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Raising Onions.

There are two causes of failure to make this crop uncertain. One is because the soil is not kept clear of weeds, and the other is that it is not properly enriched. To raise a good crop of onions requires a light, loamy soil, worked into as fine a condition as possible, to render cultivation easy.

The greater part of the preparation should be done in the fall, and especially the application of the manure. Well rotted manure is the best, and that which is free from grass, oats, or weed seeds, should always be selected. Of course, if the manure is properly rotted the vitality of the larger portion of the seed in it will be killed, but unless this is done it will render the cultivation much more difficult. Stiff, clayey, or hard, poor land can be made a great deal better for the onion crop by a heavy application of ashes or well rotted bagasse. I prefer to apply ashes as a top dressing in the spring, working it in the surface, as I find by experience that they are not only valuable as a fertilizer when used in this way, but are also of great benefit in keeping down the weeds.

A plot of ground that is seeded with crab-grass should not be selected, as the pulling up of the grass injures the growth of the onions. Onions feed near the surface; in fact, the larger portion of the bulb grows on top of the soil, and as a natural consequence the plant food should be well worked in the surface. Of course it is too late now to talk about fall preparation. If we want a crop of onions from seed this spring, whatever preparation there is must be done between now and seeding. I should plow or spade up the soil as soon as possible, if there is a thaw out either the last of this or any part of next month.

If you can save up and rot a supply of poultry manure and leaves, you can have the very best manure for a good onion crop.

Another important point in raising a good crop of onions is to have good seed and sow it early. The first favorable time in the spring must be taken advantage of, if you would have the best success with your crop. As good seed is necessary in any crop, so it is with onions. Test your seed before risking your entire crop, as by the time you plant once and fail, and procure seed and plant again, it will be too late to make a good crop. I always take advantage of the first chance in March to sow my onion seed. We usually have a few warm days sometime about the middle of the month when this work can be done. Of course I do not say that this is the case every year. The first favorable opportunity should be taken advantage of, is what I want to impress upon those who expect to make a crop; let this time come when it will, any time early in the spring. If the ground has been plowed or spaded well during the winter, a good harrowing or raking should be given. If you have the poultry manure, now is the best time to apply it, working it on top of the soil with a rake. If you have not the poultry manure and have ashes, give a good strong dressing of ashes, raking evenly over the surface. Mark off in drills twelve inches apart, and not more than one inch deep; lay off the drills as narrow and as straight as possible, and then drill the seed evenly. Try to keep them in a straight row, as it will aid much in the cultivation. Cover lightly, but press the soil firmly upon the seed. They will withstand considerable cold, damp weather before rotting.

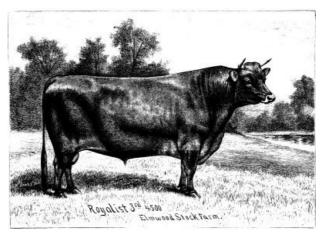
Last year I sowed my onion seed on the 23d of March; the next ten days were cold, rainy, dark, dismal days, with two or three freezes. Yet my onions came up all right and made a good crop.

As soon as the shoots make their appearance above the ground a good raking with a fine steel rake can be given. This will give them a good start and destroy the young weeds that will begin to make their appearance at the same time. After the onions start to grow, cultivation is the making of the crop, and the cleaner they are kept and the oftener the surface is stirred the better will be the crop.

As to varieties, the old Red Wethersfield and the Danvers Yellow are my favorites. The Yellow Strasburg is a good yellow variety, and there are quite a number of others that are good. In cultivating I keep the surface level, as they do better if kept in this way than if they are hilled up. Thin out so that the plants do not crowd each other—they should stand two or three inches apart —if you want large onions at maturity.

N. J. SHEPHERD. MILLER CO., MO.

Royalist 3d, 4500.



Royalist 3rd 4500 Elmwood Stock Farm PROPERTY OF COL. C. F. MILLS, SPRINGFIELD, ILLINOIS.

The bull Royalist 3d, 4500, here portrayed, stands at the head of the superb Jersey herd owned by Col. Charles F. Mills, Springfield, Illinois. He was bred by Mr. Samuel Stratton; dropped December 13, 1878; got by imp. Royalist 2906; dam imp. Nelly 6456. Royalist 2906 received the first prize over all Jersey in 1877; first prize and silver cup at St. Saviour's Show in 1877; first prize at the great St. Louis Fair as a three-year-old, and grand sweepstakes at St. Louis Fair in 1879 as the best Jersey bull of any age. Her sire, Duke (76), won first prize over the Island, Herd Book Parochial prize, and first Herd Book prize at Royal Jersey Show in 1875. Merry Boy (61), I. H. B., grandsire of Royalist 2906, won first prize at St. Mary's Show in 1874. Stockwell II (24), I. H. B., great-great-grandsire of Royalist 2906, won third prize over the Island and second Herd Book prize at the Royal Jersey Show, 1871; the bronze medal at the Channel Island Exhibition in 1871, and third prize at the Royal Jersey Show in 1872.

Nelly, the dam of Royalist 3d, 4500, has produced 21 pounds of butter in seven days since importation, and Mr. Stratton is authority for the statement that she received the special prize at the Farmers' Club, Island of Jersey, for the best butter cow, having made 16 pounds Jersey weight of 18 ounces to the pound, or 18 avoirdupois pounds, in seven days. Her sire, Lemon (170), is the grandsire of Mr. C. Easthope's celebrated Nancy Lee 7618 (test 95 lbs. $3\frac{1}{2}$ oz. unsalted butter in 31 days), and Daisy of St. Peters 18175 (test 20 lbs. $5\frac{1}{2}$ oz. unsalted butter in seven days).

Taking all things into consideration, we doubt if there is a better Jersey bull in the world than Royalist 3d. Certainly he has no superior in this country. Mr. Mills' Jersey herd is a model in all respects, and the popular chief clerk in the State Agricultural rooms may well be proud of it.

The Northwestern Importers' and Breeders' Association, Minneapolis, Minn., have bought \$20,000 worth of Fresian stock of the Unadilla Company, West Edmeston, N. Y.

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Illinois Tile-Makers' Convention.

BUSINESS OF THE YEAR.

(Continued from last week.)

An interesting feature of the proceedings of the Tile-Makers' Convention was the brief reports of members regarding their business last year. About forty manufacturers reported. In the majority of cases the demand has been fair; in a few very brisk; in quite a number it was said that sales could be made only at a reduction in prices. It was easy to see that in some sections of the State the work of tile-making was overdone, that is, the supply is in excess of the demand. It was the

general expression that prices could not be greatly reduced and leave a reasonable profit to the manufacturer.

HOW TO INCREASE THE DEMAND

was the question this year. Last year at this convention the talk was upon "How shall we supply the demand?" The answers to the question of how to increase the demand were various. Some advocated a rigid adherence to fair living prices, and thus teach farmers that it is useless to wait for cheaper tile; make a first-class article and the cheap tile that is hurting the trade will be forced out of the market. There was a general advocacy of a wider dissemination of a knowledge of the benefits of drainage. Show farmers and fruit-growers that they can add new acres to their farms, and take from tiled land a sufficiently increased yield the first year to pay for tiling, and that their land is worth more dollars per acre after tiling than the expense amounts to, and the demand will multiply many fold. Teach the farmers how to lay their drains properly, so that no disappointment will result, and every acre drained will advertise the profits from drainage. Circulate facts in regard to drainage as contributed to the agricultural papers, and even the newspapers. Subscribe for these papers and distribute them. Circulate the essays read at tilemakers' conventions. Talk drainage everywhere and at all times. These were among the means sensibly advocated for increasing the demand for tile.

WINTER TILE-MAKING.

It is but recently that the manufacture of tile has been carried on in winter, but now many establishments are running the year round. It was not claimed that the business can be prosecuted as advantageously in winter as in summer. But it gives employment to men, and the manufactories are thus enabled to keep skilled labor always on hand. It was thought that though the profits are small it is really better to run in winter where there is a demand for tile. In most cases it is better to make brick a portion of the year. There is always a demand for good brick at paying prices. If it will not pay to produce all tile, or so much tile as may be turned out, this will afford relief and keep the machine in motion.

TILE MACHINERY.

Mr. Billingsby, whose position allows him an excellent opportunity of judging, said there has been rapid improvement in the machinery for tile-making. Great advance has been made in machines for preparing clay, especially in the rapidity of handling it. The buildings for drying tile were a great deal better than five years ago. The means of ventilation are becoming excellent. The kilns are better and can be more satisfactorily managed. There is yet need for a cheaper tile factory—one where the investment of only a few hundred dollars will answer.

PROTECTING DRAINS.

It was generally conceded that it is best to have some device at the end of the drains to keep out rabbits, water animals, etc. Wires stretched across did pretty well but must be carefully looked after to clear away the roots and refuse that come through the drains. Two or three devices to take the place of wire were exhibited and were generally thought to be greatly superior.

OPEN DITCHES.

An interesting feature of this convention was the introduction, for the first time, of the discussion of tile ditching by machinery in a paper prepared by Hon. F. Plumb, of Streator, Ill. Mr. Plumb has been experimenting for several years with tile ditches, using both animal and steam power. He gave it as his conclusion that the machine of the future would be a machine that would perfect the ditch by one passage over the ground. He has perfected and is now manufacturing a steam power machine, at Streator, Ill., which is spoken of very highly by all who have seen it at work in the field. Mr. Plumb claims that the machine will cut twenty rods of three-foot ditch in an hour, and give a grade and finish to the bottom of the ditch equal to the very best hand work. The capacity of the machine is varied to any depth up to four feet, and for any sized tile up to nine-inch. Two men can operate the machine. The cost of cutting ditches, laying and covering tile is reduced to about ten cents per rod. He has already sold several of his machines, and is to be congratulated on the success he has attained in securing a good tile ditcher. We can conceive of no one thing that will conduce to the sale and use of tile so much as such a machine as the Plumb Steam Tile Ditcher. The machine is indorsed by C. G. Elliott, of Tonica, Drainage Engineer; by Mr. Pike, President of the convention, and others who have seen it at work in the field.

LAYING TILE BY MACHINERY.

There was nothing among the devices exhibited at this convention that attracted more attention or received more favorable private comment than a model of Chamberlin Brothers' Patent Apparatus for Tiling. The model only was shown, but working machines are in operation in Iowa, and they are giving excellent satisfaction, as attested by such men as Thos. B. Wales, Jr., of Iowa City, and Daniel H. Wheeler, Secretary of the Nebraska State Board of Agriculture. The apparatus is upon the old principle of the mole ditcher requiring the same capstan power. One

team is sufficient to run it. The apparatus is composed of a beam or sill, horizontal in position, and a coulter seven feet long at the rear end of the beam, and perpendicular to it a spirit level attached to the beam, aids in regulating. The coulter can be run anywhere from one to five feet deep. The front end of the beam is provided with a mud or stone boat to prevent sinking in the mud, and with a jack screw for regulating on uneven ground. Attached to it, and following the mole, is a carrier 200 feet long, made concave in form. On this the tile are laid and carried into the ground. A start is made at an open ditch or hole of required depth; when the carrier is drawn in full length a hole is dug just back of the coulter, two by three feet, down to the tile, a stop placed in front of the tile, the machine is started which draws the carrier from under the tile, when it is again located as before, and so on. Different sized moles are used according to the size of the tile to be laid. Any one can easily count up the advantages of this mode of laying tile, provided the machine can do the work it is claimed to do, and of this there seems to be no question, if we may believe the testimony of those who have seen it in operation.

DRAINAGE LAWS.

The following by Senator Whiting, of Bureau county, was read by the Secretary:

Illinois is a good State as nature made her, and drainage is destined to add wealth almost inestimable. Drainage enterprises are everywhere seen—in extent from the small work beginning and ending in the same field, to the levees of Sny Carte, and the canal-like channels through the Winnebago swamps. Drainage is naturally divided into two classes:

- 1. Individual drainage, where the land-owner has his own outlet independent of others.
- 2. Combined drainage where one can not drain without joining with others.

The smallest of these combined works is where two only are concerned. The Hickory Creek ditch now in progress in Bureau and Henry counties is thirteen miles long, has a district of about 15,000 acres, owned by over seventy-five persons. This combined drainage partakes of the nature of public works. For this class the constitution has been twice amended, and many elaborate laws have been enacted. These laws have had their vicissitudes, and are not yet free from complications. The first drainage legislation commenced forty years ago, by a special act, to drain some wet lands near Chicago. In 1859 two special acts were passed for lands on the American bottoms. In 1865 a general act was passed. All these enactments were under the constitution of 1848 which was silent on drainage, and the courts annulled most of these as unconstitutional. In 1870 the new constitution was framed containing a brief provision on drainage. The late Mr. Browning, a leading member of that convention, drafted a drainage bill which was enacted into a law without change. Large enterprises were organized and got well started; but again some complaining person appealed to the courts, and this law too, was declared too big for the constitution. The constitution was then enlarged to meet if possible, the views of the court. Two elaborate laws on the main question were passed in 1879, and these with several amendments since made rest undisturbed on the statutes. One of these is generally known as the "levee law," and the other as the "farm drainage act." They cover nearly the same subject matter, and were passed to compromise conflicting views. These laws relate to "combined drainage." "Individual drainage" was not discussed. As the law does not undertake to define how deep you may plow or what crop you shall raise, so it was thought unnecessary to make any provisions about the drainage of your own land.

