were last year at this time. In proportion to the expense, my crops have paid the best I have ever raised, and I farmed five years in the West before coming here. I would advise all new settlers to plant all they can up to the middle of June. Commence early, and keep breaking and planting; put the corn down through the sod that is turned, into the soil below; take pains and see that it is well covered, and the sod broken close down on the hill. Don't put more than three kernels in a hill—two are better for the corn. Mix pumpkin seed in with the corn, and you will be surprised to see how your sod will produce. Plant sorghum in the same way; it is at home in our soil. Potatoes do well, if the soil is stirred below the sod, either by plowing or digging. Don't bring the subsoil on top of the sod; they don't do as well as to leave it below. Plant everything you want to, and in nine times out of ten it will pay you.

Our county is filling up with stock and stock men, in a small way. We have not had the disadvantage of a herd law yet, and hope we never will. Many are coming here and bringing their small herds with them, because it is getting to be generally known that we don't go for the herding law. But I will close for this time.

Greenville, Jewell Co., Kan., December, 1871.

THE BOTANY OF KANSAS.

BY PROF. J. H. CARRUTH.

EDITOR FARMER: Your correspondent from Salina, Mr. JOSEPH HENRY, inquires about the Flora of Kansas. In the June number of the *Kansas Educational Journal* he will find a list of nearly five hundred plants of Kansas (from the oaks to the mosses), read by Prof. J. H. CARRUTH before the Kansas Academy of Sciences, at its annual meeting, September, 1870. Prof. CARRUTH, assisted by Prof. F. H. SNOW and others, at the last meeting, October, 1871, added about one hundred species; so that the list is now nearly complete. This is a valuable aid to any one studying our Botany. Only the technical names are given; but the common names, with description, may be found in *Gray's* or *Wood's Botany*, for nearly the full list of six hundred.

State Agricultural College, Manhattan, Dec. 1871.

THE KANSAS FARMER ON HAY.

BY L. G. VANCAMP.

EDITOR FARMER: This subject is one of importance to the farmers of the West. Now, I say that the fine upland grass is far the best for horses, if cut in the right time. It must be cut in the right time, and stacked without rain, and salted well with good coarse salt, which will preserve the hay, and the horse will do on it with half the grain, or thereabouts.

As for cattle, I think the long grass is the best; but it wants to be salted the same as the other, so that the stock will eat the more, and it will keep them the Winter through, if they have any shed to lie in. Now, the way I feed hay to stock is, I make a long rack of rails or poles, and then stack the hay in it, so that the cattle can run to it and eat when they please, and as much as they please.

NEVER HEARD OF HIM.—Business brought Dr. Webster at one time to London; and one evening, when passing the House of Lords, his curiosity induced him to make an effort to go in and see them. None were admitted without a ticket, except noblemen's servants. Dr. Webster, being ignorant of the rules, requested admittance. "What Lord do you belong to?" asked the doorkeeper.

"To the Lord Jehovah," answered Webster. "The Lord Jehovah?" queried the intelligent functionary. "I have kept here seven years, but never heard of such a Lord. Jack," said he to his fellow keeper, on the front steps, "here is a fellow who says he belongs to the Lord Jehovah; do you know such a Lord?"

"Never heard of him," replied Jack.

"But there is such a Lord," said the Doctor.

"Pass him in," said Jack. "I suppose it's some poor Scotch Lord."

The Kansas Farmer

1871—1872.

To-day a New Year steps upon the threshold of Time, close upon the heels of the old one that has gone out, with its sealed book of records, into Eternity. We cannot again open the old book, to correct, add to, or take from, the record. Every sentence, word, syllable and letter, must stand for ever as written. It is but waste of time to dwell upon it with thoughts of joy or sorrow, more than will aid us to gather strength and wisdom for the future, from the weakness and error of the past.

The new Year-Book lies before us, with its broad, unmarked pages. It is to be filled by each of us as, day by day, its pages are turned over by the rising sun. Shall yours, reader, and ours, be so written upon that we shall not blush to read them, and accept them as the true life-record whereby we shall be content to stand in judgment, here and hereafter? Let us, at least, enter upon the task with such resolve.

This is the period of retrospection and resolve with us all. It is the point of time almost universally chosen for the inauguration of change and bold steps of progress. What we will do next year, has been a subject of anxious thought and cool deliberation up to this hour. The task is now in hand, and we should see to it that it is well done.

THE FARMER goes out to its patrons and friends with a warm heart-greeting upon its tongue. It wishes a "HAPPY NEW YEAR" to all—not in empty words, but with a determination to do its duty in making the year a happy and prosperous one to its readers. This determination is expressed in its appearance, and in its steady, consistent course as a class paper, made for food and not for the amusement of its readers.

The change from Monthly to Semi-Monthly issues, with the greatly increased cost of paper and execution, is not based upon gains of the past, but hopes for the future. It has been, and still is, our purpose to make THE FARMER in every respect worthy of the State and its progressive policy. Not a dollar of its earnings has ever been diverted from its improvement. Whatever has been given as patronage has been returned, from time to time, in cost of production. What has been true in the past, we pledge for the future. As you, reader, are liberal in efforts to extend our circulation, so will you be rewarded in the enhanced value of THE FARMER. Every dollar you bring to its coffers shall be held sacred to its improvement, until a standard of excellence is reached by the Organ of Kansas Industry, that shall satisfy the most ambitious.

With a sweet mingling of gratitude and hope, we again sit down in the Family Circle of THE FARMER, to share with you the joys and sorrows, the gains and losses, of the new, untried year.

KANSAS STATE AGRICULTURAL COLLEGE.

JOSEPH DENISON, D. D., President of our Agricultural College, whose portrait we give on our first page, is a native of Massachusetts, and a graduate of Wesleyan University at Middletown, Conn. After graduating, he taught languages three years at America Seminary, N. Y., and for thirteen years after, was a clergyman in the Methodist Church in the vicinity of Boston. In 1855 he came to Kansas, and, in connection with Hon. I. T. GOODNOW, suc-

ceeded in establishing Blumont College in 1860, at the then new town of Manhattan. Besides the building, which is of stone, three stories high, 40x80 feet, they secured one hundred acres of land, a library of 2,000 volumes, and other necessary appurtenances. In 1863 this building, ground, library and all, were transferred to the State of Kansas, the Legislature accepting it as the Kansas State Agricultural College, in accordance with an act of Congress granting to each State 30,000 acres of land for each Representative and Senator in Congress, to endow a College, where the agricultural and mechanical sciences are to be taught, without excluding other branches. A part of the land selected falling within a railroad grant, the State actually secured but 83,000 acres for its three Representatives. As the land could not be sold at once, save at a great loss, the State advanced at different times \$30,000 to pay teachers' salaries. During all this time up to 1870, no appropriation had been made for barns or other necessary buildings, nor for teams, stock, implements, &c., and hence we had an Agricultural College only in name. Twice Dr. DENISON has mortgaged his own home for the benefit of the College, and has repeatedly solicited pecuniary aid for the same from others. In 1870 the Legislature forgave the debt of \$30,000, that had accrued during seven years, and permitted the use of that sum for the development of the College. This enabled the Regents of the College to issue scrip to this amount, bearing seven per cent. interest against the College. The Legislature of 1871 appropriated \$2,700 for the use of the College, and repealed the law compelling an exclusive use of the income for Professors' salaries, and placed the endowment in the hands of the Regents. Also passed an "Enabling act," permitting the township of Manhattan to vote bonds to aid the College. Under this act, the above township has voted \$12,000 in bonds for the specific purpose of purchasing and equipping a College Farm; and this sum, in connection with the college scrip that has been sold, has been so appropriated, and improved land bought, making with what the College already owned, a farm of 415 acres, that represents every variety of soil found in the State. Over one-half of the endowment land has been sold, creating a fund of \$120,000 in ten per cent. notes, of parties who have bought the land, and \$60,000 of paid up principal, that has been chiefly invested in school bonds, throughout the State. This sum has assisted in building school houses in twenty-five different counties. The courses of study have been entirely remodeled during 1871, making four distinct courses. In three of these, Agriculture and the Mechanic arts make up the entire course; and in one only do the ancient languages appear, and in this, Agriculture occupies a prominent position. The farm operations have made fair progress during the past year. The College now has over 2,000 trees in orchards, three acres in vineyard, and about 40,000 trees in nursery. Thirty students have performed regular manual labor upon the Farm under the direction of the Farm Superintendent, receiving therefor a reasonable compensation. Thirty young ladies and gentlemen, in addition to the above, have received horticultural instruction from a practical nurseryman, and have assisted in the Fall work of the nursery, and have material for 60,000 grafts. There have been 194 students in attendance, representing twenty-seven counties. There are ten experienced teachers constantly employed, and in addition arrangements are made for a course of lectures on Horticulture by Dr. JOHN A. WARDER; one on Entomology by CHAS. V. RILEY; one on Veterinary Science by Dr. J. H. DETMERS. The tuition is entirely free, except a slight fee for music, which is optional. The present building is entirely inadequate to the wants of the institution, as are the funds for developing the Farm. A good barn is greatly needed, as is also improved stock and chemical apparatus.

Other States have done much better by their

colleges than have we. Massachusetts graduated its first class in 1871, and its Legislature appropriated, last session, \$190,000, \$50,000 of which was for buildings. Iowa has appropriated \$254,250, \$214,000 of which was for buildings. Michigan and Illinois have been equally liberal, and those States are now reaping the benefit of their wisdom. While we would not urge such an expenditure here for buildings, we would say, that in accepting the grant of land from Congress, the State of Kansas assumed the responsibility of providing the necessary buildings, implements and stock, for the proper illustration of those theories the College is designed to teach, and it is the duty of the Legislature to see that it is done. They cannot fall back upon the incompetency of either Regents or Faculty, as both are under the control of our Legislature, and it is the duty of that body to see that the offices of the College are efficiently administered. There is no excuse for starving it to death.

MANAGEMENT OF SETTING HENS.

We have been interested in a little discussion in the *Poultry Standard*, as to the best arrangement for setting hens. Mr. H. H. STODDARD allows his hens to make their nests where they will, in the same room with the laying hens; and feeds them once a day, calling all the hens not setting out of the room to do this.

We can suggest, we think, a better plan—one, at least, that requires a good deal less trouble; and we know from practical experience that it answers every purpose. If the poultry-house is twenty feet wide, construct the nests one tier above the other, five feet from one wall of the house, leaving a ledge on both sides of the nests wide enough for the hens to walk on. If the bottom nests are elevated above the floor of the henry, close up the space underneath either with plank or lath, and likewise above the nests.

By this arrangement, you virtually have two rooms—one five feet wide, the other fifteen, less the width of the nests. Each room has a door, at opposite ends of the building, opening into a yard of a capacity suitable to the number of hens kept.

The nests have a door, made of lath, at each side; and these doors should be movable, simply held in place by a button.

When the hens are laying, all the doors are closed on the side opening into the narrow room; and when a hen desires to sit, the door on the laying side is closed, and that on the other side opened.

By this arrangement, no care is necessary beyond the closing and opening of the doors. One set of nest doors can be made to answer, and the owner is not bothered by fighting away the laying hens from his sitters every day.

NOTES FROM THE PINE-TREE STATE.—NO. II.

BY J. W. LANG.

The harvest has been gathered in, the Autumn's work completed, and the early snows of Winter are upon our fields. Now, in these short, dark days of December, it is good to indulge in retrospection; to cast back over the season's labors, its successes, and its reverses, and glean some lesson of wisdom, some practical lesson that shall be a guide for us in coming years. It is a good time to take an inventory of our possessions, and to lay our plans for the coming year; for he who lives and works without plans—definite, well made plans—is living and working at great loss. It is also a good time for all, old and young, to read, study, and reflect. These long Winter evenings are golden opportunities for improvement, for the acquisition of the very knowledge we so much need, and the facts that would be so valuable to us. They are far too valuable to be loafed away, too precious to be spent in card-playing, reading trashy books or papers, or idled and squandered away in bar-room or grocery.

THE OUTLOOK

With us has nothing peculiarly cheering, except the steady march of improvement, that even with

America

adverse seasons, and amid discouraging circumstances, goes steadily onward. Sections of our State have been visited by severe drouths, and devastating hordes of grasshoppers. Other sections have been spared, and the crops are average. Hay is the only crop that is short, and in a climate where from six to seven months feeding is necessary, this is a serious failure. Many are feeding out only half the usual amount of hay, and using corn, roots and other provender to substitute the other half. Stock has been reduced considerably, yet there is sufficient left for farm uses generally. We always like to see more than enough—a superabundance; then we may reasonably expect large manure heaps, cheap meats, and plenty of farmers who consume their produce on the farm, and low prices corresponding.

Many are anticipating high prices for stock the coming Spring. We may be allowed to dissent from this, and think that prices will be quite moderate. There is somewhat a scarcity of sheep with us, that is, to what there should be. They are the most profitable, and bear the highest price of any farm-stock we have here, proportionately. Sheep are the corner-stone of improved and permanent husbandry. They utilize many otherwise worthless products, and return a larger per cent. for money invested than any other stock. This is true in Maine; we believe it true in Kansas.

FRUITS.

Maine is a first-class apple State, and the culture of this king of fruits, as well as others suited to the severe climate, is on the increase. Thousands of trees will be put out the coming Spring; thousands are every Spring. In favored situations, the pear, the grape, the cherry, the plum, and most of the small fruits are at home. The strawberry, raspberry, blackberry, cranberry, gooseberry, currant, blueberry, and a host of others, are peculiarly at home, and their culture is receiving, from year to year, increased attention. Too little attention is given by our people, generally, to those inestimable blessings. Extensive fruit culture betokens an intelligent people, high cultivation, and improved Agriculture. We have not warmth of climate or length of season for peach culture, or open field culture for grapes, but we produce the hardier kinds of fruits, if not in perfection, very nearly to it.

FOREST TREES.

Maine has been noted, and is now to a large extent, as a lumber producing State. It was entirely covered, at one time, by primitive forests of oak, maple, birch, basswood, beech, hemlock, pine, spruce, fir, cedar and juniper. The great object with the pioneer was to destroy these as fast as possible, in order to make clearings. Devastation was the order of the day, and handed down from father to son, and has wrought incalculable damage to many sections.

There are farms, many indeed, that have not wood enough upon them to support the household fires. Our great, rocky hill-tops have been unclothed of their mantle of protecting trees, and the bleak winds have full sweep over the country. Drouth is very common, and sudden changes frequent. Streams that were prolific in trout and other fish, and that years ago were never known to fail, now cease to flow nearly every Summer. Springs that were counted never-failing, in the days of early forest clearings, are now frequently destitute of water in Summer, or have disappeared altogether. The soil of the big hills, once fertile, by cropping, washing, and severe exposure to all the elements, has wasted its elements of productiveness, and are great barren bulks of earth and exposed rock, calling loudly, but in vain, to be reclothed with their fit and natural clothing, beautiful and useful forest trees.

May not a lesson be learned here of high utility to every section? Maintain a due proportion of forest growth everywhere. In the rolling country, in the hilly and rough, in the prairie, and everywhere. Over our whole Union there is a work, a

mighty work, to be done in these particulars. Although a national, yet it is an individual work.

OUR PUBLIC SCHOOLS

Lie at the foundation of everything that is of worth. Free public instruction is the best legacy of our ancestors, for it is the guardian of the other for which they fought and bled—Liberty. Blot them out, and we go back to anarchy and barbarism as surely as darkness follows the declining sun. We have the district system in operation here. The towns are divided into several districts, according to size, and each district has its house, and chooses an agent to employ teachers and act for them in other matters. Each town has a supervisor, or committee of three. Their duties are to examine teachers and supervise the schools. But it matters not so much what the system is, or the minutiae of details, as it does what the interests of the parents are, or the ability of the teachers. We should endeavor to make the best and most of what we have, and ever be on the alert to adopt any improvement. Not all innovations are improvements; but reason, our common sense, and our circumstances will decide these rightly, if we are wide awake.

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WE trust the friends of THE FARMER will abate no jot or tittle of their efforts to increase its circulation.

EASTERN Kansas is enjoying excellent sleighing.

EFFECT OF COLD UPON MILCH COWS.

We have repeatedly, in these pages, urged upon farmers the necessity of giving their milch cows better protection during Winter; but it has been principally upon the ground of humanity, and a knowledge that less food was required to keep up the animal heat. We confess that it had not occurred to us that cold would have such an appreciable effect upon the flow of milk, as the following extract from the *Journal of Chemistry* shows. Dr. NICHOLS, the editor, in addition to being one of the most accomplished chemists of the world, is, withal, a most excellent farmer; lives upon a small farm a few miles out from Boston, and cultivates it, not only for pleasure, but for profit; and any statement that he would make in relation to the chemistry of the farm may be relied on implicitly. Here is what he says:

During the past Summer, in the hot days in July and August, the animals resorted to the lake to drink; and after sating their thirst, they would wade into the water and remain sometimes an hour or two with the legs half immersed. This habit, it was found, invariably diminished the flow of milk at night; and in order to learn the extent of the diminution, careful observations were made. It was ascertained that standing in the water an hour, diminished the flow to the amount of eight or ten quarts in a herd of thirteen cows. The loss was so great, that whenever they resorted to the water they were driven back to the pasture at once. We have learned that by simply turning the herd into the yard, upon a cold day in Winter, and allowing them to remain fifteen minutes, the flow of milk was diminished to a serious extent; and consequently, the animals are not now allowed to leave the warm stable during the entire Winter, except for a brief period upon warm, sunshiny days. Water is brought directly from a well into the barn, and the drinking vessels are so arranged that the animals have to move but a step or two to supply their wants.