Court Decision.—To the public surprise the Appellate court at Ottawa in two decisions pronounced individual drainage unlawful. As this decision is notable, and the subject of controversy, its history should be known. In 1876, Mr. C. Pilgrim, of Bureau county, laid about sixty rods of two-inch tile up a slight depression in his corn-field, discharging the same under a box culvert in the public road. This depression continued into a pasture field of Mr. J. H. Mellor, of Stark county, about eighteen rods to a running stream. Mr. Mellor sued Mr. Pilgrim for trespass, and the case was twice tried successively in the circuit courts of Stark and Bureau counties. The juries each time decided for Mr. Pilgrim, but the Appellate court each time reversed the decision; and finally worried Mr. Pilgrim into yielding to a judgment of one cent damages. The material part of that decision is as follows:

Mellor vs. Pilgrim.—"The appellant had the right to own and possess his land free from the increased burden arising from receiving the surface water from the land of appellee through artificial channels made by appellee, for the purpose of carrying the surface water therefrom more rapidly than the same would naturally flow; and the appellant having such right for any invasion thereof the law gives him an action. * * * If, as we have seen, the appellee by making the drain in question collected the surface water upon his own land and discharged the same upon the lands of the appellant in increased quantity and in a different manner than the same would naturally run, the act was unlawful because of its consequences, and the subjecting of appellant's lands to such increased and different burden than would otherwise attach to it, was an invasion of appellant's rights from which the law implies damages, and in such case proof of the wrongful act entitles the plaintiff to recover nominal damages at least."

Under this decision it is not easy to see how a man can lawfully cut a rod of ditch or lay tile on his own land, unless he can contrive some way to stop the flow of water.

1. The lower man may recover without proving that he is damaged because to drain is "wrongful."

- 2. Such drainage being a continuing trespass, subjects the perpetrator to never ending law suits and foredoomed defeats.
- 3. The lower man may forbid you to drain, or exact such tribute as he may dictate.
- 4. As the first man below must be consulted, why not the second, and how far this side of the Gulf is the limit of this trespass?

Here, as I have elsewhere, I challenge this as bad law. It reverses the order of nature, as well as custom, and can not be endured as the public policy of Illinois. Let us contemplate the exact opposite principle. "A land owner may drain his land for agricultural purposes by tile or open ditch, in the line of natural drainage, into any natural outlet on his own land or into any drainage depression leading to some natural outlet."

This proposition is generally regarded as self evident, but out of respect to the court, let us give some of the considerations on which it rests:

- 1. Improved agriculture is an element in civilization.
- 2. Drainage belongs to good agriculture, is extensively practiced and must often precede the plow.
- 3. The surplus water can not be stored or annihilated, and the course of drainage is indicated, in most places determined by nature, in the drainage depressions which are nature's outlets.
- 4. The law of gravity, with or without man's work, is constant and active in moving the waters to the lower level. The ditcher's art is to remove the obstacles to a freer flow.
- 5. Excessive water is a foe to agriculture; and for the general good it should be collected into channels, and as speedily as possible passed along on its inevitable journey.

OBJECTIONS ANSWERED.—It is said to be a universal law maxim, "that you may use your own as you will, but not to the detriment of your neighbor," and that this principle forbids this kind of drainage. This maxim may be general, but it is not universal. My neighbor may have built his house and other domestic arrangements in the lee of a natural grove of timber on my land. The removal of this grove may be a real grievance by giving the wind too free a sweep; yet my right to change this waste into a grain field will not be questioned. My warranty deed is my right thus to improve my land, though it be "to the detriment of my neighbor." He should have foreseen the contingency of a removal of these woods. On like principles a land owner may remove an excess of water so as to raise corn and not rushes. In the removal of woods my neighbor may not have an immediate remedy for his ills, but the effect of my ditches may be turned to good account by continuing them, and thus improving his land as I have mine. My warranty deed is my right to cultivate my own land, and this right carries the right to cultivate it in the best manner. The lower man should have taken judicial notice that water runs down hill, and that in this progressive age ditches may be cut and tiles laid.

But it is said that this court decision follows the English Common law; and now being settled by a decision, it is not open for further consideration. In this progressive age nothing is settled until it is settled right. Judge Taney once judicially settled the status of the African race. The common law was held to forbid the bridging of navigable streams. Harbors could only be made where the water was salt and affected by the tides. The Dartmouth college decision was held to so cover railroad corporations as to shield them from legislative control. These have all been overturned by the march of events, and this Appellate court decision is not necessarily immortal. For fifty years the farmers of Illinois knew no such rule. The public roads have been improved by side ditches which dropped the water into the first depression. In 1873 there was placed in the road law a provision that a land owner may drain on the public road by giving timely notice, and this stands through all revisions. Blackstone in his commentaries does not class this kind of drainage as a nuisance or trespass to lower lands, but he does its opposite, where the lower man neglects to "scour" a ditch, and thus sets back the water to the harm of the upper man. If this court rule is common law, as claimed, then it may be further said that a rule for the dark ages when drainage was exceptional, is not necessarily the true rule, since drainage has become so large a part of good agriculture.

Action of the General Assembly.—Early in the last session, bills were introduced into each House to overturn this court decision. These were defeated, but late in the session there passed with much unanimity a bill of the following title, which became a law: "An act to permit owners of land to construct drains for agricultural purposes." Sec. 1 of this act reads as follows: "That the owner or owners of land in this State shall be permitted to construct drains for agricultural purposes, only, into any natural water-course or any natural depression whereby the water will be carried into any natural water-course, or any drain on the public highway, if the road commissioners consent thereto, for the purpose of securing proper drainage to such land, without being liable in damages therefor to any other person or persons or corporation." This was intended to establish the right of "individual drainage."

But we are told that the courts will not respect this law, for the reason that it seeks to legalize trespass.

Here we join issue with our objectors and stand by this declaratory law. It embodies the general opinion and practice of the people; it is plainly conformable to the physical laws of nature and the requirements of civilization. Lands are held subject to laws thus grounded, and these

considerations will not tolerate laws or decisions the very opposite.

These declarations are not much more radical than a declaration that we stand by the law of gravity as constitutional.

The public are busy in overturning this court decision by everywhere disregarding it. The few who stopped draining in deference to the court, have resumed under shelter of the statute. If all violators should be prosecuted with vigor, tile-making might decline, but courting would be lively. Courts and judges must be multiplied, and every lawyer in the State would have fat business for the next ten years. Some judge will soon give us a precedent in accordance with reason, and this will settle the matter as effectually as did one taste of the tree of knowledge reveal good and evil. It will soon be seen that individual interest is best promoted by general and free drainage—that presumption should be in its favor, and that one man should not be clothed with power to stop others from making improvements.

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New Laws.—The next legislative work on drainage should be to revise and consolidate the law. On some points the law is duplicate, and on one triplicate. It is generally demanded that the law shall be less cumbrous and more summary. This can be done to some extent when it shall be found that the courts favor drainage. So far they have had a very tender feeling for complaints. When drainage shall be acknowledged to be lawful, laudable, and necessary, like plowing, laws may be greatly simplified and made more effectual.

RIVER DISTRICTS.—Illinois being generally level, many of our inland streams waste a large amount of land by overflow and drift. Roads, crops, and bridges are insecure. To a large extent this may be remedied by straightening the channels, and hereafter keeping them in repair and clear of drift wood. If the lands along these rivers, which would receive benefits from this work, were made into a district and classified according to benefits, the burden on them for proper improvement would not be great, and it is believed that dollars would be realized for cents expended. This waste is growing worse year by year. Enough land could be reclaimed along the Kaskaskia, Little Wabash, Big Muddy, Saline, and Henderson to more than make a New England State. The State may well afford to do the engineering and give an enabling act, that the people interested may organize as they decide to improve their respective rivers. When so improved, it will become practicable to more effectually drain the district by lateral works.

Illinois being so generally level, and much of our black soil resting on clay, here is to be the favorite field for the ditcher and tile-maker. Invention has an inviting field, and already foreshadows rich results. Your association, though a private one, touches the public interest very broadly. You reveal and make possible new sources of wealth, which promises to agriculture a new era of development. You may do much to settle true principles and proper public policy, so that this great drainage enterprise may move along harmoniously. The law-maker and the tile-maker are necessary factors in this grand march of improvement.

Other valuable papers were read which we shall take occasion to publish at some future time.

Better Management Needed.

A little forethought on a farm is a good thing. It saves time, money, and much of the vexation that is liable to come without it. Like the watchman on a ship a good farmer must always be looking ahead. He must be quick in his judgment of what should be done at the present time, and he should have a good perception to show him the best thing to do for the future.

It is a mistaken idea that many possess who think there is no brain work needed on a farm. Farmers are usually looked upon as an ignorant class of people, especially by many of the city friends who often do not see the large, sympathizing feelings that lie hidden beneath the rough exterior of country people. They are in many cases better educated than they look to be, and they have a chance to use all the education they have at their command in the performance of the many and different kinds of duties that are to be done in the occupation of agriculture. There is much work to be done and it requires to be done at the right time to give a profitable return for the labor. To have things done properly a farm requires a good manager to eke out the labor force in the way it will do the greatest amount of work. Most farmers are willing to work, and take pleasure in doing so. All perform the harder parts of farming with an energy that is surpassed by no other laboring class in the world. Farmers deserve praise for this, I think, for it requires a great deal of pluck to work as hard as many of them do.

It is not, however, the actual hard manual labor that pays the best. The hardest part of the work may be done and there still remain enough to render the job far from complete. The minute parts of an occupation are the ones that distinguish it from others. These parts constitute trades. They require a special training to perform them, and the more perfectly they can be performed by any one, the more successful will that person be considered as a tradesman. A fine workman receives more pay for less work than one who does rougher work, simply because it is the minute parts that bring in the profit. This is so in the mechanical trades; it is so also in farming and yet many seem to be unaware of the fact. How numerous are those who leave out the minutia; mechanics learn a trade in a short time at least well enough to make a living by it. Many farmers have spent their whole lives upon farms and are still scarcely able to make a decent living; and the reason of

it is because they have left undone those parts which would, if performed, bring in profit.

It is not the lack of an education that causes so much poor success. It is a lack of care in action and a want of observation in seeing. A man's experience is what makes him wise. He gains this experience by coming in contact with and observing those things which he meets.

In schools children are taught from the works of men. These works are arts, and since art is but the imitation of nature, all education is but imitation of that which the farmer boy has the chance of seeing before it becomes second hand. There is no place that has greater facilities to give observation its full scope than a farm. All farmers can, with the aid of the right kind of books and papers, be reasonably well educated, and most of them have a better comparative knowledge than they think they have. Many of the city cousins are superficially educated. City people can talk, but the greater part of the talk of many of them might be more properly called chattering. No farmer need feel below them because he is more retired and has a greater amount of modesty.

It is true, perhaps, that one can not seem more insignificant than he really is. Great men are constantly dying, but the living move on just the same. Each person's position seems valuable to few, and yet there is almost an entire dependence of man to man. Every one can not fill the highest positions, but they should make the best possible use of the faculties that are given them. If this is done there will be no regrets in the future in regard to what might have been done in the past. Life will then be thought worth living and much more happiness will cluster around it than now does.

There is no greater lack of education, perhaps, in agriculture than in the other vocations of man, and most farmers have a good share of well developed muscle to aid them in their work. The requisites are supplied. How many use them, at least in the way they should be used. All of the work could be done, but there is too small a number of good managers to oversee and carry out the performance of the little jobs that require to be performed at the right time.

There are some people in every business who, in the race for success, far outrun their competitors. This may be noticed on a farm. It takes but a short time to tell by the work a man does whether he is a good farmer or not. If a person is a good farmer and unites that quality to that of business management he will be successful in his attainments. Through success he will be honored by the members of his profession. He will be praised by all other people, and above all he will in the silent thoughts of his own mind have the satisfaction and pleasure of knowing that he is not a cipher in the vast human family. He will be pointed out as an example to those who are perhaps bowed down by discouragement. He will in all probability be called lucky when his success is really due to decisions that are arrived at by the experience and close observation of the past. If more farmers would be content to give their thoughts, as well as time, to farming, there would be more success and happiness in the occupation that depends above all others on good management.

S. Lawrence.		
Quincy, Ill.		

Seed Corn from South.

I am an interested reader of The Prairie Farmer, and knowing that thousands of farmers take the advice they get from its pages and act upon it, I wish to say that the suggestions of B. F. J., Champaign, Ill., regarding seed corn from portions of the country South of us will not do. Last spring hundreds of farmers in Western Iowa planted seed corn that came from Kansas and Nebraska, and the result was that none of that from Kansas ripened, while but little of the Nebraska seed did any better. It all grew nicely, but was still green and growing when the frost came. It may be claimed that much of that grown from native seed was no better, but it was better and considerable of it ripened, and from this native seed we have the only promise of seed for next year's planting. If farmers expect a good crop of corn they should not get seed from a southern latitude. No Iowa farmer would buy seed corn now that grew in Kentucky, Kansas, or Missouri. The only seed corn on which our farmers rely implicitly is that which they have gathered before frost came and hung up near the fire to be thoroughly dried before it froze. That corn will grow.

S. L. W.
Manning, Iowa.

Field and Furrow.

ALL manures deposited by nature are left on or near the surface. The whole tendency of manure is to go down into the soil rather than to rise from it. There is probably very little if any loss of nitrogen from evaporation of manure, unless it is put in piles so as to foment. Rains and dews return to the soil as much ammonia in a year as is carried off in the atmosphere.

RICE contains more starch than either wheat, rye, barley, oats or corn. Of these grains oats carry the least starch, but by far the largest proportion of cellulose. In nitrogenous substances wheat leads, followed by barley, oats, rye and corn, while rice is most deficient. Corn leads in fat, and oats in relative proportion of water. Wheat leads in gum and rice in salt.

Convenience of farm buildings is an important aid to good farming, especially where much stock is kept and there are many chores. Water should always be provided in the barn-yard, the feeding boxes should be near where the feed is kept, and the buildings should not be very far removed from the house. If this results in more neatness about barns and barnyards than has been thought necessary, it will be another important advantage gained.

THE President of the Elmira Farmers' Club tells the Husbandman that his crop of sorghum got caught by the frost, and too much injured to be of value as a sirup-producing substance. But he fed it to his cows which ate it greedily, and soon began to gain in milk. He thinks he got about as much profit from the crop as if it had been devoted to the original intent.

GOVERNOR GLICK, in a short address before the State Board of Agriculture, last week, stated that Kansas history is the most remarkable on record; that in 1883 her people had more money to the head than any other people under heaven; that the State had received 60,000 immigrant population in 1883; that it will receive 160,000 in 1884; that in ten years it will have 2,000,000 people, and that thereafter Kansas will not care anything about bureaus of immigration—it will have people enough to work with, and the rest will come as fast as they are needed.

Farmers' Call: The experiments conducted during the last season at the Missouri State Agricultural College fully demonstrate the advisability of mulching potatoes. We believe every experiment so far reported gave a similar result. The cost of the materials for mulching is usually very small, leaves or straw being plentiful and cheap upon the farm. The materials manure the ground; and mulching saves hoeing. The potato requires a cooler climate and moister soil than our latitude affords. Mulching tends to secure both. The result in every case has been largely increased yields of superior quality.

The old saying, no grass no cattle, no cattle no manure, no manure no crops, is as true to-day as when first spoken. Grass takes care of him who sows it. The meadow is the master mine of wealth. Strong meadows fill big barns. Fat pastures make fat pockets. The acre that will carry a steer carries wealth. Flush pastures make fat stock. Heavy meadows make happy farmers. Up to my ears in soft grass laughs the fat ox. Sweet pastures make sound butter. Soft hay makes strong wool. These are some of the maxims of the meadow. The grass seed to sow depends upon the soil and here every man must be his own judge. Not every farmer, however, knows the grass adapted to his soil. If he does and seeds by the bushel, or other measures, he is apt to be misled.

Including millet and Hungarian there were in Kansas this year 3,730,150 acres of land devoted to the raising of hay. The yield per acre was 1.61 tons, or a total product of 6,002,576 tons. None of the tame grasses have as yet attained a large area in this State, the most extensively grown being timothy which has an area of 95,844 acres. The great bulk of the grass lands mentioned above is the prairie, protected by fence. The eastern third of the State probably contains four fifths of the tame grass area. The question of the growing of tame grasses in Kansas is receiving much attention from farmers, it becoming of vast importance as people increase the number of their farm animals. The question no doubt will be satisfactorily solved within a few years, and the tame grass area will increase to its just proportion.

The agricultural changes in Great Britain continue to be of a marked character. The area devoted to grain crops the past year was 8,618,675 acres, which is 214,705 acres less than in 1882. Potatoes were planted on 543,000 acres, and turnips and Swedes on 2,029,000 acres—all showing a slight increase; but mangolds, vetches and other green crops have declined by 21,000 acres on the figures for the previous year. Clover and the grasses show an increase of 58,500 acres. The change from tilth to permanent pasturage is again conspicuous, there being 15,065,300 acres as compared with 14,821,600 last year. Ten years ago grass covered 13,000,000 acres, while arable land has fallen during that period from 18,186,000 to 17,319,000 acres. Orchards are on the increase, and also market gardening. In the matter of live stock there is an improvement which leads to the hope that the heavy losses of recent years will be made up.

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Are mechanical devices used to overcome the mechanical defect of forcing the wheel to run out of its natural position.

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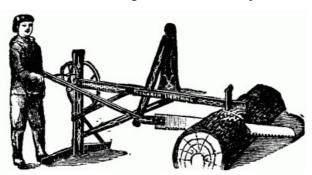
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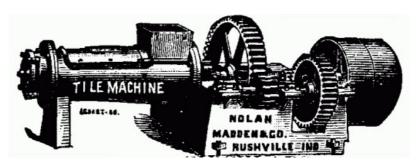


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REMEMBER that \$2.00 pays for The Prairie Farmer from this date to January 1, 1885; For \$2.00 you get it for one year and a copy of The Prairie Farmer County Map of the United States, free! This is the most liberal offer ever made by any first-class weekly agricultural paper in this country.



American breeders imported from Scotland 850 head of polled cattle last year.

W. C. Vandercook, Secretary of the Northern Illinois Merino Sheep Breeders' Association, recently took 900 Merino sheep to his recently purchased ranch in Norton county, Kansas.

Mr. Estill, of Estill, Mo., passed through Chicago, a few days ago, with forty head of Angus-Aberdeen and Hereford cattle. Estill & Elliott now own one of the best polled herds in the West.

The second regular annual meeting of the Kansas State Short-horn Breeders' Association will be held in the Senate Chamber of the Capitol, Topeka, Kan., during February 12 and 13, beginning at $7 \, \text{P. M.}$ of the 12th.

The seventh annual meeting of the Dutch-Fresian Association of America will be held at the Butterfield House, Utica, N. Y., February 6, 1884. Essays and addresses are expected from a number of distinguished stock breeders.

The Lafayette County Thoroughbred Live Stock Breeders' Association was recently organized at Higginsville, Mo. They will hold annual public sales and otherwise advance the improved stock interest. Their first sale will be held at Higginsville, October 15 and 16, 1884.

The following is a list of Jerseys exported from the island during the past year: Mr. Francis Le Brocq exported 848 cows, bulls, 28—total, 876. Mr. Eugene J. Arnold sent out 656 cows, 47 bulls —total, 703. Sundry shippers sold 158 cows and 7 bulls—total, 165. Grand total, 1,744 head.

Our readers will not fail to notice the public sale ad. of Mr. Wm. Yule, of Somers, Wis., who will,

on the 19th day of March, disperse his entire herd of thoroughbred Short-horn cattle. The herd numbers forty head, and is the opening sale of the season, and will be one of the most attractive ones of the year. They are all of his own breeding. Send for catalogue, which will be ready about February 15.

Horse-stealing seems to be as prevalent in England as in this country. A late London live-stock journal says there is as much of it going on as there was half a century ago. A gang has recently been operating in Kent, Essex, and Surrey quite extensively. The thieves are no respecters of breeds, taking hunters, cart horses and carriage horses with equal boldness. Arrests are becoming frequent, and it seems likely the gang will soon be broken up.

Herd Books and Records.

The following addresses may be of use to many readers of The Prairie Farmer who may wish to record stock or purchase books:

American Short-horn Herd Book-W. T. Bailey, Secretary, 27 Montauk block, Chicago, Ill.

National Register of Norman Horses—T. Butterworth, Secretary, Quincy, Ill.

American Clydesdale Stud Book—Charles F. Mills, Secretary, Springfield, Ill.

American Hereford Record—Breeders' Live Stock Association, Beecher, Ill.

Holstein Herd Book—Thos. B. Wales, Secretary, Iowa City, Iowa.

Herd Register—American Jersey Cattle Club, Geo. E. Waring, Secretary, Newport, R. I.

American Poland-China Record—John Gilmore, Secretary, Vinton, Iowa.

Central Poland-China Record, Mr. Morris, Secretary, Indianapolis, Ind.

Competing for Sweepstake Prizes.

Our readers will remember that we last week made mention of a change in the sweepstakes rings at the next Illinois State Fair. This was a slight error. The change was made with reference to the Fat Stock Show. In this connection we present the argument of Hon. John P. Reynolds, on the subject before the board and which governed the board in its action.

THE ARGUMENT.

To the State Board of Agriculture.

Gentlemen.—The undersigned, Superintendent of class A., respectfully submits the following report for the past year, including the fair in September, and the Fat Stock Show in November.

THE FAIR.

It was perfectly apparent to any one familiar with the displays of previous years in this department, that the breeding of fine cattle in this country is, at the present time, attracting the attention and commanding the best and most intelligent care of not alone the farmers who have been bred to their avocation, but of capitalists, who comprehend the great money values involved, and who either of themselves or through their sons have set out to identify themselves with this great interest. As the result of the fact the display of cattle was more varied as to breeds and greater as to number, if not superior as to quality, than at any fair, while the visitors in attendance seeking to purchase and studying the question of breeds with a view to purchase for breeding purposes, were never so numerous nor so much in earnest.

Under such circumstances, it may easily be imagined that the awards of prizes, not for the money value of the prizes themselves, but for the bearing of such honors upon the interests of exhibitors in regard to sales, assumed an unusual importance and involved a corresponding responsibility on the part of this board. Impressed, as I think, with a proper sense of that responsibility, and of the embarrassment which always surround that position, as your representative I discharged the duty to the best of my ability.

The most serious and perhaps, the only embarrassment which I should refer to in this report, was the absence of so large a proportion of the members of awarding committees originally selected, rendering it necessary to fill the places of the absentees by selections from the by-standers after the cattle had been called to the rings. Some of you "have been there" and have a realizing sense

of the difficulties involved in the effort to make these substitutions intelligently and with conscientious care, on the spur of the moment. To do so in all cases with satisfaction to one's self is simply impossible, and to do it in all cases with satisfaction to unlucky competing exhibitors is not to be expected. If I could do the first and feel sure that the talisman had been wisely selected, it would be easy to disregard complaints, if any, which are known to be unjust.

The question of so modifying our committee system as to avoid the embarrassment I have referred to and thus to secure a better deserved confidence in the justice of the awards is one I hope to hear discussed at this meeting as it has been probably at every meeting of our predecessors for the past thirty years.

Possibly we are in the light of our own experience, with a different system at the Fat Stock Shows prepared to try something else at the fairs; but of this I do not feel certain.

THE FAT STOCK SHOW.

The remarks I have made in regard to the display at the fair and the great interest it excited apply with, if possible, still greater force to the Fat Stock Show. Your record shows all material facts in respect to numbers and quality of the stock on exhibition, and I need not enlarge.

The importance of this enterprise, in its relation to the meat supply of the world, can hardly be over-stated, and its direct results to the producers of the meat producing breeds of stock as well as to the consumers, are too apparent to require discussion.

The rules and methods adopted by the board for conducting this show seems to need but little change—some slight modifications of the requirements of the premium list will be proposed when that subject shall come up for consideration, but beyond these there is but one subject which I regard as of sufficient importance to demand a suggestion from me at this time. I refer to the number of and division of duties among the awarding committees.

The method of selecting judges seems to me all right and there was much less difficulty in securing their attendance than at the fair. A few did not respond, but their places were filled satisfactorily in most cases. The wisdom of the appointment of your committee to decide upon the age of all animals on exhibition, prior to the commencement of the work of the judges and entirely independent of any suggestion or wish on the part of exhibitors, was practically demonstrated so that there is probably now no desire to discontinue it. In this case their discussions corroborated and established the statements and good faith of the exhibitors themselves in every instance except one, in which one the result was unimportant.

The special feature to which I desire to call your attention may perhaps be best understood if I express my own views in regard to it.

At present it is the practice for one committee of judges to make the awards on the animals of each breed in their several rings of yearlings, two-year-olds, and three-year-olds. After that has been done it is the practice for another committee to select the sweepstakes animals from among all the entries of all ages of that breed without regard to the prizes which the former committee may have awarded.

Now it not infrequently happens, and is always liable to occur, that the latter committee selects as the best animal of any age one which the former committee did not deem worthy of any prize at all or at least not a first prize, when judged by them in competition with these of its own age only. Evidently there is a mistake somewhere. Both decisions can not be correct. Both committees, we are bound to assume are equally honest, disinterested, and competent, because the members of both committees considered in making up a decision such discrepancy of judgment and the system which renders it possible may be almost excusable, perhaps, but in the Fat Stock Show, where we deal so fully in details and exact figures, and where we pretend to use our best efforts in every practical manner to get at and publish for the benefit of a confiding world the reliable, bottom facts obtained by the labors of paid experts, reach a conflicting record is not, in any judgement, one to be greatly proud of.

There is one plain, just and proper remedy for this, to wit: Restrict the award of sweepstakes prizes in the several breed rings to such animals as have taken first premiums in the rings for ages, and restrict competition for *grand sweepstakes* to such animals as have taken *sweepstake* prizes in the breed rings as have not otherwise competed at all. The awards of all special prizes should follow the decisions in the regular rings when not offered for animals not included in the regular rings.

Under this rule every animal competing for a sweepstakes prize, with possible exceptions in the grand sweepstakes, would have received the highest indorsement of the committees, and hence there could be no pretense of prejudice on the part of the judges and hence, too, it would matter very little whether a new competent committee were called for the grand sweepstakes or that committee was composed of judges who served in the rings, the latter, in my opinion, being preferable, because of their larger opportunity in becoming familiar with the points of difference between the competing animals.