The nature of the water supply, and conveniences of access, are most important points in the management of milch cows. A draught of ice-cold water, taken by a cow in Winter, cuts short the milk yield for the day from one to two pints. Well water, drawn into vessels and allowed to stand a few hours covered, in the warm barn, has its temperature raised several degrees; and this practice should be adopted by all thrifty farmers. It would undoubtedly pay well to slightly warm the water; but this is attended with considerable inconvenience where large herds are kept, unless steam apparatus is used. The influence of a cold current of air, and cold drinking water, upon cows in milk, is not of a transient nature; it extends for a longer period than a day or a week. Many fine animals are ruined by careless exposures every year; and self-interest and feelings of humanity should prompt all cow owners to keep diligent watch over their welfare and comfort.

Since first reading this article, we have thought upon the subject, and we believe every farmer can exemplify its truth by a few moments' reflection; and when we consider that comparatively few farmers have any shelter for their cows at all, and very few of those having sheds or barns have them sufficiently warm to be of material benefit, it would not be too much to say that we lose one-half of the milk product we are entitled to.

We were recently upon a farm at milking time, and from ten cows the good wife obtained but four gallons of strained milk at the night's milking. The days being short, and the milking being done by daylight, of course the morning's milking would be something greater. But if it was one-half more that would only give one gallon per day for each cow—certainly not one-half what ought to be obtained from our average common cows.

In the case of which we are speaking, the farmer's wife gave us some data as to the milk (or rather butter) product of the farm, and of which she has exclusive control. She is one of the very few fortunate (?) women who make a choice article of butter.

Besides supplying a large family with milk and butter, she has sold, during the past year, six hundred dollars' worth of the latter, from the ten cows; and she has not obtained any fancy prices for the butter, which its quality really merits, the entire amount being sold to a huckster, who, of course, makes a good profit between the producer and the consumer.

But even this, which is a far better showing than most of our farmers can make, is far less than it ought to be, and would be if those ten cows had a good warm bank barn for their winter lodgings, and a goodly supply of beets, carrots and cabbages for their winter feed, instead of corn and fodder alone.

When we asked this farmer why he did not build a good barn, he answered that he was not able. We know something of his affairs; and while he

is one of the most truthful of men, and thought he was telling the truth when he answered our question, yet we frankly say we did not believe him—at least, in the sense in which he meant it.

He has one of the best quarter sections of land to be found in the State of Kansas, all under a good fence, and in a good state of cultivation, with a fine young orchard and vineyard just come into bearing. He has four fine, sturdy, intelligent boys at home, all capable of doing a man's work; and what is more, they are willing to do it. He has two or three good teams, and a good granary, but nothing that can be called a barn on the place.

His stock consists of the teams above mentioned, the ten cows, fifteen or twenty calves and young cattle, and a few hogs; with a good supply of corn and hay, some wheat, and about seven hundred bushels of oats. He is out of debt, substantially; has good credit wherever known, and is, in fact, what is called a well-to-do farmer.

We ask the question, If a man in this condition is not able to build a thousand dollar barn, what are those farmers to do who have nothing but their land, one team, and only their own labor?

This is a serious question, and one that concerns every farmer in the State who has not already got the barn.

As we have said, we believe our friend is fully able to build a good barn, and he will not take of fence if we give our reasons for thinking so. He is a man of fine intellect, well fitted to fill any State or county office. He has twice served his district in the State Legislature, once in the Senate and once in the Lower House; has served one or two terms as county commissioner, and repeatedly as township trustee, and is now holding the latter office.

To fulfill the duties of these offices he has, necessarily, been much away from home, and has spent a good deal of money, that he would not be required to spend in private life; and we doubt if the salaries have paid him for one-half his time.

Being much in public life, where economy of personal expenses is too often thought a crime, it is not to be wondered at that he should have contracted habits of spending money almost lavishly, especially in the company of *old friends* (?); and if our friend is not able to build a barn, this is the great cause.

When we say that he is able, we mean that if he will tell the people to elect some one else to look after their affairs, and will practice a rigid economy in his own personal expenditures, stay at home on the farm, to look after the affairs there more closely; put every dollar he can get into young stock, until he gets his farm stocked to its full capacity, and cultivate a greater variety of crops, he soon will be able to build and pay for a barn; and thereby clear at least three hundred dollars more from his ten cows, to say nothing of the advantage to the other stock.

We have wandered somewhat from the original subject, but only because we know that our friend has a good many counterparts all over the Western country, who are annually losing from three hundred to a thousand dollars for want of a good barn; and yet, strange to say, they are not able to build one.

MAD ITCH.

A correspondent in the October FARMER started the question as to whether "we have such a disease as mad itch among cattle, and what its cause and remedy?"

Our Veterinary Editor has answered the question more fully in this number but, as he says, the disease has not been fully investigated by competent veterinarians, and, hence, no remedy has been found.

Since the question was started in THE FARMER, other papers have been agitating the question, and no doubt we shall yet arrive at its true solution. A peculiarity of the disease is that it almost invariably occurs upon the approach of cold weather, at a time when cattle change their food from the easily digested succulent food of Summer to the more

harsh, woody fiber of Fall and Winter, and we are not sure but what a plausible solution of the difficulty may be found in this fact. It has been the opinion among farmers for years, especially in the large hog raising districts of the country, that mad itch was produced by cattle eating the corn-stalks chewed by hogs; and we have seen the disease follow this cause so closely, that we are inclined to believe that it is one of the causes. It is a well known fact among physicians, that certain indigestible substances, indigestible in themselves, and certain other substances which retard digestion, will produce an irritation of the skin, more or less excessive. Opium and its preparations, and muriate of ammonia, are two examples of the latter class; certain samples of buckwheat flour, from which the husk or covering of the grain has not been thoroughly "bolted," is an example of the first class. It is a common practice among hog raisers to commence feeding corn on the stalk as soon as the ear fills, and this is usually done before the hogs are "put up" to commence the regular fattening process. For this purpose the stalks are cut and thrown over the fence into the pasture, or by the road side, as most convenient, and little care is exercised, usually, to keep the cattle from these feeding grounds. The stalk, after the hogs have chewed it, is nothing but a mass of woody fiber, and, of course, is indigestible. Cattle will eat this chewed fodder to excess, and we can readily understand why this should produce the intolerable itching noticed among cattle. There are, no doubt, other substances that will produce the same effect, but cattle do not eat these substances in sufficient quantities to produce the extreme effects we see in the chewed fodder.

Without claiming to be a veterinarian, we would suggest, that if future investigation should establish this as the cause of mad itch, that the first treatment in such a case should be a brisk purgative, something that will evacuate the bowels in the shortest time, to be followed with stimulants, kept up at regular intervals for three or four days, in quantity sufficient to increase the digestion somewhat above its natural standard. A better treatment still would be, to exercise more care in feeding the hogs where the cattle can have access to the feeding ground.

PRAIRIE FIRES.

Each day, almost, brings us new tidings of the destruction of property from the prairie fires, and each day shows the necessity of more prompt and efficient action to render these fires less frequent.

Our attention has been called by Hon. Ed. RUSSELL, of this city, to a device (the invention of a settler in Cloud county) for subduing these fires; and it strikes us that it could be made very effective. It is virtually a wheelbarrow, differing only in this, that the wheel is twelve or fifteen inches wide on its face, and should be three or four feet in diameter.

The gentleman who got this up set a keg of water on the platform of the barrow, with a spigot so arranged as to keep a small stream of water running on the wheel. This may or may not be an advantage.

To use it, the man simply trundled it over the margin of the fire, going on the run. If there is a stiff wind blowing, two of these barrows could be worked to advantage.

They are easily made. Any farmer of ordinary skill can make them; and we urge upon those living where they are exposed to these terrible visitations, to manufacture, at once, one or two of these implements, and keep them on hand. The wheel may be made of inch boards, sawing, say, into four feet lengths, and nailing them together with cleets side by side, until it measures four feet each way. Get the center, and with a line strike a circle, and saw out. Two of these make the heads of the wheel. Mortise a three-inch square hole through the center for the axle, which should be of hard

wood. Now cut strips fifteen inches long, and nail on the heads, and you have the wheel made, or at least one that will answer every purpose.

PRIZE FOR THE BEST TEN ACRES OF WHEAT.

In our last issue we referred to the prize offered by the Champion Machine Company for the best ten acres of Fall wheat, grown either in Kansas or Missouri. The premium is an elegantly finished Reaper, made at a cost to the firm of \$1,500, or, at the option of the winner, one of their later improved machines and one hundred dollars in cash. The object of the Champion Company in offering so large a premium, is to stimulate farmers to a better system of tillage and culture. The terms of competition are, that the wheat must be entered (for the best ten acres), either at the Kansas State Fair of 1872, or at the Kansas City (Missouri), Exposition, for the same year, according to the rules of entry as prescribed by those Societies. Accompanying the entry, there must be a full and complete statement setting forth the variety of wheat used, the amount of seed sown per acre, when it was put in, and whether drilled or broad-cast, amount and kind of manure used, if any, when applied, the general treatment the ground received, both before and after sowing, and what time it was cut, and how much time elapsed between cutting and threshing; and, finally, the sworn statement of the farmer raising the crop, as well as that of two reliable witnesses, that they saw both the ground and the wheat measured, and that all three can testify that so many bushels of wheat were raised on ten acres of ground. By keeping these conditions in mind, any farmer can comply with them, and the prize is worth striving for. The machine is on exhibition at the agricultural warehouse of M. S. GRANT in this city.