I am persuaded that no objection to the remedy as I have stated it, would or could properly be made except by those whose animals were not included in the first prize or sweepstakes winners, and the only objection I have ever heard to the adoption of the rule, even at the fairs, is based on

the idea that those animals (or the owners) failing to take prizes in the rings for ages, should have a "new trial" before an entirely new jury in sweepstakes. But how about those who won the verdict in the first trial! Is there any justice in requiring them to submit to another trial between themselves and those they have once vanquished? and if there is any propriety in that, why not in still another new trial and more new trials before new juries until every animal in the show has received a first prize, or the treasury has been exhausted or the community fails to furnish any more jurymen?

If it were simply the "consolation stakes" to non-prize winners, some loose practice might seem justifiable, but it is not the best policy in conducting the competitions of the Fat Stock Show to be influenced by any considerations except those which relate to fair, impartial and intelligent decisions, and no decisions can be fair, impartial and intelligent which conflict with each other and which, as a whole, fail to form a consistent record.



James F. Scott purchased 200 mares and 500 one and two year old colts to be delivered on the 15th of March at the San Antonio Viego ranch.

Raising Young Mules.

Where land is not too high, and pasturage good as well as cheap, keeping good mares from which young mules can be raised is certainly a profitable business; especially so where corn and hay are grown on the farm, and the mares can be profitably worked at least part of the year.

With a liberal supply of corn fodder for winter feeding, and a good pasture, with hay and corn during the coldest weather, and when at work, this branch of farming is not only easy, but certain and profitable. A mare in good condition, not counting pasturage, can be kept for eight dollars a year. Service of jack here is generally six dollars, making keeping of mare and service cost fourteen. There has been no time since I came to this part of the State when a mule colt would not bring all the way from twenty-five to fifty dollars, depending, of course, upon the size, form, and general condition at weaning time. Allowing nothing for the work the mare would be able to do, which certainly ought to be sufficient to pay for her keep, there is left a good margin for profit. Or if we count the interest on the money invested in the mare, still we have a good profit left. The difference paid for young mules shows two facts: first, the importance of a good sire, or jack, and the other of a well-formed mare. It certainly costs no more money to keep a well-formed animal than it does to keep a poor one. Of course, at the start, one may require a somewhat larger outlay of money, and in this way, if we count the interest on the money invested, cause young mules to cost a trifle more than if cheaper animals were used. But this is more than compensated for by the larger price the colt will bring.

The difference between a mare that will bring a mule that only sells for the lowest price here at weaning time, twenty-five dollars, and one that brings a mule that will sell for fifty, the highest generally obtained, would make quite an item in the amount of profit to be derived from her keep, and especially where the same animals are kept quite a number of years for this purpose, as is often the case.

And this is not all; the mule will himself pay handsomely for keeping. Mules a year old, that are broken to the halter, so that they can be led, bring from eighty to one hundred dollars. When two years old, and broken to to the wagon as well as saddle, one hundred to one hundred and twenty-five dollars is the general price. Of course a pair of well matched mules, well broken to harness, at three or four years, will sell all the way from three to five hundred dollars, depending upon their color, form, size, etc. And this difference is, in nearly all cases the result of the difference between good and poor jacks, as well as good and poor mares. One other point must always be taken into account in this work, and that is in having mares that are sure breeders.

I find that those who have made most money out of this line of farming or stock-raising are those who, when they have secured a valuable brood mare that is sure of bringing a first-class mule colt, they not only keep her, but they take good care of her; and in this way they secure the very best results and realize the largest profits.

Where proper care is taken not to overwork or strain them, mares can always be profitably worked in planting and cultivating the corn crop, as well as cribbing it in the fall; fully enough work can be done to pay for what they eat and the pasturage. So that the cost of service and interest on the money invested is what the mule costs at weaning time. After that time, of course, they cost something more, as weaning time generally comes in the fall at about the time that pastures fail, and corn fodder, wheat straw, and hay, with a small amount of grain during the winter must be fed to keep the colt growing in good condition. Many farmers who do not care to go to the trouble of breaking young mules, dispose of them at weaning time; while others find it profitable to buy these up at whatever prices they are obtainable, and keep until they are two or three years old; during this time they are broken to lead, to ride, and to work.

To be sure, there is some risk connected with this, but, on the whole, it is considered very remunerative—so much so that many young men who manage to get enough cash ahead will buy one or two mule colts in the fall at weaning time and keep them until well broken in, and they sell at a profit, and in this way make a good start for themselves. As compared with other branches of stock-raising, there is less risk in this than in almost any other branch of farm stock.

N. J. Shepherd. Miller Co., Mo.

[Pg 53]



Wisconsin Dairymen.

The convention of Wisconsin dairymen, at Lake Mills, last week, was an excellent one. It was largely attended by the most prominent and experienced dairymen of this wonderful dairy State.

The people of Lake Mills did their utmost to make the visit of delegates pleasant, and they succeeded admirably. The crowning feature of their hospitality was the banquet on Thursday night. The feast was prepared by the ladies of the M. E. church. The supper, the toasts and responses, the music and all were enjoyable in the highest degree. Wisconsin dairymen believe in banquets. A leading member of the convention declared that the prosperous history of the association began with its first banquet.

Governor Rusk was in attendance at this convention, and his address was one calculated to encourage and help on the association. He assured the members that if they thought the association needed legislative aid, all they have to do is to ask for it. If they ask for \$5,000, he will do his best to have the appropriation bill passed, and he will sign the enactment promptly when it reaches him for signature. He believes Wisconsin one of the foremost of dairy States, and he wants it to retain its position.

Among other prominent gentlemen present who participated in the discussions were Prof. Henry, of the Agricultural Department of the State University; Hon. Clinton Babbitt, Secretary of the State Agricultural Society; Hon. Hiram Smith, Chester Hazen, S. Favile, J. M. Smith, J. H. Smith, J. B. Harris, Inspector of Dairy Factories, Canada, and T. D. Curtis, Syracuse, N. Y.

The election of officers resulted in retaining the incumbents of last year for another year's service. These gentlemen are: W. H. Morrison, Elkhorn, President; D. W. Curtis, Fort Atkinson, Secretary; H. K. Loomis, Treasurer.

One of the prominent papers read was on Co-operative Dairying, by J. B. Harris, Esq., of Antwerp, N. Y., who is employed by the Canadian government as inspector of cheese and butter factories. We will give it in full, and follow next week with some account of the discussions.

CO-OPERATIVE CHEESE-MAKING.

In all human efforts, grand results have been attained chiefly by concert of action.

In our own time, everything is done by co-operation. Railways across continents, canals uniting oceans and seas, bridges almost of fabulous proportions, enterprises in engineering and commerce, never before known, evince the extent to which modern genius is availing itself of concert of effort in testing human capacity.

There is a visible tendency in all branches of business toward co-operation and centralization.

In looking down upon a large city, the unity visible even in the diversity of human affairs manifests itself in a manner truly wonderful. The air is literally filled with a vast net-work of wire, crossing and re-crossing in every conceivable direction, and over these, backward and forward, the thoughts of men are made to vibrate with the speed of lightning, in the elaboration and consummation of thousands of business schemes, and the air, as well as the buildings and streets, is full of human activity and enterprise. The lawyer, sitting comfortably at his desk in his office, talks with his banker, physician, grocer, a hundred clients, and his family, all seated like him himself at home, or at their various places of business. Thus is the telephone made the instrument of human co-operation and concert of action.

It is now less than thirty years since dairymen stumbled into the practice of co-

operation in the business of making-cheese. Previous to that time cheese-making in this country was, to say the least, a crude affair. Every farmer ran his own factory, according to his own peculiar notion, and disposed of his products as he could "light on" chaps. In that day, cheese-making was guess work and hap-hazard. To-day it is a science. Then there were as many rules and methods as there were men. To-day the laws which nature has enacted, to govern the process of converting milk into cheese, are codified, and cheese-making has become a profession. In that day the accumulated results of the cheese industry of a neighborhood or township was a sight to behold—all manner of circular blocks, of concentrated error, large and small, thick and thin, when heaped together presented a spectacle that would now bring a smile upon the countenance of the most sober and dignified cheese-maker in the State.

The condition of the market at that time was quite as crude and irregular as the system, or rather the want of system, in manufacturing. There was no cable, no regular reports from the great business centers of the land, no regularly organized boards of trade, railroads not as numerous, less daily papers were in circulation, and many other circumstances which left the seller comparatively at the mercy of the buyer, and the purchase and sale of a dairy was conducted upon principles similar to those usually practiced in a horse trade.

The great changes which since that day have taken place in the dairying world are due chiefly to a division of labor, the introduction of system and co-operation. Our machinery, we are sorry to say, is not yet quite perfect in all its parts, and does not move with the precision and harmony of the orchestra, to which we have already alluded. Yet, although still in its infancy, it has already produced and does annually produce results grand indeed.

If we take a glance at the various industries at which men are to-day engaged, intellectual, commercial, and mechanical, the painstaking exactitude everywhere practiced will be found to be a growing subject of wonder and admiration. The secret of this lies in the fact that perfection in any department of business not only enlarges that business but also enriches those engaged in it. For example: there are perhaps ten times as many watches manufactured in the world to-day as at any other period in its history. It is a profitable business, or men would not engage in it, and the superhuman effort that is being continually put forth to increase the value, by making as perfect an article as human power can produce, establishes conclusively the assertion that there is always a profit in doing well. I am glad to observe that in the cheese industry of the United States and Canada, the light of this truth has to some extent aroused the slumbering dairymen. To quote from the Utica Herald of Sept. 11, 1883: "It is estimated that about 700,000 men are employed in this business, in one capacity or another, and that about 15,000,000 cows are used to furnish the one product of milk. The returns from this product are over \$800,000,000. The total amount of capital invested in dairying in the United States is estimated to reach the enormous sum of \$2,000,000,000." In consulting these figures we hope there is no person so dense of understanding as to entertain for a moment the idea that had the old system of every man his own cheese-maker prevailed that anything approaching this grand result would ever have been attained. Never. The concert or effort attained in the factory system is the key note to this grand, soul-inspiring chorus.

But an experience of twenty-five years in the dairy industry leads me to the conclusion that in the music of our business there is yet much discord. The dairymen and factorymen fail to understand the spirit of the piece we are attempting to perform, and fail to catch the idea that individual profit and prosperity depend upon the success of the business as a whole. No chain is stronger than its weakest link, and so long as there remains a slovenly dairyman in the business just so long our system will be incomplete and the working of cooperation remain imperfect. Perfect concert of effort, unbroken unity of hand with hand, in all the various details of the business, reaching down to the most unimportant items in the production of milk and the making of cheese, will produce in the long run the most profitable and permanent results to the individual as well as to the community.

"But," say some, "there is too much of the millennium, too much of theory, too much of the unattainable, in all this." To such I answer that there is much of the millennium, much of theory, and much of the unattainable in the Sermon on the Mount, and yet our Divine Master preached it, nevertheless.

It may perhaps be considered chimerical and theorizing to talk of a time when there will be no such persons among dairymen as what are known to the cheesemaker as a skimmer or stripper, but we hope such a time will come, nevertheless.

To what purpose do A., B., and C., and a score of other industrious, honest, painstaking fellows, exert themselves to collect a model dairy, sparing neither time nor expense in providing themselves with perfect sets of improved appurtenances for those dairies, from rich, well-watered pastures down to good, substantial three-

legged milking stools, and labor incessantly from sunrise until sundown, that their barns may be in perfect order and everything connected with the business neat and clean, in order that their material may come into the hands of the manufacturer in a perfect condition—if heedless, lazy, shiftless, dishonest, ignorant, good-for-nothing D. keeps about him a herd of sick, disconsolated racksof-bones, to wander over his arid and desolate fields in search of food and drink in summer, or with backs humped up, hover together for shelter under the lea of a wheat-straw stack, their only food in winter, and using a kit of dairying tools, the very best article of which is an old, water-soaked, dirty wooden pail, drawing his whey from the factory in the old, rusty, time-embattled milk cans, in which it is allowed to stand until the next milking, and which, after an imperfect washing, and refilled and returned to the factory, freighted with a compound sufficiently poisoned to nullify and undo the best efforts of a hundred A., B., and C's. It may be theorizing and visionary to talk of a time when the spirit of co-operation shall have driven such fellows out of the dairying business, to betake themselves with a pickax and spade to the ditch, but that such a time may come ought to be the earnest prayer of every thorough-going friend of co-operation in the land.

It may seem like castle building and an unprofitable waste of time to indulge in theories and construct plans by which the rivalry among factorymen may be kept within a limit sufficiently circumscribed to prevent the fear of loss of patronage from interfering with, and lowering the standard of, our cheese. It is too often the case, nowadays, that factorymen are deterred from a full and complete discharge of their duty to themselves, their patrons, and the world in general, by a fear, by no means groundless, that a bold and upright course with regard to the material brought to them will result in a damaging, if not entire loss, of their occupation.

The unwise extent to which men have gone in the erection of cheese factories, has increased competition to an extent decidedly prejudicial to the interest of the cheese-consuming world. A., having invested his entire capital in the construction and equipment of a factory, will be quite likely, when B., C., and D. erect factories in his immediate neighborhood, to hold his peace when sundry varieties of swill milk are offered at his door, instead of speaking out an equivocal protest against the insult thus offered to his professional pride and sense of decency.