AGRICULTURAL DEPARTMENT REPORTS.

We have received and examined pretty thoroughly the Annual Reports of the Department of Agriculture for the year 1870, the last issued under the supervision of the Hon. HORACE CAPRON; and we accord to it the merit of being the best Report ever issued from the Department. It is replete with information from beginning to end, and abounds in practical illustrations.

Among the most interesting articles, we notice: "The Market System of the Country;" "Farming in New England;" "Green Corn Fodder for Milch Cows;" "The Dairy;" "Management and Profit of Poultry;" "Structure and Diseases of the Horse's Foot," and "The Recent Farm Experiments."

Aside from the above, there are quite a number of other articles, no doubt both instructive and entertaining; but we have not found time to do more than glance through them.

This Report should be in the hands of every farmer; and, no doubt, it can be obtained by all who will take the trouble to write to the Commissioner for it.

Farmers' Clubs and Agricultural Societies should see that their members are supplied with it.

FOOD FOR MILCH COWS.

Dr. GUNN, of Eldorado, asks us in a recent letter what kind of food we consider best for milch cows.

To answer it briefly, we would say, good, bright hay (clover is best), corn fodder, corn meal, beets, cabbage, bran, shorts and boiled oats.

For the best success with cows, we must give them a variety of food; and the above named is not too great a variety. Of course, cows will do well on much less; and if we were to be confined any four of these articles, we should prefer fodder, corn meal, beets and cabbage; and if we should reduce this diet, we would strike off the last two. But it is poor policy to deprive animals of vegetables during the Winter.

ALL subscribers who sent in their names before the change from a Monthly to a Semi-Monthly was decided on, will get a full year's subscription.

THE HOG: ITS DISEASES AND TREATMENT;

WITH SOME OBSERVATIONS UPON
ITS BREEDING AND MANAGEMENT.

INTRODUCTION.

Perhaps no farm stock has been written about so little as the Hog; and, until the recent work of Mr. JOSEPH HARRIS upon the Pig, we have had nothing that could be considered a text-book, of American origin; and the few English works upon the subject are not adapted to the American hog-raiser.

Incomplete as would be our Agricultural Literature without *Harris on the Pig*, there is a gap yet to be filled between that and the wants of the Western hog-raiser. We doubt if we shall be able to fill it; but if we add our mite toward that object, we are satisfied.

In the West, our soil and style of farming demand that we shall raise hogs, leaving to our Eastern neighbors, who live in proximity to the large markets, the task of raising pigs. The fertile prairies and rich alluvial bottoms of the West are so well adapted to the culture of corn, and corn so perfectly meets the wants of the hog, that without the two the West would be bankrupt.

Cattle-raising, of course, plays an important part in our farm economy; but cattle and hog raising, in order to secure the greatest profits, must go together, and hence, our Western farmers have for years used these two varieties of stock as the most profitable vehicles for conveying their grain crops to market, and probably will use them for all time to come.

The diseases of hogs, so far as we are aware, have never been made the subject of a book; and while, to the East, this may not be a matter of much importance, here in the West, where individual farmers have frequently hundreds, and sometimes thousands of dollars invested in this stock, it is a matter of prime importance that its diseases and treatment should be fully understood.

For further prefatory remarks, under this head, we refer the reader to the chapters on "Diseases."

CHAPTER I.—BREEDS.

We shall not attempt, in these articles, to give a complete history of all the different breeds of hogs. That has been done so perfectly in the work alluded to in the Introduction, that a repetition of it here would be superfluous, and for practical purposes would be useless, as many of the English breeds of swine are not adapted to our wants; but we shall give our attention to those American breeds (if breeds they are), and to such of the foreign breeds as we think would be profitable to the Western hog-raiser.

We mention, first, the hog known as the Poland-China; also known by the names of Magie hog, Butler county hog, Moore hog, &c.; but the first name has been very generally settled upon as being the most appropriate, and is, perhaps, as good as any other.

Mr. DAVID MAGIE, of Oxford, Ohio, is one of the oldest (if not indeed the oldest) breeders of this hog; and very much of the credit belongs to him, as we have no doubt that, had it not been for his intelligence and perseverance, we would not have had the Poland-China of to-day. A Mr. OXTORBY, of Ohio, is another large and very excellent breeder of this stock; as is also Mr. A. C. MOORE, of Canton, Illinois.

In a letter before us, from Mr. DAVID MAGIE, he says: "This breed was started by me thirty-five years ago (1870), by crossing the pure bred Irish Grazer with the Big-boned China, and the Poland hog with the Byfield, and then breeding the results of these two crosses."

It is one of our largest breeds, and is notable and valuable for the unusual size of the hind quarters, and the great depth of the sides; also, the ability to take on fat at any age, in a marked degree.

The color markings vary considerably in the Po-

land-China hog, ranging from a black hog with a few white hairs or small white spots, to a white hog with black hairs and spots. The latter is somewhat rare, but we have known one such, that came from Mr. MAGIE's pens. The prevailing color is spotted, with a little more black than white, and growing darker every year. This hog gets its size and bone from the Poland and Irish Grazer, its ability to take on fat from the China, and its symmetry from the Byfield.

The perfect specimen of the Poland-China hog is, in our judgment, nearer what the majority of Western farmers need than any hog that we have; and the only objection we have to urge against it is, that it is not a breed to the extent that will always reproduce itself, though it comes nearer to it than any American hogs. A few more years will, no doubt, establish all of the better points of the Poland-China hog.

They are gross feeders, grow to a very large size, attain maturity at from sixteen to twenty months, and will make as much pork to a given amount of food as any large hog that we know of.

For the past two or three years we have noticed that the Poland-Chinas are gradually growing darker; and we have suspected that some of the largest breeders were infusing a strain of Berkshire blood into them. The suspicion has been almost confirmed, the past season, by noticing the great improvement in the ears, legs and hair; but we have nothing authoritative upon this point. We would not consider a strain of improved Berkshire blood any disadvantage to the Poland-China.

We have before us some weights of this hog, which may be of general interest. Thirteen lots, numbering six hundred and twenty-five head, weighed, gross average, five hundred and fifty-six pounds. Thirty-eight head, slaughtered by one firm in 1870, weighed five hundred and thirty-eight and three-quarters pounds, net average.

This illustrates, somewhat, the capacity of this hog to take on fat.

The foregoing embraces the chief merits of the Poland-China hog; and we are only expressing a long-felt conviction, when we say that this hog is, in our judgment, best adapted to the wants of a very large majority of our Western hog-raisers, from the fact that they are hardy, docile, good feeders, and make a reasonable amount of pork to a given quantity of corn. If we were on a small farm, and fattened but few hogs annually; or near a good market, where fat pigs commanded a good price the year round, we should not keep Poland-China hogs. But for the farmer, raising and fattening annually from twenty to one hundred head, or more, we believe they have no superior. In saying this, we do not forget the claims of the Berkshires, Cheshires, or any other breeds. They have their place, and their merits, and none appreciate them more than do we; but years of breeding have proved what we have above stated, that the Poland-China is best adapted to the majority of our hog-raisers.

[TO BE CONTINUED.]

OUR CORRESPONDENTS.

LORENZO WESTOVER, County Attorney of Cloud county, writes: "I thought that I would try to do without THE FARMER and N. Y. Tribune last year, owing to finances being low; but it cost me many an anxious hour, and I made a resolve to strain an extra nerve and secure them for 1872. Please tell immigrants and new-comers generally that, though desirable to break sod in June, it is not indispensable. I broke forty acres last Winter, and cross-plowed in the Spring, and set out about 3,000 fruit trees, with the loss of but five; also, 4,000 forest trees, but with a greater loss in the latter; and raised on the ground a good crop of corn, potatoes, beets and ruta-bagas. I esteem our prairie hay fully equal to the tame grasses for making a good article of butter. A neighbor made 700 pounds of choice butter from three cows last year. Orange county, N. Y., thinks 100 pounds to the cow a good yield."

TO ALL WHO CAN READ.

The Weekly Sun Doubled in Size Without Increase in Price.

With the beginning of the year 1872 THE WEEKLY SUN will be double its present size, and will contain eight pages instead of four, making it equal in dimensions to any other weekly secular journal published in the country. At the same time its price will not be increased. It will be furnished to subscribers at the uniform rate of one dollar a year for each copy. To this rate no exception will be made and no reduction will be possible, either to clubs or agents. Every subscriber who sends a dollar will receive a copy for one year.

While THE WEEKLY SUN will thus furnish as much reading matter as other papers published at double or treble the price, it will contain new features which will add greatly to its interest and value as a family newspaper. Its independence of opinion and its unqualified hostility to Tweedism and Grantism, and every form of public robbery and corruption will be maintained, while in point of political news its readers may rely upon always receiving the most accurate as well as the freshest intelligence that can possibly be obtained. The enlargement will enable us to devote additional space to valuable agricultural intelligence, and to print interesting stories and romances more extensively than hitherto. For miscellaneous reading, presenting the quaint and humorous aspects of life, and for useful information respecting not only what takes place in this metropolis and this country, but in all other parts of the world, we shall now have ample room.

In its new form THE WEEKLY SUN will be the cheapest paper of its class in the United States; and we appeal to such of our readers as approve its ideas and objects, and find it interesting and valuable, not only to renew their own subscriptions, but to recommend the paper to their friends and neighbors.

The coming year is destined to be a memorable one in the history of the country. We are on the eve of a most significant Presidential election, and political movements will for many months be watched with unusual interest. As a journal, free from the trammels of party, THE WEEKLY SUN will continue to uphold the principles of true republican government. Its readers are invited to sustain it in that work. The truth, irrespective of party prejudice or official influence, will always be told in its columns.

Terms of The Weekly Sun:

A journal containing eight pages, published every Wednesday morning—To all mail subscribers, whether single or in clubs, one dollar a year each, always in advance.

DAILY SUN, by mail, 50 cents a month, or \$6 a year.

SEMI-WEEKLY SUN, by mail, \$2 a year.

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Jan1-1t

THE PROFITS OF THE CORN CROP.

It is a matter of surprise that one farmer can raise a given number of bushels of grain upon a given quality of soil, for about one-half the price that his neighbor can, and yet it is a matter past dispute.

We have before us the record of a crop of corn raised in 1870, for the correctness of which we can vouch, but with a modesty hardly commendable, the gentleman will not permit us to use his name.

The crop consisted of seventy-five acres, and the gross product was 3,750 bushels. Every particle of

labor was hired, which cost \$409. The wear of tools, wagons, harness, etc., is counted at sixty dollars; seed, five dollars; making total cost of crop, less interest on investment, \$474. If we allow \$197 as the interest on the investment, which would be a large estimate, we have a total cost of crop of \$671, or within a fraction of eighteen cents per bushel.

We shall not claim that this was done by scientific farming, but it was done by something that approaches very near it, and we wish that more of our farmers could learn the art.

OUR CORNER

Our Paris Letter.—We have made arrangements with a talented writer in Paris, France, to furnish us a semi-monthly letter from there, upon topics of general interest to agriculturists. These letters will be of especial interest to our Franco-American readers, and will also contain much to interest our German population, inasmuch as they will speak of farming matters in Germany as well as in France; and a careful reading will enable our American readers to compare European Agriculture with our own, and will also enable them to form some opinion of the future value of farm produce. In addition, they will contain much readable, gossip matter, that we feel satisfied will be appreciated.

Jas. J. H. Gregory, Marblehead, Mass. Elsewhere will be found advertisements of this old and reliable dealer in Farm and Garden Seeds. Mr. GREGORY has originated, or given notoriety to, more valuable vegetable, probably, than any other grower in the country. From experience, we can guarantee that Mr. G. will render satisfaction to every customer.

Notes from the Pine-Tree State.—We publish, this month, No. 2 of the above series. Mr. LANG, the writer, is a member of the Maine State Board of Agriculture, a practical farmer, and, as will be seen, a ready writer. He is a large contributor to the Agricultural Press, and our readers will find much to interest in his articles from the Pine-Tree State.

Garden Seeds.—Elsewhere will be found the advertisement of BRIGGS & BROTHER, Rochester, N. Y. This is one of the largest Seed firms in the country, and they have a reputation second to none for fair dealing. Their Annual Catalogue will shortly be issued, and promises to be one of the most elegant ever put out by any firm.

That Horse.—We published, last month, the advertisement of the thoroughbred stallion, "Prince Archy," and by error of the printer we make the horse fifteen years old. It should read, "was foaled March, 1867." See the advertisement. It is a valuable animal.

Bloomington Nursery.—F. K. PHOENIX, Bloomington, Ill., has a card in another part of our paper, advertising a large stock of Fruit and Forest Trees and general nursery stock. Price lists sent free.

T. S. Arthur & Sons, publishers of that excellent monthly, *Arthur's Home Magazine*, and that much-prized children's monthly, *The Children's Hour*. Publishers' terms, premium list, &c., elsewhere.

BOOKS AND PAPERS.

The Hoosier Schoolmaster, by EDWARD EGGLESON, Editor *Hearth & Home*. Price \$1.25. The above Story has been published, and is just now being completed in the *Hearth & Home*, and is to be issued in book form by ORANGE JUDD & Co., New York. Those who have read the serial speak of it in terms of strongest praise; and those in want of a New Year's present for a friend can do no better than to send them a bound copy of "The Hoosier Schoolmaster."

Vick's Illustrated Catalogue.—The great Seedsman has surpassed all his former efforts, in getting up something new and beautiful in the way of a Catalogue, intended as a Christmas present to his customers, but forwarded to any address, by mail, on receipt of 10 cents—not one quarter of its cost. It contains 120 pages, beautifully illustrated, printed on tinted paper, giving full descriptions of all field and garden vegetables, as well as flowers. Send for it.

Northwestern Farmer, Indianapolis, Ind. Monthly; CALDWELL & KINGSBURY, Publishers and Editors; Dr. A. FURNASS, Ass't Editor. THE FARMER, since it passed into the hands of the present proprietors, has been greatly improved, and is one of the most readable journals in the country. Dr. FURNASS is a host in himself, when it comes to writing practical common sense articles. Terms, \$1.50 per annum. Send for specimen copy.

Wyandotte Herald, V. J. LOWE & Co., Publishers, Wyandotte, Kansas. A weekly paper, Democratic in politics, and devoted to the general interests of the community. Will appear about January 4th, 1872.

THE APIARY.

DOUGLAS COUNTY BEE-KEEPERS' ASSOCIATION.

BY NOAH CAMERON.

The President being absent at the December meeting, Mr. H. REES was chosen Chairman for the meeting.

N. CAMERON stated that his bees had done well, realizing two hundred per cent. on the capital invested this season. His bees were now in the cellar, with sufficient honey to last through the winter, the hives averaging fifty pounds each, gross, and from twenty-five to thirty pounds of honey on the first of December. He thinks that not more than five pounds will be consumed per hive before they are put out on the first of March. It is just as necessary and as profitable to protect bees from the cold of our winters as it is our stock, and even more so, as the bee is a native of more southern latitudes; a single bee is not able to stand a temperature of fifty degrees without becoming chilled; that bees now are not very strong in numbers, owing to the fact that they had stored the comb full of honey during August last, and consequently breeding was restricted. As a general thing, bees have altogether too much honey to do well.

Mr. LOVEJOY wanted to know what he meant by too much honey. His bees were in good condition now, all very heavy. He had five swarms in the spring, sold two, and now had seven; had used all the honey they wanted, and sold about twenty dollars' worth.

Mr. CAMERON said that when all the combs were filled with honey late in the season, swarms became greatly reduced in numbers by the natural process of mortality, as there was no chance to keep up the supply by breeding. They often threw out the young brood to make room for honey, but they were never known to throw out the honey to make room for brood. Bees entering winter weak in numbers, wintered badly between cold sheets of honey, and were very likely to perish if the winter should be severe. If they should survive the winter, breeding would be limited in the spring, for the very reason that there was not sufficient room for the queen to deposit eggs.

Mr. COBB had examined his bees during the winter, and found that they were breeding some all winter.

Mr. MACY put in his appearance (an old member but not very regular). He is not afflicted with "bee on the brain." He announced that he had thirty stocks to sell. Was in a great hurry, and could not stay. As he was making for the door, he was asked why he wanted to sell. He said he was going to move away. Some thought, however, that it was because the bees used the point of their stings too much on the Doctor.

Here there was a discussion why bees sting some more than others. Mr. BLACKBURN thought it owing to a certain state of the blood. Others thought it was on account of the fear that some persons exhibited. This was a hard old question, but there is one thing certain, that they are always sure to sting a person that is investing in every bee humbug that comes along.

There was some discussion on honey plants, and that the Society should procure seed of some of the best for distribution, to be sown in the spring. Alsike and white clover were thought to be the best. Some thought hoarhound would prove a very important honey plant for this country, as it remains in bloom a long time, and at a time when there is scarcely any other source for honey. It is a plant that is very hardy, and never needs sowing but once, and seems to produce honey whether the weather is wet or dry.

PROFITS OF BEE KEEPING.

At the special meeting of the State Association at Topeka, in September, Dr. L. J. DALLAS thought his surplus honey for this season would amount to

4,000 pounds, but owing to the dry weather and a failure of the honey plants to secrete honey, he stopped at 3,400 pounds of extracted honey. [We expected a report in detail, from the Doctor. Will probably have it for the next number of THE FARMER.] This honey was taken from forty-two stocks he had last spring and their increase. The honey at twenty cents per pound would amount to \$680; eighteen swarms increase, at seven dollars each, \$156; making \$830, without counting his box honey.

By way of contrast, we will give a report that is not so flattering on what might be called bee keeping on a small scale. It is from Mr. SPARR. He says he purchased one swarm of bees in gum, eight dollars; patent right and six secrets, ten dollars; another patent right and hive to transfer his bees to, eight dollars; sugar to feed them, five dollars; three hives for the expected swarms, nine dollars; making forty dollars. He then discovered there was something the matter with his bees, and he took them to a bee doctor, and he pronounced them dead. But he says that he is not going to give it up so; is going to try a couple of swarms next spring.