To the dairyman naturally given to slovenly and careless habits, the restraint to which he might otherwise be subjected is practically removed when nearly equidistant from his place of abode there are three or four factories, instead of one, and he knows that if rejected at one place, he can without inconvenience go to another, and thus it transpires that at five factories in every ten there will be found a conspicuous absence of thorough and inexorable discriminations which ought always to prevail in the receipt of milk for factory purposes.

For this abuse there is, in our estimation, a remedy however theoretical and visionary it may appear, and that is concert of action and co-operation among factorymen. Men in all branches of business, nowadays, associate with each other, and form themselves into bodies for the purpose of closer union and mutual protection, and when this is done for the general good, as well as individual advancement, the purpose is laudable and universally successful.

We know of no business in which the necessity of combination is so great as that of cheese-making, and, what, let me ask, could be more desirable and praiseworthy than an association of cheese-makers, for the purpose of sending the swill milk of the country to the hogs, where it belongs, instead of making it up, as at present, for human consumption.

We have an idea that such an association might be successfully formed, and that, when once in effectual operation, it might ask the legislative body of its country to enact a law, entitled "An Act for the suppression of swill milk, and for the general good of mankind," in which it should be provided, among other things, that in every case where a dairyman has left a factory on account of having had his milk rejected for cause traceable to his negligence, that in all such cases, the factory or factory company knowingly receiving the milk of such rejected party, shall be liable to some appropriate penalty.

The extreme sensitiveness of milk in the absorption of taint from the atmosphere, or any substance with which it comes in contact, ought to be thoroughly understood by all persons engaged in handling it, but, we believe, that but few comparatively are alive to the true facts of the case. I herewith present several paragraphs clipped from journals of recent date:

"There are seventy-five cases of typhoid fever in the town of Port Jarvis. Dr. McDonald attributes the spread of the disease to the use of milk from the farm of Mrs. Thomas Cuddebach, in whose family there have been several typhoid cases, holding that the milk conveyed the disease germs. Nearly all of the parties now sick had used milk from the farm."

"A dairyman from Dundee has been apprehended and fined for allowing his wife

and daughter to milk cows and assist in the sale of milk, after they had been engaged in nursing a child suffering from scarlet fever. No less than nineteen cases of fever, four of which resulted fatally, were traced to this act of carelessness."

With these facts in view, how can it be expected that any amount of diligence on the part of a cheese-maker can atone for the unpardonable sin committed, day after day, by the heedless and unobserving patrons, of leaving a can of freshly drawn milk standing all night in an unwholesome barn or yard, until it has absorbed a whole family of pestilential odors, and then to carry it to the factory to corrupt and poison everything with which it comes in contact.

Some may suppose it a mere theory to speak of a condition of things in which abuses of this character can not be found, but during an experience of five years as cheese instructor, in the Province of Ontario, during which I superintended the making of cheese in about 400 different factories, and during the last year inspected the milk from about 65,000 cows, the property of about 7,000 dairymen, I occasionally made up vats in which there was no discoverable taint and which, I was pretty certain, came from the farms of well drilled, well posted dairymen, and, from a circumstance of this character, I am led to the conclusion that what has been done once can be done again, and I make such facts a text upon which I found my plea for more thorough co-operation and diligent painstaking in the work of producing milk for factory purposes.

There may be times when peculiar atmospheric conditions will exert unfavorable influences, and seasons when drought and wet weather will produce changes, over which human efforts have no control, and for these sufficient allowance must be made. We quarrel with the stupidity, shiftlessness, and ignorance of men, and not with the providence of God.

In this day and age of the world there is no excuse for ignorance upon the points to which we have alluded. Wisdom uttereth her voice in the streets, and he who will not hear her ought to be drummed out of the camp of dairymen. As a rule, a common carpenter puts more thought into his business in a month than many dairymen do in a year. Indeed, it would be difficult to point out a single branch of human industry, of one-half the magnitude which the manufacture and sale of cheese has reached, carried on in a manner so slipshod and slovenly as dairying.

The banker, the columns of whose ledger fail by one cent of balancing, spares neither time nor money in searching out and correcting the error; the merchant brings to bear upon his business a care and insight so unceasing and laborious that his locks are soon sprinkled with premature silver; the machinist works to plans from which the variation of a thousandth part of an inch can not be allowed to pass uncorrected; but the dairyman too often stumbles along through his work without thought, or employs the little intellect he has in putting in and harvesting his crops, leaving the dairy in the meantime to take care of itself. There are too many men engaged in dairying who can see nothing in the business beyond the factory dividend; men to whom filling the milk pail and the can are the Alpha and Omega of life. To such men such a thing as an ambition that their county, town, or neighborhood shall attain and hold a reputation for being the banner cheese district of the State or nation, is as thoroughly unknown as the configuration of the bottom of the Dead sea.

In saying what we have about the patrons of cheese factories, and the closer and more thorough co-operation among them, we have been actuated by no feelings of unkindness or ill will, nor have we arraigned them upon trivial or imaginary charges. The indictments we have found against them are all true bills, against which too many of them will be unable to sustain the plea of not guilty. We have been constrained to our present course by an overmastering sense of the importance of greater care, deeper thought, and closer union in pushing forward one of the greatest industries of the day. I am confident that before another step can be taken in advance it must be preluded by a correction of the errors which we have feebly attempted to portray, all of which lie outside and prior to the factory. As a body, cheese-makers can do little better than they are now doing, until there is some improvement in the material upon which they are called upon to exercise their skill, and the practice of crimination and recrimination, the factorymen tossing the blame upon the dairymen and the dairymen upon the factorymen, which is made use of to conceal the real source of our mistakes, will continue to shield him from the eyes of a discriminating public until the care and diligence of dairymen strip him of this shelter and drive him forward on the march to improvement.

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Impaction of the Paunch.

Impaction of the paunch (the first stomach or rumen) in cattle, sometimes also called grainsick or mawbound, differs from bloating or hoove, mainly thereby that the distention is more solid than gaseous, it being either with food alone, or with food and gas. Symptomatically it differs also from hoove by the absence of eructation, and by the hardness of the flanks and the smaller volume of the swelling. It arises from gorging with almost any kind of food, even with grain or with chaff, at a sudden change of diet; but it is particularly liable to arise from a surfeit of turnips, fresh grass, or any other succulent food at the commencement of the season. The instrument called a probang ought to be introduced, either to decide whether the case be one of hoove or one of mawbound, or to ascertain the degree in which the latter disease exists. If the probang bring on a sudden rush of gas, the disease is wholly or chiefly hoove; and if it encounter a solid resistance, the disease mawbound, and exists in a degree of aggravation proportioned to the nearness of the point at which the resistance is felt.

In mild cases of impaction of the paunch, when the animal does not seem to suffer much pain, and is not materially fevered, but merely ceases rumination or chewing of the cud, refuses to eat, and lies long and indolently in one posture, a dose of oil, or a little forced walking, are frequently sufficient to effect a cure. In cases which, though on the whole mild, are accompanied with a kind of inertia, or with an insuperable reluctance to rise or to move about, stimulants, such as ether diluted with alcohol and water, may be required to rouse the paunch into renewed action; but whenever such remedies are necessary, they must be given in cautious doses, and always accompanied with some gentle purgatives. In very bad cases, when the animal seems sinking through inertness into death, or in which moans, swells at the sides, becomes almost as a board in the flanks, appears to suffer great and increasing pain, and seems eventually to be overwhelmed with anguish and to be passing into unconsciousness, it must be promptly decided whether we have sufficient time and encouragement to try the effect of stimulants, purgatives, the stomach pump, and other comparatively gentle measures; and if not, we should, without much delay, cut through the left flank into the paunch, and with the hands withdraw the contents. The cutting operation itself is attended or followed with little danger; but in the extracting of the food, no matter how carefully performed, some small portion is liable to drop into the abdominal cavity; and this, in consequence of its indigested condition, resists absorption or expulsion, undergoes an irritating decomposition, and may very probably originate some serious inflammatory disorder. Any animal which has suffered a very bad case of impaction of the paunch, ought, immediately after complete restoration to health, to be sent to the shambles; for, independently of the lurking danger consequent on the artificial extraction of the food, or even upon the relaxation which follows the administration of a stimulant, the paunch is so much overstretched and injured by the mechanical effects of the distension as to be temporarily incapacitated for the proper discharge of its functions.

Queries Answered.

PROBABLY RINGBONE.—W. B. S., Sciola, Iowa. In the absence of any information to the contrary, the lameness may be regarded as due to the development of ringbone. There is no certain cure for this disease. All that may be expected from treatment is to retard or stay its progress or development; but in all cases more or less stiffness or lameness will remain, depending upon the extent of its development. Then, subsequent hard work, or any cause of renewed irritation, will be apt to further aggravate the case, and cause additional enlargement and increasing lameness. The usual course of treatment in such cases consists in blistering or firing, or both combined, with subsequent long rest or a season's liberty on pasture.

Uneasiness is a species of sagacity; a passive sagacity. Fools are never uneasy.

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Horticulturists, Write for Your Paper.

Lessons of 1883.

BY O. B. GALUSHA.

Progress in all arts and sciences is the one grand aim of all associations and of all agricultural and horticultural societies and journals; and to study the results of each year's experiences and observations, comparing them with those of previous years, and also with the ideal of perfection which each laborer in these several departments of industry has pictured in his own mind, is the best preparation for achieving desired results in the future.

In the present paper we will take a brief retrospect of the fruit crops of 1883, and inquire into the causes of successes and failures.

STRAWBERRIES.

We begin with the strawberry, which, though small and unpretentious, has been from year to year rising in importance until it has become second only to the apple in the estimation of a majority of consumers.

The past year's experience has taught, as does that of each year, that great care should be taken in selecting varieties adapted to each particular soil and situation. This may be said to be the important thing in strawberry growing.

It is a difficult thing to find such varieties by the ordinary means of selecting; namely, recourse to the catalogues of growers. Man has a wonderful amount of selfishness in his composition. I say wonderful, for it is a wonder when we consider how much better he would enjoy life were all selfishness eliminated from it, and benevolence, coupled with true self love, were substituted. "Each crow thinks its own young the blackest," and each (almost) originator or "exclusive owner" of a new variety of plant or tree, labors hard to convince himself and others that he has the best of his kind; but, owing to the weakness of human nature, even the sincere among these are liable to be biased, and thus mislead others. The only safety, therefore, lies in planting such varieties as you know to succeed well near you in similar soil, while new varieties, commended as superior by persons of known integrity and experience, for similar soil and climatic condition, should be tried only on a small scale as an experiment. If they succeed, you can soon have plenty of plants of your own growing—if you prefer to grow them. This advice, though often before given will bear frequent repetition—for the desire for "something new" is as prevalent with us now as it was with the Athenians in St. Paul's time. We have seen Big Bobs, Great Americans, and other monstrosities dwindle to pigmies in the hands of ordinary cultivators, and the demand for Sharpless become less sharp through its sensitiveness to the influence of Jack Frost; and hosts of other sorts, really good and valuable somewhere, and under peculiarly favorable conditions to be comparatively valueless for general cultivation. Therefore every person designing to plant should repeat to himself this injunction—"Go slow on new varieties."

It is not desirable for persons who plant for their own use solely to select the pistillate varieties; for these, although the most profusely productive when well fertilized, are liable to overrun their staminate neighbors, and soon render the "strawberry patch" unproductive, or productive only of small or imperfect fruit. The leading pistillates offered in the catalogues now are Crescent, Col. Cheney, Windsor Chief, Jersey Queen, Big Bob, Manchester, Green Prolific, Golden Defiance, Champion, Park Beauty, Gipsey, and some others.

There are a few sorts, having perfect blossoms, which give profitable returns on a variety of soils, and which may be considered safe to plant. These are Charles Downing, Miner, Bidwell (kept in single rows or single plants), Piper, Cumberland Triumph, Phelps ("Old Iron Clad"), Sucker State, Finch, Capt. Jack (acid), Longfellow (with good, rich culture), Mt. Vernon (late), and for sandy soil, Kentucky (late). This list may be said to constitute the cream of the thousand and one varieties offered which have been well tested. Of course those who grow strawberries for market

will plant largely of some of the pistillate sorts, owing to their great productiveness.

The past year has taught the folly of too great haste in removing the covering from strawberry plants; as those which bloomed early were badly damaged by the frost. Plantations, also, which were partially screened by rows and belts of evergreens produced twice to three times the quantity of fruit that was obtained from the same varieties fully exposed. Plants in orchards also escaped to a great degree, for the trees were in leaf when the destructive frost occurred, and thus gave partial protection. Strawberries are at home in a young orchard; the cultivation given the plants is good for the trees, and the slight shade of the young trees is no perceptible detriment to the plants or fruit.

The general crop was about one-third an average—the chief damage being done by the frost—though the tarnished plant-bug was very destructive in Southern Illinois, and did some damage in other localities. Prices were from fifty to a hundred per cent higher than usual—supply and demand being the factors, in the fruit trade, as well as in all others, which regulate prices.

Spring is better than summer or autumn for planting strawberries. In thirty years' experience in strawberry culture I have never, except in two instances, found any advantage in summer or fall planting, and in these pot-plants were used, which are too expensive for general planting and not always preferable. Three or four of the varieties named, 100 of each, planted as early in spring as the ground is in good condition, in rows three to three and a half feet apart, and confined, as they run, to narrow strips, will give an abundance of fruit for two or three years for a large family. Certainly such planting and care is as good an investment as can be made upon any farm or in any garden.