As to our own operations this season, we would state that last spring we had twenty-six hives of bees; we increased to fifty. From these we took 2,100 pounds extracted honey and 400 pounds box honey. We then have 2,500 pounds surplus honey at twenty cents per pound, \$500; twenty-four swarms increase at seven dollars, \$168; sale of Italian queens, \$20; making \$688.

The first honey extracted was on the 4th of September (owing to delay in getting our extractor ready). We have thought that if we had commenced two weeks earlier, we might have had another thousand pounds of honey. At the time we commenced extracting, the bees had been idle for a week or ten days for want of room, and of course many of them had to be idle much longer, as it took some time to run five hundred frames through the extractor. The most we got from one swarm was one hundred and thirty pounds. We have been so well pleased with the bee business and our success, that we intend hereafter to make it our chief business. And for the benefit of the bee-keeping fraternity and those contemplating the business, we have been thinking of keeping a general assortment of every thing in the bee line: seeds of honey plants, bee books, bee journals, bee hives, bees, Italian queens, honey extractors, comb guides, every thing that we consider essential for successful bee-keeping. We will not have any patents, secret nostrums, moth traps, etc., at our shop. When our arrangements are completed, we will let you know through the advertising columns of THE FARMER.

Lawrence, Kansas, December 26, 1871.



Prescriptions for Sick or Injured Animals, Free. BY A PROFESSIONAL VETERINARIAN.

[The readers of THE FARMER, who have sick or injured Horses or Cattle, can have the advice of a Professional Veterinarian of great experience, through this Department, gratis, by sending an account of the complaint they desire advice upon. No questions will be answered by mail.—EDITOR FARMER.]

Acute Bronchitis.

EDITOR FARMER: I have a horse which is afflicted with a disease of the throat, which resists every application yet made for its cure. She was first taken with swelling of the throat, which affected her breathing somewhat. I applied corrosive liniment, which reduced the swelling and enabled her to breathe easier; but since then she has discharged matter from both nostrils, being mixed with what she has been eating. At times, when she coughs,

she will discharge half a teacupfull of matter from her mouth. She eats well, but still is falling away in flesh. Will you please name the disease, and give a remedy? and oblige

J. HENRY BARNES.

ANSWER.—Bronchitis—that is, inflammation of the bronchi (which means the windpipe). It is a very common disease among horses, and is confounded by most horse doctors with inflammation of the lungs, distempers, and colds. It occurs in various degrees of intensity, and should at least be described under two heads—acute bronchitis and chronic bronchitis. Your case is of the former. Symptoms commenced with a chill, harsh or painful cough, loss of appetite, heaving at the flanks, the mouth hot and dry. In a day or so a discharge of pus or matter will be observed from one or both nostrils.

TREATMENT.—1st. Negative. Never bleed, unless you are prepared to lose your horse; but first, place the horse in a comfortable place, give him twenty drops of the tincture of aconite root in one half pint of water every four hours, until the fever is relieved. Two doses will probably be sufficient. Give plenty of cold water to drink. Let him have a little grass, if it can be got.

On the second day, the following medicines may be given: Powdered gentian root, two ounces; nuxvomica, one-fourth of an ounce. Mix, and divide into six powders, and give one powder morning and night. These medicines will prevent debility and depression, and the pouring out of fluid or serum into the legs, sheath, belly and breast. After the fever has been removed, allow good food and plenty of it. Such treatment will not only cure the horse in five or six days, but the horse is nothing the worse.

Sprain.

EDITOR FARMER: I will avail myself of your veterinary surgeon. I have a fine mare, that got strained on a cane mill this Fall. She is very spirited; was struck with a cane stalk, gave a spring, and the stalks that had been allowed to gather in the track gave way beneath her feet. She did not fall entirely down, but it threw both her hind feet out sideways. It did not appear to affect her much at the time, but she has since been getting worse, stumbling when she travels, and apparently not having free use of her fore parts. The other day, in drawing a light load up a hill, she stumbled and fell, and was unable to rise for some time; and when she did, I noticed that the blood rushed up into the large veins in her neck in bunches, apparently clotted. It was with great difficulty she could walk, staggering about like a drunken man. I took that to be blind staggers, and bled her about two quarts, which appeared to relieve her a little. This was about three days ago, and since then she has been very staggy—cannot walk without stumbling and staggering about, and when she stumbles she does not appear to have the power to catch herself, although she is in good condition and is doing well otherwise. What is the matter with her, and what the remedy?

GEO. SHAFER.

ANSWER.—In all cases of sprains perfect rest is absolutely necessary. Do not feed the mare too high, but give a few bran mashies. If you can find any undue heat about her sides or shoulders, treat it alternately with hot and cold water. Should there be indications of much fever, give tincture of aconite root, twenty drops, in one-half pint water—two doses, four hours apart, will be sufficient.

Black Teeth.

EDITOR FARMER: I have a lot of pigs, eight or nine months old, that partially chew their corn and spit it out. Their teeth are black. What is the remedy? P. S.—I have a mind to get a pair of forceps, and pull all the black teeth. A. E. RHODES.

ANSWER.—Pulling the teeth will do no good. Bleeding in the third bar of the mouth is often resorted to, and sometimes gives temporary relief. A

better treatment is, to give occasionally ashes, charcoal and sulphur, say once or twice a week, in boiled food.

M. S. GRANT,

519, 521 AND 523 SHAWNEE STREET,

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Wholesale and Retail Dealer in

FARMING IMPLEMENTS,

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GARDEN CITY, GRANT AND

MOLINE PLOWS,

SKINNER BREAKERS & GANG PLOWS,

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BUCKEYE GRAIN DRILLS,

Cider, Cane and Fanning Mills,

AND ALL KINDS OF FARM AND GARDEN TOOLS; Landreth's Garden Seeds, at Landreth's prices; Vick's Flower Seeds, sold as low as sold by him, thereby saving freight and postage.

HORTICULTURAL TOOLS.

Terra Cotta Ware Trellis Work, Rustic Work, Statuary in great variety, Flower Vases, Aquariums, Globes, Gold Fish Fountains, and other articles too numerous to mention. Low Prices will be given, and every attention paid to customers. Jan-17

WANTED, FOR 1872,

RELIABLE AND INFLUENTIAL MEN, TO REPRESENT one of the oldest and most solvent Companies in the world. Incorporated in 1846.

Assets (January 1, 1870), \$30,915,957.
Annual Income, \$10,000,000.

To the professional or business man, with good references, we offer extra inducements to travel through Kansas, Nebraska, Wyoming, Dakota, Nevada, Arizona, Colorado, Montana, Idaho, Utah and New Mexico. Pleasant and profitable fields of labor will be assigned in any of the above named States or Territories. With Broad and

NARROW GAUGE RAILROADS

Radiating from Leavenworth West, South and North, our facilities for travel are equal to the older States; while the immense immigration and capital now moving West opens an inviting field to energetic, reliable Agents, when backed by such a Company as the

CONNECTICUT MUTUAL LIFE INSURANCE COMPANY,
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To the experienced Life Insurance man we say, Call in person, with such references as will be satisfactory to us, select your own locality, somewhere in Kansas or Nebraska, and join the

"OLD RELIABLE"

In building up a safe and profitable business for yourself in the growing West. Address

HOPKINS & GRAHAM,
Gen'l Agents Connecticut Mutual Life Insurance Company,
Leavenworth, Kansas. Jan-17.

Household Recipes.

Head Cheese.—After the heads have been properly trimmed (i. e., minus eyes, ears and nose), and cut up and soaked in cold water (two days at least) to extract the blood, wash them in warm water and put on to boil. Cook them in plenty of water till the bones drop out, and then set off to cool, pouring the liquid into one vessel and meat into another. As soon as cold enough, pick out every bone with your fingers, then chop the meat fine, the same as though making hash, and season with plenty of pepper, salt and pulverized sage. It is an improvement, for those who are fond of high seasoning, to chop up a large red pepper with the meat, and put just a pinch of ground spice and cloves in with the pepper and salt. Skim all the grease you can off the liquid, and put it and the meat back in the pot. Let all boil together a few moments, and then pour in a pan to cool.

If there are pigs' feet to pickle, boil at the same time, and put the water they are cooked in into the head cheese.

Potato Pan Pie.—Take four or five large sweet potatoes, cut in small pieces, and boil until cooked through. Pour off the water, and put them into a baking dish. Then put in three heaping tablespoonfuls of sugar, a tablespoonful of butter, a little nutmeg, and a cup of cold water. Make a crust like pie-crust, only thicker, and just large enough

to cover the dish. Cut a slit in the crust, and put it on top of the potatoes, and bake till a light brown. This dish is not a fancy one for a light dessert, but a good substantial part of a meal, and is pronounced excellent.

Queen Pudding.—One pint of nice, fine bread crumbs, one quart of milk, one cup of sugar, the yolks of four eggs beaten, the grated rind of a lemon, and a piece of butter the size of an egg. Bake until done, but not watery. Whip the whites of the eggs stiff, and beat in a teacupful of sugar, in which has been strained the juice of the lemon. Spread over the pudding a layer of jelly, and pour the whites of the eggs over this. Replace in the oven, and bake lightly. To be eaten cold with cream, if preferred.

Derby Yeast.—Two quarts of water, one good handful of hops in a bag, four good-sized potatoes; let all boil together until the potatoes are done. Have ready a large dish, with about two handfuls of flour; pour on the scalding hops and potato water; strain the potatoes through a sieve, and stir up all together; add a teaspoonful of ginger and molasses, and a teatpoonful of salt. Let stand a few hours, and pour away for use.

Stuffed Cabbage.—Take a large fresh cabbage, and cut out the heart; fill the place with a stuffing of cooked chicken or veal, chopped very fine, highly seasoned, and rolled into balls with yolk of egg. Then tie the cabbage firmly together, and boil in a covered kettle two hours. This makes a delicious dish, and is useful for using small pieces cold meat.

A Nice Vegetable Soup.—Take an equal quantity of young, tender okras and tomatoes, say a quarter of a pound of each; chop the okras fine, scald and peel the tomatoes, put them into a stew-pan without any water, add a lump of butter, very little salt and pepper, and one onion minced fine. Let it stew steadily for an hour, and then strain and serve it.

Straws.—Nearly a quart of flour, in which mix well one teaspoonful of cream of tartar; in this cut finely a piece of butter the size of an egg, and break in three eggs, adding two cups sugar. Dissolve one teaspoonful of soda in one cup of milk, and add it to the flour. Cut them out about as thick as doughnuts, and fry them in butter.

German Puffs.—Melt a quarter of a pound of butter, and mix it well with a half pound of flour; add a quart of milk, eight eggs well beaten, some grated nutmeg, and some cinnamon. Beat the ingredients well together, and bake the mixture in cups. Fill your cups but half full, as the puffs rise very high.

Ginger Snaps.—One pint of honey, three-fourth of a pound of butter, two teaspoonfuls of ginger, and boil together a few minutes. When nearly cold, put in flour till it is nearly stiff. Roll out thinly, and bake quickly.

Literary Department.

A STORY ABOUT PIRATES

A YANKEE CAPTAIN'S ADVENTURE.

There lived, many years ago, on the eastern shore of Mount Desert, a large island off the coast of Maine (now a fashionable place of Summer resort), an old fisherman by the name of Jedediah Spinnet, who, with a schooner of some hundred tons burthen, in which he, together with four stout sons, was wont to go about once a year to Grand Bank for the purpose of catching codfish. The old man had five things about which he loved to boast—his schooner *Betsy Jenkins*, and his four sons.

The four sons were all that their father represented them to be; and no one ever doubted his word, when he said their like was not to be found for fifty miles around. The oldest was twenty-two, while the youngest had reached his sixteenth year; and they answered to the names of Seth, Andrew, John and Samuel.

One morning a stranger called on Jedediah, to engage him to take to Havana some iron machinery belonging to steam engines for sugar plantations. The terms were soon agreed upon, and the old man and his sons immediately set about putting the machinery on board. That accomplished, they set sail for Havana, with a fair wind; and for several days proceeded on their course without an adventure of any kind. One morning, however, a vessel was discerned on the starboard quarter, which, with some hesitation, the old man pronounced to be a pirate. There was not much time allowed them for doubting, for the strange vessel soon saluted them with the not very agreeable whizzing of an eighteen-pound shot just under the stern.

"That means for us to heave to," remarked the old man.

"Then, I guess we had better do it, hadn't we?" said Seth.

"Of course," the old man replied; and the *Betsy Jenkins* was accordingly brought up into the wind, and her main boom hauled over to windward.

"Now, boys," said the old man, as soon as the schooner came to a stand, "all we can do is to be as cool as possible, and trust to fortune. There is no way to escape, that I can see now; but, perhaps, if we are civil, they will take such stuff as they want, and let us go. At any rate, there is no use crying about it, for it can't be helped. Now, get your pistols, and see that they are surely loaded, and have your knives ready; but be sure and hide them, so that the pirates shall see no signs of resistance."

In a few minutes all the arms the schooner afforded, with the exception of one or two old muskets, were secured about the persons of our Down Easters, and they quietly awaited the coming of the pirates.

"One word more, boys," said the old man, as the pirate came round under the stern. "Watch every motion I make, and be ready to jump the moment I speak."

As Captain Spinnet ceased speaking, the pirate luffed up under the fisherman's lee quarter, and in a moment more the schooner's deck was graced by the presence of a dozen of as strange-looking mortals as eyes ever looked upon.

"Are you captain of this vessel?" demanded the pirate chief.

"Yes, sir."

"What is your cargo?"

"Machinery for steam injins, an' sich."

"Nothing else?" asked the pirate captain, with a searching look.

At this moment Capt. Spinnet's eye caught what seemed like a sail to the southward and eastward; but not a sign betrayed the discovery, while a brilliant idea shot through his mind, and he hesitatingly replied:

"Wal, yes; there is a little something else."

"What is it?"

"Why, sir, p'raps I hadn't oughter tell," replied Capt. Spinnet, counterfeiting the most extreme perturbation. "You see, it was given to me as a kind of trust, and it wouldn't be right for me to give it up. You may take anything else you please, for I cannot help myself."

"You are an honest old codger, at any rate," said the pirate; "but if you value your life ten minutes longer, just tell me what you have got on board, and exactly the place where it lies."

The sight of a cocked pistol brought the old man to his senses; and in a deprecating voice he stammered out:

"Do—don't kill me, sir—don't! I'll tell you all. We've got forty thousand dollars nailed up in boxes just for'ard o' the cabin bulkhead; but Mr. Defore didn't suspect anybody would have thought of looking for it there."

"Probably not," chuckled the pirate chief, while his eyes sparkled with delight. And then, turning to his own vessel, he ordered all but three of his men to jump aboard the schooner.

In a few minutes the pirates had taken off the

hatches; and in their haste to get at the "silver dollars," they forgot everything else. Not so with Spinnet; he had his wits at work, and no sooner had the last of the villains disappeared below the hatchway, than he turned to his sons—

"Now, boys, for your lives! Seth, you clap your knife across the fore and peak halyards; and you, John, cut the main brace. Be quick, now, and the moment you have done it, jump aboard the pirate. Andrew and Sam, you cast off the pirate's grappling; then jump, and well walk into them three chaps aboard the clipper. Now for it."

No sooner were the last words out of the old man's mouth, than his sons did exactly as they were directed. The fore and main halyards were cut, the two grapplings were cast off at the same instant, and as the heavy gaffs came rattling down, our heroes leaped on board the pirate. The moment the clipper felt at liberty her head swung off, and before the astonished buccaneers could gain the deck of the fisherman, their own vessel was half a cable's-length to leeward, sweeping away gracefully before the wind. The three men who had been left in charge were easily secured.

"Halloa, there!" shouted Capt. Spinnet, as the luckless pirates crowded around the lee gangway of their prize; when you get them 'ere silver dollars, just let us know—will you?"

Half a dozen pistol-shots was all the answer the old man got, but they did him no harm. Crowding all sail, he made directly for the vessel he had discovered, which lay to leeward of him, and which he now made out to be a large ship. The clipper cut through the water like a dolphin, and in a short space of time Spinnet luffed up under the ship's stern. She proved to be an East Indiaman, bound for Charleston, having, all told, thirty men on board; a portion of whom volunteered their services, to assist in capturing the pirates.

Before dark Capt. Spinnet was again within hailing distance of his own vessel. Raising a trumpet to his mouth, he shouted

"Schooner, ahoy! Will you quietly surrender yourselves prisoners, if we come on board?"

"Come, and try it!" returned the pirate captain, as he brandished his cutlass above his head in a threatening manner, which seemed to indicate that he would fight to the last.

But that was his last moment. Seth crouched below the bulwarks, taking deliberate aim along the barrel of a heavy rifle; and as the bloody ruffian was in the act of turning to his men, the sharp crack of Seth Spinnet's weapon rang through the air, and the next moment the pirate chief fell back into the arms of his men, with a bullet in his heart.

"Now," said the old man, as he leveled the long pivot-gun and seized a lighted match, "I'll give you just five minutes to make up your minds, and if you don't surrender I'll blow every one of you into the other world."

The death of their captain, and the sight of the pointed pivot-gun, the peculiar properties of which they knew full well, brought the pirates to their senses. They threw down their weapons, and gave themselves up.

In two days from that time, Capt. Spinnet delivered his cargo safely at Havana, gave the pirates into the hands of the civil authorities, and turned the clipper over to the government; in return for which he received a sum of money sufficient to secure independence during the remainder of his life, as well as a handsome medal from the Governor.

GOOD ADVICE.