RASPBERRIES AND BLACKBERRIES

were more nearly a failure, generally, as a crop, in 1883, than strawberries, but owing to a different cause, namely, the severe cold of the previous winter. None of the cultivated varieties escaped unharmed wherever the mercury sank lower than 30 degrees below zero, and 32 degrees below was marked nearly everywhere north of the latitude of Peoria and Bloomington, in Illinois, and in many places 36 degrees below was recorded. Blackberries also suffered; even the hardy Snyder not escaping; and a similar disaster threatens the crops of these species in 1884, for as I write, on a clear, sunny day, the mercury has not risen higher than 16 degrees below zero, and this morning (January 5,) was 33 degrees below here in Peoria, and 35 degrees below in Bloomington. The canes went into the winter in good order, however, and, if no intense cold prevails hereafter, the damage may be less than last winter when they were not as well hardened.

Since we can not prevent the recurrence of these polar region down-pours, we can prepare our canes of raspberries and blackberries for enduring such extreme cold, by commencing cultivation early in the spring and discontinuing by the middle of June, also by stopping the growth of young canes, by pinching or chopping off, when not more than two and a half feet high, and again, as soon as another foot in length is made, stopping both uprights and laterals. If all weak canes are kept cut out, and those shortened for fruiting the next year not allowed to stand nearer than eight or ten inches of each other, they will become "ripe" and firm in texture before cold weather overtakes them. The hardiest of the red varieties are Turner, Thwack, and Cuthbert; and of the black-caps, the Soughegan (earliest), Tyler, and Gregg (latest). The black-caps named endured the winter fully as well as the hardy red varieties.

Of blackberries the Snyder still heads the list for hardiness and general value north of the latitude named, though Early Harvest bids fair to be of value. Taylor was damaged a little more than Snyder, while Barnard, Ancient Briton, and Stone's Hardy rank with Snyder for hardiness.

Raspberries and blackberries should be planted early in the spring, if not done in late autumn, in rows six to eight feet apart. Red raspberries may be set two feet apart in the rows, and blackcaps and blackberries wider—two and one-half to four feet, according to stock of plants or desire for quick returns; for all will bear the next year after planting. Give good cultivation the first year and mulch in the fall, along the rows of both raspberries and blackberries, with manure free from grass seeds, and cover the entire surface between the rows of blackberries with old prairie hay, corncobs, or straw; or, if cultivation the next year is intended, the inter-row of mulch may be omitted

The intense cold of these two consecutive winters should not deter land owners from planting these fruits. These extremes come in cycles; and, though old Jupiter is now, and was last winter, exerting an unusual disturbing influence upon our planet, he will this year calm his temper and give us nine or ten years of respite from his powerful magnetic sway.

CURRANTS, GOOSEBERRIES, AND GRAPES

were less affected by the severity of the winter of '83-'84 than by the late frosts of spring, which destroyed the young shoots of grapes and the blossoms and young fruit of the berries. Currants are yearly growing in favor and the price of the fruit advancing; and now currant culture is profitable and likely to continue so for a series of years.

Ground can not well be made too rich for currants and gooseberries. Plant in rows four feet apart and plants three feet apart in the rows; give thorough culture or deep mulch over the entire

surface, cut out all wood of three years' growth (or after first crop is often considered better), and a good crop is almost certain. Red Dutch, White Grape, Victoria, and Versailles are still the favorites; and American Seedling (or Cluster) and Houghton are usually the most profitable gooseberries.

Every one who can raise corn and potatoes can as easily raise, with little trouble and expense, grapes enough for a family's use. Plant such hardy sorts as Moore's Early, Worden, Concord, and Martha, in rows seven or eight feet apart, and same distance in the row, give good cultivation the first year, cut back to two or three feet in autumn, lay the short canes on the ground and hold down with a spadeful of earth. Plant posts four feet high and stretch two No. 15 wires along them —the upper one on top—and in the spring, as the vines grow, tie to the wires, keeping one cane only for fruit this year and two new ones for next year's fruiting; and a crop is as certain as a crop of corn. Cut out weak canes every year, and encourage those starting nearest the ground, cutting back each autumn one-half or two-thirds the growth; cut out old canes. It is not necessary to lay the canes down and hold them to the ground or cover in this latitude, though this work will pay well.

In two weeks orchards will be discussed.

Illinois Horticultural Society.

The annual meeting of the Executive Board of the State Horticultural Society was held in the agricultural rooms at Springfield, January 9th. Present: John M. Pearson, Godfrey, President; A. C. Hammond, Warsaw, Secretary; S. M. Slade, Elgin, Arthur Bryant, Princeton, Dr. A. G. Humphrey, Galesburg, H. M. Dunlap, Champaign, and E. A. Reihl, Alton.

A large amount of routine business was transacted, not of public interest, after which the board proceeded to arrange for a grand fruit exhibition, to be made by the society at the next State Fair. This collection will not be entered for a premium, but only to show the diversified horticultural products of the State.

The public-spirited citizens of Illinois, and particularly of Chicago, have decreed that the State Fair of 1884 shall eclipse anything of the kind ever held in the Northwest, and the State Horticultural Society, desiring to keep abreast of the times, will make a display of fruit that the State may well be proud of.

It was also decided to offer liberal premiums for horticultural products to be exhibited at the next winter meeting, which will be held in the Industrial University, at Champaign, the first or second week in December.

After some discussion as to the best method of interesting the students in our work, it was decided to offer premiums, first and second, for the best essays on horticultural subjects. The board and members of the society hope that this offer will be the means of bringing out a number of papers from the young gentlemen and ladies of the institution.

There seems to be a determination evinced by the members of the board and society to make an aggressive, vigorous campaign the present year, and to bring our work more prominently before the people than ever before.

The following are the standing committees for the year:

Orchard Culture—B. F. Johnson, Champaign; Henry Mortimore, Manteno.

Forestry—Thomas Gregg, Hamilton; L. C. Francis, Springfield.

Vegetable Gardening—A. L. Hays, Jacksonville.

Grapes and Grape Culture—Ayres, Villa Ridge; M. A. Baldwin, Jacksonville; D. J. Piper, Foreston.

Strawberries—J. G. Bubach, Princeton; Henry Wallace, Villa Ridge; O. B. Galusha, Peoria.

Raspberries, Blackberries, Currants, and Gooseberries—H. G. Vickroy, Normal; Wm. Jackson, Godfrey; D. Wilmot Scott, Galena.

Pears—C. N. Dennis, Hamilton; Parker Earle, Cobden; W. T. Nelson, Wilmington.

Peaches—J. B. Spaulding, Riverton; H. C. Freeman, Alto Pass.

Plums and Cherries—Dr. A. H. Sanborn, Anna; L. C. Francis, Springfield.

New Fruits, Trees, and Plants—J. T. Johnson, Warsaw; E. Hollister, Alton.

Gathering and Marketing Fruits and Vegetables—R. W. Hunt, Galesburg; Ed. Rogers, Upper Alton.

Utilizing Fruits—G. H. Clayson, Crystal Lake; —— Roberts, Godfrey.

Floriculture—Thomas Franks, Champaign; Joseph Heinl, Jacksonville.

Landscape Gardening—J. P. Bryant, Princeton; Prof. Standish, Galesburg.

Vegetable Physiology—Prof. Burrill, Champaign; G. H. French, Carbondale.

Entomology and Ornithology—Prof. S. A. Forbes, Normal; Miss Alice Walton, Muscatine, Iowa; Miss Emily A. Smith, Peoria.

Geology and Soils, as Affecting Plant Life—Wm. McAdams, Alton; Henry M. Bannister, Kankakee; Henry M. Shaw, Mt. Carrol.

Horticultural Adornment of Home—Mrs. Lavina S. Humphrey. Galesburg; Mrs. H. N. Roberts, Alton; Mrs. P. V. Hathaway, Damascus.

The appointment of ad-interim committees was referred to the members of the board from each horticultural district. A portion of them asked time for consultation, which was granted. When the entire committee in appointed, the names will be reported to The Prairie Farmer.

A. C. HAMMOND, Sec'y.

Diogenes in His Tub.

And first, Diogenes would discourse of that remarkable polar wave that struck us on Saturday the 5th of the year, and its probable effect on the fruit product. Great fear is manifested on all sides, and not without grounds: yet the conditions, it seems to me, have been so favorable that there is cause for hope. Remember that there was no very sudden change, the temperature having been low for two or three weeks before, and no sudden rise since. The sudden changes seem to be the ones—coming in the midst of winter—that are the most destructive to our fruits. So I conclude there is ground yet for hope; and unless some future disaster should occur, Dio., if living, will expect to eat of several sorts of fruit this year grown on his own grounds. Keep in good heart, brethren; Providence will send us all we deserve.

But hasn't that man at Cape Girardeau a level head? Dio. himself could not have given as many sensible suggestions concerning farmers' libraries, as he did in No. 1. All farmers and horticulturists can not go as deeply into periodicals as he, but they can profitably go much deeper than they do. Take a farmer's home provided on his plan, and then imagine, if you can, sensible sons running off to breaking on freight trains, or selling soap and candies behind counters! Improbable.

And then, again, in No. 2, his thoughts on naming country houses. How suggestive!

The Editor in No. 1, favors interdiction of French liquors, etc., as retaliation for their interdiction of American pork. Dio. says interdict them as a matter of protection to ourselves, without regard to hog or hominy.

"Man of the Prairie" was looking out for a little colder weather. Did he find it—and is he satisfied?

An extremely suggestive paper that, of Prof. Budd's on the "Cherry Possibilities." Further investigation in the wide field of European horticulture is demanded, not only in regard to this but to most other fruits. Even unpromising sorts, not prized there, transplanted here, may turn out to be the most valuable of any. I fear the agricultural colleges are not taking as much interest in this matter as they ought. Our State Society ought, and doubtless does, feel thankful to Prof. B., for his presence and wise counsel at its late Bloomington meeting. His remarks will be found valuable reading in the forth-coming volume of Transactions.

Seedsmen's catalogues will soon be floating around thick as autumn leaves, and planters will be puzzled what to buy. My experience may be worth something: Of tomatoes, I know nothing better than Acme and Trophy, and I think favorably of the Golden Trophy—though with some the color is objectionable. The Short-horn carrot can't be beat for table use, nor the Egyptian beet. Of the former, planted pretty thick in good soil, in rows two feet apart, 400 bushels per acre can easily be grown; and besides being good for stock, they are mighty good for men and women. In squashes the Hubbard and Boston Marrow are standbys, and that little Perfect Gem is likely to prove A No. 1. And give me the Stowell Evergreen sweet corn and the Winningstadt cabbage yet all the time. But Dio. will not be fooled with so many new sorts in 1884 as he has been in former years.

Yes—increase the tax on dogs, and collect it; so say the Iowa stock-breeders, and so echoes every [Pg 55] sensible friend of the farmer and his interests.

Next time Dio. proposes to call up a subject of much importance to everybody, and one that badly needs ventilating.

Dio.

Possibilities of Cherry Growing.

The insertion of one little word gives too unfavorable an idea of the best varieties of the Griotte cherries, grown all over the interminable steppes north and east of the Carpathian mountains in Europe.

As printed the paragraph reads: "Some of the thin-twigged Griottes, with dark skins and colored juice, are as large as the Morello and nearly or quite as sweet."

The copy reads—or should read—"as large as the English Morello and nearly or quid sweet."

As you say my object in talking the matter up is the hope of interesting some of the large nurserymen, like those at Bloomington, in the desirable work of importing and propagating the Griottes, Amarells, and the Asiatic sweet cherries known as "Spanish," of the East plain, on a large scale.

Why should our Western propagators permit our importing of fruits, ornamental trees and shrubs, to be done by the nurserymen of the Eastern States.

If we turn to a good map of Europe we will see at a glance that the importing of fruits so far has been from the west coast of France, Belgium, and Holland, or from the south of England. As with our west coast, this whole region has been made a land of verdure by the soft, humid air of the Gulf stream. Tracing on the map the line of the Carpathian and Caucasus mountains, we find three-fourths of all Europe, north and east of these ranges, without a mountain or hill traced on the great expanse except the Valdai hills, and these are only bluffs not as high or extensive as those of our rivers and dividing ridges. It is the greatest plain section of the world, and is the ancient home of the best fruits of the temperate zones. Common sense should lead us to give trial to the horticultural products of this plain. To find apples, pears, cherries, and plums as hardy, and as well adapted to the hot summers and cold winters of Illinois and Iowa as the Fameuse apple, we need not enter the empire of Russia. Northeastern Austria has a variable summer and winter climate, which will not permit the growing of apples of the grade of hardiness of the Ben Davis, Stark, Jonathan, and Dominie; of pears of the grade of Flemish Beauty, or of cherries of the grade of Early Richmond as to foliage and ability to endure low temperature. The commercial nursery-man who will visit the "King's Pomological Institute," at Proskau, in North Silesia, will see at a glance, as he wanders over the ground, that the fruits, forest trees, ornamental trees and shrubs of the nurseries of England, France, Belgium, etc., suddenly disappear with the Carpathians on the edge of the great steppes.

J. L. Budd. Ag. College, Ames, Iowa.

Prunings.

The soil for window boxes is the same as for plant culture in pots; the best is that formed by rotted sods with a little well decomposed stable manure mixed with it.

Rhubarb requires deep, rich soil. A good dressing of well-rotted manure, put on the ground this winter when it is not frozen, will start off the plants briskly in the spring. The same is true for asparagus.

Mr. Russel Heath, Carpenteria, Cal., has an "English walnut orchard" of two hundred acres of rich, level land, near the sea-shore. The trees are from ten to twenty-five years planted. His crop in 1882 was 630 sacks of 70 pounds each; this season he expects the harvest will aggregate about one-third more.

GARDENER'S MONTHLY: The writer found among the gardeners in Canada, when in that country recently, that the English plan of preserving grapes in bottles of water was in not uncommon use. The bunches are cut with pieces of stems, and then so arranged that the ends are in bottles of water. By this plan the grapes can be preserved far into the spring season.

The American Cultivator: "Can you tell we what kind of weather we may expect next month?" wrote a farmer to the editor of his paper, and the editor replied: "It is my belief that the weather next month will be like your subscription bill." The farmer wondered for an hour what the editor was driving at, when he happened to think of the word "unsettled," and he sent a postal note forthwith.

The Farmer and Fruit Grower: Mr. Willis, Lamer, a prominent fruit grower of the Cobden region, says he very distinctly remembers that the freeze of 1864 killed young fruit trees to the snow line, and that he cut his peach trees to that line, and saved that much. In 1864 the temperature was about the same as it was on January 5, 1884—in the neighborhood of 21 degrees below zero. Mr. Lamer thought no damage was done to strawberry plants.

A POMOLOGIST gives the following excellent advice in regard to maintaining the fertility of fruit lands: "Encourage the utmost variety of vegetable growth near and upon your orchard lands, and never rob the soil of its honest dues. Give judicious and thorough cultivation and pruning; and

with our generous soils and climate, I do not believe the child is yet born that will live to see our orchards languish on account of poverty of soil, or any necessity arise for the importation of fertilizers."

The Country Gentleman says two things are necessary for the growing of good asparagus, namely, plenty of room for the plant to grow, and copious manuring. The latter is best applied to thick beds by covering the whole surface with manure two or three inches thick, late in autumn, and forking it in very early in spring, before the new shoots start. Thick beds, however, should not be planted, but the plants allowed three or four feet each way to each. Three by five is a common and suitable distance, and large stalks may be obtained in this way.

Charles Merrit, of Battle Creek, has been very successful with strawberries. His plan is to plant rows about two and one-half feet apart and plants nine inches in the row; he prefers the spring time. He manures highly, cultivates thoroughly and mulches with clean straw late in the autumn. The next season he gets a large crop, and, while he is taking it off, another patch is being treated in a similar manner for the next year's crop. The second year with any bed he simply pulls out the weeds, and after picking turns it under. This plan proves to be satisfactory.

T. F. Leeper, of Warsaw Horticultural Society, says: I have been greatly interested in the condition of orchards this season, and have examined quite a number. One orchard in my neighborhood died during the summer—I supposed it was winter-killed, but an investigation showed that the roots had been destroyed by mice. Last spring I reported a number of trees in my orchard, winter-killed. These trees have been dug up and it appears that they too, were killed by mice. In my orchard the greatest injury by winter-killing has occurred in the draws or low places and I would not plant another orchard without tile drawing such places.



Gleanings by an Old Florist.

THE PANSY.

Gray, in his Manual, says: "Viola tricolor (pansy or heart's-ease) is common in dry or sandy soil. From New York to Kentucky and southward, doubtless only a small portion of the garden pansy runs wild. Naturalized from Europe."

Seen in this condition the flowers are very small, not more than one-half an inch across and oblong in shape. Cultivated at its best it has a flower two inches in diameter, almost an exact circle in outline.

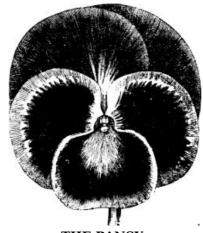
All this has been brought about by lovers of flowers during a long period of years, by saving the seed of only the best, a sort of survival of the fittest, and only to be kept up by rich soil and constant cultivation, for if left to itself the pansy dwindles back into its original nature.

It has another peculiarity also: the young plants always bring the largest flowers, so that if the extra large flowers are wanted they can be obtained only by seed annually, or a division of the old roots by cuttings. The latter is too much trouble for most cultivators in the country, and named kinds are never thought of, while in the old they used to be; perhaps it is still common for the pansy grower to name his pets, and reproduce them each year by cuttings or division of the roots.

The seed that brings the largest and best flowers generally come from Germany, although some of our own florists save them themselves for several consecutive years. I was a long time before any fixed character was maintained in color in this flower, but now seed from certain kinds will mainly reproduce its like, hence are often so used for massing kinds of a color. The plant being a native of the cooler and moister parts of Europe is better adapted to their climate than ours, and hence as our spring weather is more nearly like their original climate than our other seasons, they luxuriate in it; it is the only season in which the florist finds much of a market for his goods, and even then he receives some round abuse for selling very large noble flowers that quickly deteriorate after leaving his hands. This, however, is not his fault, the hot weather being one cause, the other that the plant refuses to produce large flowers except in its young state.

There are two methods adopted by a florist in the preparation of his stock; one, by sowing the seed in the fall and wintering the young plants in cold frames, or even by means of a slight protection of brush. The other by sowing the seed on a bench in the green-house in January. If sown in the fall early enough to get well into rough leaf, if they do not flower in the fall, which

they usually will do, they are ready to do so at the first peep of spring, as they flower at a comparatively low temperature. If sown in January, they are transplanted once on other benches, from which they are lifted and transferred either to the outside borders or to other cold frames as the case may be. It is not best to keep them in a green-house longer than necessary, say the first of March, as the conditions of a green-house will bring about the small flowers similar to the hot weather of the summer.



THE PANSY.

By the different systems the market florist can have his goods always at their best during the selling season, which ranges from the first of March up to the first of June. They are so easily grown he can afford to sell cheap, even if his goods are of the very best, and will usually bring about seventy-five cents by the single dozen, down to as low as three dollars by the hundred. Enough sod should hang to the roots to keep them fresh, and they will, after planting, go on flowering just as though they had never been disturbed. Nothing can be done with this plant, at least worthy of the name, in the window, hence it should not be attempted. To enjoy the large flowers as long as possible during summer, if there is any choice of position, give them the coolest and moistest place in the garden, not forgetting plenty of watering in dry spells. A rich, loamy soil, inclined to be porous, will give the best satisfaction, but almost any garden soil will grow them.

Edgar Sanders.

DRAINAGE.

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All Communications, Remittances, etc., should be addressed to The Prairie Farmer Publishing Company, Chicago, Ill.



Entered	d at the	Chicago	Office	as	Second-Class	Matter.
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CHICAGO, JANUARY 26, 1884.

WHEN SUBSCRIPTIONS EXPIRE.

We have several calls for an explanation of the figures following the name of subscribers as printed upon this paper each week. The first two figures indicate the volume, and the last figure or figures the number of the last paper of that volume for which the subscriber has paid: EXAMPLE: John Smith, 56-26. John has paid for THE PRAIRIE FARMER to the first of July of the present year, volume 56. Any subscriber can at once tell when his subscription expires by referring to volume and number as given on first page of the paper.

[Transcriber's Note: Original location of Table of Contents.]

1841. 1884.

The Prairie Farmer

PROSPECTUS FOR 1884.

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Its managers are conscious from comparison with other journals of its class, and from the uniform testimony of its readers, that it is foremost among the farm and home papers of the country. It will not be permitted to lose this proud position; we shall spare no efforts to maintain its usefulness and make it indispensable to farmers, stock-raisers, feeders, dairymen, horticulturalists, gardeners, and all others engaged in rural pursuits. It will enter upon its forty-fourth year under auspices, in every point of view, more encouraging than ever before in its history. Its mission has always been, and will continue to be—

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To further the work of agricultural and horticultural organization.

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To lead the van in the great contest of the people against monopolies and the unjust encroachments of capital.

To discuss the events and questions of the day without fear or favor.

To provide information concerning the public domain, Western soil, climate, water, railroads, schools, churches, and society.

To answer inquiries on all manner of subjects coming within its sphere.

To furnish the latest and most important industrial news at home and abroad.

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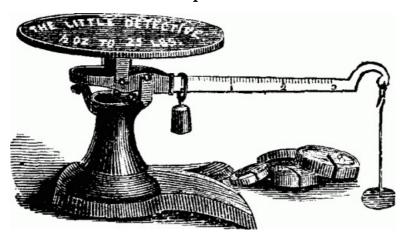
The Prairie Farmer is designed for all sections of the country. In entering upon the campaign of 1884, we urge all patrons and friends to continue their good works in extending the circulation of our paper. On our part we promise to leave nothing undone that it is possible for faithful, earnest work—aided by money and every needed mechanical facility—to do to make the paper in every respect still better than it has ever been before.

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splendid new map of the U	arly subscriber, either new or renewing, s Inited States and Canada—58×41 inches—F other column. It is not necessary to wait u	REE. Or, if preferred, one
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in every locality. We offer agents.	very liberal terms and good pay. Send for s	ample copies and terms to
THE Adams County (Ill.) I premium list is out.	Fair at Camp Point will be held the first	week in September. The
The seventh annual fair at and continue four days, with	Jerseyville, Ill., will be held commencing T th \$5,000 premiums.	uesday, October 14, 1884,
	ope Agricultural Society's trials, Novembe 1st in the trial field, and also for the mad	
	a live stock business has stimulated parties City, Iowa. The company has a capital of s a branch of its business.	
	nd instructive essays at the late Wisconsin I DEN," contributed by J. M. Smith, Esq., of (issue of the Prairie Farmer.	
risen in value and stock de	t the Government crop reports for 1883 are publed in price, the extra cost of running a all agricultural products has also alarmingly	farm more than makes up
value of exports from Grea 30, 1883. The total value of	s Consul General at London, directs attenti at Britain to the United States during the fis of declared exports from the various United during the year was \$165,207,987, a reducti 858.	scal year ended September States consular districts in
the rules and the passage	ongress from Indiana, succeeded on Monday of a bill providing that in any suit against a plation of the patent law, if the plaintiff shall	n innocent purchaser of an

to double our present list before the first day of April.

the rules and the passage of a bill providing that in any suit against an innocent purchaser of an article manufactured in violation of the patent law, if the plaintiff shall not recover twenty dollars or over, he shall recover no costs. This bill is a blow aimed at the drive-well patent agents, and others of that ilk who are perambulating the country to the annoyance of farmers. If the bill passes the Senate, and there appears no valid reason why it shall not, it will put an end to this species of robbery now so prevalent.

The only general advices we have regarding winter wheat come through the extensive grain commission house of W. T. Baker & Co., Chicago. They have private reports which indicate that the crop maintains a very high average, and, with the exception of a few points in Southern Illinois, Kentucky, and Tennessee, is doing as well as could be expected at this season of the year. In Kentucky and Tennessee the ground is quite bare of snow, but north of the Ohio river, from Kansas to Ohio, the wheat, as a general thing, is well covered. The crop, however, was generally sown late, and in many quarters fears are entertained of the final outcome.

The Nebraska State Farmers' Alliance held a meeting at Kearney on Wednesday of last week. A platform was adopted declaring in favor of national legislation to regulate railway traffic, demanding the abolition of national banks and the substitution of Government currency, demanding a tariff for revenue only, expressing sympathy with labor, asking protection to labor organizations, recommending the abolition of convict labor, asking Congress to reclaim all unclaimed land grants and reserve the public domain for actual settlers, and opposing the acquisition of public land by foreigners.

Do not forget that the Annual Farmers' Institute, or Agricultural Lecture Course, at the Illinois Industrial University will be held from Tuesday, January 29th, to Friday, February 1, 1884. Four lectures will be given each day, at 10 a.m., 11 a.m., 2 p.m. and 3 p.m., by Dr. Peabody, Regent of the University, Professors Burrill, Jillson, McMurtrie, Morrow and others. The topics discussed will be: *Soils*—Their Origin, Physical Characteristics, Chemical Composition, Drainage, Cultivation, Fertilization; *Plants*—Their Structure, Growth, Nutrition, Seeds, Movement of Sap, Development and Distribution, Economic Products. Addresses will be given in the evenings by Dr. Peabody, Governor Hamilton and others. These lectures and addresses are given as a part of the work of the College of Agriculture of the University. No fees or examinations are required. All interested are cordially invited to attend.

THE COST OF COLD WINDS.

Prof. Shelton, of the Kansas Agricultural College, puts the question of sheltering stock in an exceedingly pointed manner. He has lately been feeding ten steers in an experimental way. He found that for the period of ten days ending December 29, the average gain per head was thirtyone and one-tenth pounds. The weather was warm and sunny. The steers were fed in an unbattened board shed. During the succeeding ten days, when the cold was intense almost the entire time, the same steers, fed on the same rations, and in the same shed, gained but six and six-tenths pounds per head. About a year ago the Professor fed a lot of pigs for three weeks of the coldest weather, in open yards, and found them to consume more than three times the amount of food to pound of increase than the same number of pigs in the warm basement of the barn. He has a cow kept in a bleak "Kansas barn" which shrinks in her milk from one-fourth to one-half after twenty-four hours of very severe weather. From all this the conclusion is what we have so often taught in these columns, though not as forcibly as the Professor teaches by his careful experiments, that you can not burn feed as fuel to support the body of an animal and at the same time have the animal stow it away in the form of muscle and fat. The fact is that our farmers throw away one-half their feed in furnishing animal heat that they might just as well save by paying a small lumber bill and expending a moderate amount of labor.