President PORTER, of Yale College, recently gave to his students a compendium of advice, which has rarely been surpassed for comprehensive brevity. He said: "Young men, you are the architects of your own fortunes. Rely upon your own strength of body and soul. Take for your star, self-reliance, faith, honesty and industry. Inscribe on your banner, 'Luck is a fool, Pluck is a hero.' Don't take too much advice; keep at the helm, and steer your

own ship, remembering that the great art of commanding is to take a fair share of the work. Don't practice hypocrisy. Always think well of yourself. Strike out. Assume your own position. Put potatoes in a cart over a rough road, and the small ones go to the bottom. Rise above the envious and jealous. Fire above the mark you intend to hit. Energy, invincible determination, with a right motive, are the levers that move the world. Don't drink. Don't chew. Don't smoke. Don't gamble. Don't swear. Don't deceive. Don't marry until you can support a wife. Be in earnest. Be self-reliant. Be generous. Be civil. Read the papers. Advertise your business. Make money, and do good with it. Love your God and your fellow-men. Love truth and virtue. Love your country, and obey its laws."

If this advice is implicitly obeyed by the young men of the country, the millenium is near at hand.

LOST IN THE WILDERNESS.

A TERRIBLE ADVENTURE WITH A COUGAR.

Dr. EVARTS, the lost member of the Yellowstone Exploring Expedition, contributes an interesting account of his adventures in the wilderness to *Scribner's Monthly*. We quote the following:

I stretched myself under a tree, upon the foliage which had partially filled a space between contiguous trunks, and fell asleep. How long I slept I know not; but suddenly I was aroused by a loud, shrill scream, like that of a human being in distress, poured, seemingly, into the very portals of my ear. There was no mistaking that fearful voice. I had been deceived by it and answered it a dozen times while treading the forest, with the belief that it was a friendly signal. It was the screech of a mountain lion, so alarmingly near as to cause every nerve to thrill with terror. To yell in return, seize with convulsive grasp the limbs of the friendly tree, and swing myself into it, was the work of a moment. Scrambling hurriedly from limb to limb, I was soon as near the top as safety would permit. The savage beast was snuffing and growling below, apparently on the very spot I had just abandoned. I answered every growl with a responsive scream. Terrified at the delay and pawing of the beast, I increased my voice to its utmost volume, broke branches from the limbs, and, in the impotency of fright, madly hurled them at the spot whence the continued howling proceeded.

Failing to alarm the animal, which now began to make the circuit of the tree, I shook, with a strength increased by terror, the slender trunk, until every limb rustled with the motion. All in vain. The terrible creature pursued his walk around the tree, lashing the ground with his tail, and prolonged his howlings almost to a roar. It was too dark to see, but the movements of the lion kept me apprised of its position. Whenever I heard it on one side of the tree, I speedily changed to the opposite—an exercise which, in my weakened state, I could only have performed under the impulse of terror. I would alternately sweat and burn with horror at the thought of being torn to pieces and devoured by this formidable monster. All my attempts to frighten it seemed unavailing. Disheartened at its persistency, and expecting every moment it would take the deadly leap, I tried to collect my thoughts and prepare for the fatal encounter which I knew must result.

Just at this moment it occurred to me that I would try silence. Clasping the trunk of the tree, with both arms, I sat perfectly still. The lion, at this time ranging round, occasionally snuffing and pausing, and all the while filling the forest with the echo of his howlings, suddenly imitated my example. This silence was more terrible, if possible, than the clatter and crash of his movements through the brushwood; for now I did not know from what direction to expect an attack. Moments passed with me like hours. After a lapse of time which I cannot estimate, the beast gave a spring into the thicket, and ran screaming into the forest. My deliverance was effected.

"WHERE THE LAUGH COMES IN."

"A little Nonsense, now and then,
Is relished by the wisest men."

WHAT would a hog do, if he wished to build himself a habitation? Tie a knot in his tail, and call it a pig's-tie.

WHY are hens immortal? Because, in addition to having their necks-twirled in this, their sons never set.

WHEN Horace Greeley was asked what kind of music he prefers, he answered: "The song of the harvest: three beets to the measure."

"I ALWAYS sing to please myself," said a gentleman who was humming a tune in company. "Then you are not at all difficult to please," said a lady who sat next to him.

It is a funny fact, that when a Mormon wife is deprived by age of all her charms, she immediately becomes conscience-stricken, and declares polygamy to be the devil's own institution.

A CLERK in Kansas City writes to his sweetheart: "Can't marry you this winter. Our firm don't advertise; business is awful dull, and my wages will be cut down, if the firm don't burst up altogether. So, let us postpone it till '72."

A New style of obituary is coming into use, that expresses briefly a great deal, as follows: "John Smith, of New York—revolver." "G. Jenkins, of Philadelphia—third story window." "Ann Jones, of New Jersey—laudanum."

Mrs. Sarah Norton thinks a woman with the right of suffrage would be as miserable as a man liable to bear children. She also believes that all the women who advocate "woman's rights," have failed in finding a woman's place in life.

A MAN in Boston, on getting soda water, was retiring from the store without the ceremony which usually follows that operation. "Recollect, sir," said the polite proprietor, "if you lose your pocket-book, you didn't pull it out here."

"DIDN'T you tell me that this morass was hard at the bottom?" said a young horseman to a countryman, when his horse had sunk to the saddle-girth. "Ye-es, I did; but you ain't half-way to the bottom yet," said the fellow.

A WOMAN in Wisconsin, the mother of twenty-two children, informed her pastor the other day that she had read much about people being made perfect through suffering, and added, "If suffering can render a woman perfect, I should be the most perfect person on God's footstool."

"MA, I'm going to make soft soap for the Fair next Fall," said a beautiful miss of seventeen, the other day. "What put that notion into your head, Sally?" "Why, the premium is just what I have been wanting." "Pray, what is it?" "A 'Kansas Farmer.' I hope he will be a good-looking one."

A LADY, well known in Washington as a lobbyist, always accosts a stranger with, "I think I have seen you somewhere," which often leads to a clue for her to find out the history of the party. One evening she played off her usual game on a gentleman who understood her character, and who replied, "Most likely, madam. I sometimes go there."

SPECIAL NOTICES.

Pulmonary Affections are the scourge of New England; but with the use of *White Pine Compound* most of the suffering incident to these diseases can be removed. For sale by all druggists.

All Newsdealers keep that excellent and trustworthy industrial magazine, "THE MANUFACTURER & BUILDER" on sale, or will take subscriptions for it. 50,000 readers per month testify to the value of this estimable publication. \$1.00 for 6 months; \$2.00 per year. Address

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Carpenters and Draughtsmen should critically examine the **DESIGNS FOR BUILDINGS**, published monthly in "THE MANUFACTURER & BUILDER." \$1.00 for 6 months; \$2.00 per year. All Newsdealers have it. Address

WESTERN & COMPANY, Publishers,
P. O. 5969. 37 Park Row, N. Y.

A TOPER sneered at a young man for wearing spectacles, when the latter replied: "It is better to use glasses over the nose, as I do, than under the nose, as you do."

DON'T SHE TALK QUEER?—A lady lecturer spoke in this city not long since, and in the course of her remarks, advised young men, in beginning life, to "take some good woman, and that they struggle up together." An elderly gentleman, whose ears are not as keen as those of an Indian scout, misunderstanding the remark, after the lecture was over, suggested that "the woman talked kinder queer, advising a young man to take a nice girl, and then snuggle up together."

SCHENCK'S PULMONIC SYRUP,

SEAWEED TONIC AND MANDRAKE PILLS, FOR THE cure of Consumption, Liver Complaint, Dyspepsia, and all Diseases arising from a torpid state of the Liver and Stomach. The success of my medicine in curing Pulmonary Consumption is too well established to admit of skepticism. I do not wish to be understood to say that when lungs are destroyed, any medicine can create new ones; but I do say that when a patient has a violent cough, night sweats, creeping chills, is emaciated, confined to bed, a cure may be effected. I will venture to say that two-thirds of the cases of Consumption are caused by liver complaint and dyspepsia. The mucous membrane of the bronchial tubes sympathize with the liver and stomach, and frequently light colds hasten into Consumption.

Schenck's Pulmonic Syrup is one of the most powerful purifiers of the blood known. It collects and ripens all the morbid matter in the lungs, and expels it by expectoration, or by the formation of gatherings, which break into the bronchia, and are spit up in large quantities, the lungs being thereby restored to health.

In order to do this, the stomach must be prepared, so that digestion will go on. The Mandrake Pills cleanse the stomach, liver and bowels of all mucus slime and vitiated matter, that clog up the system and prevent digestion. The Seaweed Tonic mixes with the food, and strengthens it so that it does not sour, and it goes through the process of chylification, and is made into good blood. When the stomach has got into this condition, the Pulmonic Syrup soon ripens the matter in the lungs, and a cure is effected.

Many years ago I was in the last stages of consumption, confined to my bed, and at one time my physician thought I could not live a week. Then, like a drowning man catching at straws, I heard of and obtained the preparations which I now offer to the public, and they made a perfect cure of me. It seemed to me that I could feel them penetrate my whole system. They soon ripened the matter in my lungs, and I would spit up more than a pint of offensive yellow matter every morning for a long time.

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