GOOD WORK AT WASHINGTON.

Surely the House of Representatives is getting down to solid work since the holiday vacation. Mr. Holman, for instance, found no great difficulty in getting a resolution passed declaring that in the judgment of the House all public lands heretofore granted to States and corporations in aid of the construction of railroads, so far as the same is subject to forfeiture by reason of the nonfulfillment of the conditions on which the grants were made, ought to be declared forfeited by the United States, and restored to the public domain.

This was good work, but Mr. Holman's second resolution, also passed, was fully as much in accordance with public feeling and desire. It is to the effect that our laws relating to public lands should be so framed and administered as to ultimately secure freeholds to the greatest number of *citizens*, and to this end all laws facilitating speculation in public lands authorizing or permitting entry or purchase in large bodies ought to be repealed, and all public lands adapted to agriculture, subject to bounty grants, and those in aid of education ought to be reserved for the benefit of actual and bona fide settlers, and disposed of only under the provisions of the

[Pg 57]

There was some opposition to this resolution. Mr. Kasson feared such a law might work injury to the cattle industry. Mr. Bedford, however, neutralized Mr. Kasson's influence by declaring that he did not propose that four or five cattle kings should own the West as four or five railway kings own the East.

It may be that our readers would like to take down the names of members who voted against the resolutions. Here they are: Barksdale, Bingham, Bisbee, George, Horr, Kean, Libbey, Lyman, Morse, Muldrow, Poland, Ranney, Reed, Rice, Russell, Stone, Van Eaton, Whiting.

Now that the representatives have resolved that these things ought to be done let us see if they will stand up to the rack and attend to their part of the doing.

WISCONSIN MEETINGS.

Feb. 5 and 6—The State Horticultural Society in Senate Chamber, Madison.

Feb. 5—The Wisconsin Cane-Growers Association, Madison. Prof. Wiley of the Department of Agriculture will be present.

Feb. 6, 7, and 8—Farmers' State Convention, under the auspices of the State Society, at capitol.

Feb. 13 and 14-16th annual meeting of the Southern Wisconsin Cane-Growers' and Manufacturers' Association at Whitewater.

Feb. 6—The Wisconsin Swine Breeders will hold a meeting at the capitol, for the transaction of such business as may come before them and the discussion of subjects appertaining to successful breeding and feeding of swine. All interested in this subject are invited to attend.

Answers to Correspondents.

J. C. McConaughy, Rochelle, Ill.—1. How can I secure a blue-grass pasture? 2. How much seed to acre? 3. Can blue-grass be grown successfully mixed with other grasses? 4. What season and what soil is best adapted to secure a good catch? 5. Can it be grown on low, wet land?

Answer.—1. There are almost as many ways to obtain a blue-grass pasture as there are men who undertake the job, though essentially the practices are alike. The usual method is to sow the seed in the spring or fall, either alone or with clover or timothy. 2. The seed is very light and chaffy, and weighs only fourteen pounds to the bushel, and the amount sown varies from five to seven pounds to the acre. 3. Yes, though after a few years blue-grass, on a true blue-grass soil, roots every other grass out and reigns with a divided empire with white clover. 4. Any good corn or wheat soil will produce good blue-grass—the usual method of obtaining a blue-grass pasture is as follows: To one bushel of good timothy seed one quart of red clover is added, and this quantity is made to cover from five to six acres. The seeding may be done in the fall with fall grain, in the spring with oats, or on stubble or wheat land on the snow in February. After, in the month of August from a peck to a half bushel of blue-grass is sown upon the young timothy and clover. But little or nothing can be seen of the blue-grass for the first year and it does not show vigorously until the third year. Thereafter if the soil is a true blue-grass one and the land is pastured, bluegrass and white clover dominate to the exclusion of everything else. Perhaps the surest way to obtain a stand of timothy and thereafter a set of blue-grass, is to prepare the land carefully and sow rye in October. On this sow timothy and red clover as above on the snow in February or March; pasture the rye, but not too closely, to 15th of May. Harvest the rye at the usual time, and the yield will be all the better for the pasturing, and sow the blue-grass seed on the stubble in August. 5. No, but red top will in spite of your best efforts to the contrary unless you till and thoroughly break up the land.

JOHN ZIMMERMAN, CAMERON, Mo.—1. Has setting trees on a fence line as posts for barb-wire been a success? 2. If so what kind of tree is the best? 3. Will the hardy catalpa do, if so what distance apart?

Answer.—1. Barb-wire has not been introduced and used long enough for trees set for the purpose of posts to grow to a sufficient size. But in many cases aged Osage orange hedges, which have been suffered to grow up, have been thinned out so as to leave a tree every ten, twelve, or fifteen feet, and on these barbed-wires have been strung and made a fence, which so far has proved satisfactory. The same success was obtained where fruit and shade trees standing in a line have had barbed-wire attached to them. But the precaution must be taken to nail a strip—a common fence picket will answer—to the tree and then the barb-wire to that. If this is not done, and the wire is fastened by a staple to the tree, the wood soon overgrows, cracks and increases the strain on the wire, damages the tree and spoils the fence. 2. Almost any fast growing tree will do, but hard wood varieties are preferable. 3. The hardy catalpa may do, but for low land we would just as soon have the common willow. Eight feet apart is a good distance. The wires may

be fastened to these when they have acquired a diameter of four or five inches, and later every other post may be removed. For high and dry land in your latitude one Osage orange is worth a half-dozen catalpas, because it is just as easily grown—and when grown it furnishes the strongest and most lasting timber known. We may add here, that where a fence is wanted across sloughs, or through permanently wet or moist land, posts large enough for barbed-wire may be grown in a couple of years or so—this by cutting stakes six or seven feet long and from three to five inches in diameter from the common willow, and setting them in March. The stakes require attention the first summer, in case of dry weather or drouth, but nothing more than that the moist earth shall be pressed up against them to prevent the young roots from drying out.

M. D. Vincent, Springfield, Mo.—1. Can you tell me how badly oranges were frosted during the late cold spell in Florida? 2. Is there a record of colder weather at Charleston, S. C., Savannah, Ga., if so when was it?

Answer.—1. It is hard getting at the facts. One report is that neither oranges nor the trees were injured at Palatka, fifty miles south of Jacksonville, while another just as credible says the fruit was badly frozen on the trees as far south as Enterprise, 100 miles south of Jacksonville. The probabilities are, that there was a good deal of damage done to fruit on the trees, but no permanent or serious injury to the orchards. 2. The mercury may not have been lower for 100 years at Charleston or Savannah than the late cold spell, but during the winter of 1834-35 the weather was so severe the orange trees were killed to the ground 100 miles south of Jacksonville. Snow to a foot in depth fell at Millidgeville, Ga., Lat. 33, and several inches over all northern Florida. Some apprehensions are felt that these southern sections are not safe from severe frosts for this winter and the next, since it is pretty well known that these extreme cold periods return about every half-century—the winters of near fifty and one hundred years ago having been made remarkable by terribly severe and protracted cold.

J. H. J. WATERTOWN, WIS.—Give us the best remedy for chillblains?

Answer.—Tincture of iodine painted over the parts; or 10 grains of salicylic acid extended in an ounce of half water and half alcohol. Both to be applied with great caution, and largely diluted where the skin is broken and ulcers have formed.

Charles C. Peters, Olney, Ill.—If you were about to plant an orchard on levelish, but at the same time naturally well drained land, would you advise throwing up ridges as the common custom is in some sections?

Answer.—It might be advantageous to throw up ridges so as to secure permanent moisture; but the trees should be set in the depression between them instead of on the ridges.

Thoroughbred, Lexington, Ky.—There is a belief or an opinion current among a class of breeders, always ready to accept and experiment with new fangled notions, that the draft breeds imported from abroad, especially the high priced French horses, are fed from birth on a more or less regular ration of bone or flesh meal. This they claim is for the purpose of developing bone and muscle. What do you know of the facts?

Answer.—Not much. Some of the foreign journals contain accounts of experiments in feeding soluble phosphates of lime, but no two agree on results, except that when the salt is judicially fed, no harm is done. The subject is worthy of investigation and especially by Kentucky breeders, since it would establish the claim that their soil, being especially rich in the phosphates and nitrogen, produces grain, hay, and forage of superior strength for feeding purposes, which appear again, in their high bred stock of horses, sheep, and cattle.

The fourth National Agricultural Convention, under the auspices of the American Agricultural Association, will be held at the Grand Central Hotel, New York City, Wednesday and Thursday, February 6th and 7th, 1884. Addresses will be delivered and papers read by leading thinkers and writers on topics of general interest, and all identified with agriculture and kindred pursuits are cordially invited to be present and participate in the proceedings. Delegates will be present from all sections of the country, and arrangements for reduced rates of fare are being made with the railroads leading into New York. The annual meeting for the election of officers and the transaction of other business, including the matter of a national agricultural fair, will be held at $12 \, \text{M}$. of the first day of the Convention.

Wayside Notes.

BY A MAN OF THE PRAIRIE.

I notice that Mr. Sanders, of the Treasury Cattle Commission, thinks it beneath the dignity of Congress to adopt retaliatory measures against France and Germany for prohibiting American pork products from entering those countries. He thinks it a far better scheme to appoint a small army of inspectors to examine all the pork before it is shipped from this country. This might be

more dignified, and after a time effectual, but how shall we make France and Germany stop shipping their poisoned goods to this country? Will they be equally "dignified" and appoint inspectors on their side that will be satisfactory to our people. Probably they would after a few months of prohibition; never before. Dignity is a good thing, but protection to the health and wealth of the people is better. Besides, Government inspectors are expensive luxuries, and by no means always efficient. A fat Government appointment is a nice thing—for the appointee, as Mr. Sanders is aware, but it is not profitable to the tax-payers of the country to multiply them too extensively. In my opinion the easiest way out of the muddle is to strike back and to hit where it will hurt worst.

Clinton Babbitt, Secretary of the Wisconsin State Agricultural Society, is reported to have said at the late meeting of the State Dairymen's Association that he had a very poor opinion of editors. In fact, that he held them in about the same esteem as Ben Butler does. Now I don't suppose it makes an iota of difference to any editor under the sun what Butler or Babbitt think of him; what Ben and Clint need to look out for is what the editors think of them. Big Ben got an inkling of this a few weeks ago; Little Clint's turn may come next.

For some time I have been noticing the advanced style of writing in the two or three "Down East" agricultural papers that come under my notice. They bear evidences of "culcha" that are truly encouraging, but here is a case that is actually exhilarating, or would be were it not somewhat bewildering. It is from an article about the Jersey Lily, Mrs. Langtry: "Who ever vocalized such a word with a more complex intonation, or with a more marvellously intimate union with a more inextricably intertwined relationship to the most exquisite sensibilities that accompany and mark the infinite flights and reachings of the soul, as within its human casement it burns with fire divine?" Now, I call that decidedly fine, and were I the owner of a whole herd of Jerseys I should endeavor to engage this genius to write them up for me. At any rate I think he should be brought West to help on the Jersey boom.

I sent the editors of The Prairie Farmer, the other day, from Springfield, where I was paying a flying visit to the agricultural rooms, a copy of the Reynolds argument for a change in the awarding of sweepstakes prizes on cattle. Mr. R. applied it to the Fat Stock Show alone, and I believe the State Board adopted the suggestions. But for the life of me I can not see why the principle is not equally applicable to the State Fair premiums, and indeed to similar exhibits at all our fairs. Next year I hope the State Board will extend the innovation to the State Fair, and from this it may be it will extend to similar organizations of lesser magnitude.

I notice that the National Academy of Sciences have decided that glucose is not injurious to health. Well, this is good news, at any rate, but it does not follow that manufacturers and merchants have the right to mix it with cane sugar or sell it to us for genuine cane sirups, or real honey, or pure sugar candy, or in any of the other ways in which we are made to pay two or three times what it is really worth. It does not do away with the great need of a rigorous food adulteration act, though there is great satisfaction in knowing that when we eat it we are not taking in a mild death-dealing potion. But, come to think of it, there are other great scientists in the country besides those composing the National Academy. Some of them have decided in a contrary manner. Is it not best to have the question decided by a majority vote of reputable chemists, and then stick to the good old things, whichever way the decision may be? On principle I don't object to suine, oleo, or any of the objectionable articles. All I want is to know when I am buying, and paying for them in real genuine dollars. Bogus dollars are every whit as respectable as bogus butter or bogus honey, though the law makes it a little unhealthy to use them with any degree of liberality.

Letter from Champaign.

A light rain yesterday (the 18th) was the first for five weeks, and the first sign of a January thaw we have had. But it began to snow at dark, continued lightly all night, and has been snowing, blowing, and drifting to-day up to this hour, 2 p. m. Coming soft at first, that part of it will lay where it fell, and the uncovered portion of the wheat has got a new blanket, which we hope will out-last January. We have had but one so long uninterrupted spell of sleighing for these many years, and that was in the winter of '78-'79. With the exception of the few very cold days before and after the 5th, the month has been quite favorable for stock and all the labors of the farm.

The damage done by the cold wave of January 4th to 7th is believed to be greater than first reported. Growers tell me that Snyder blackberries are killed down to the frost line, which proves it is not iron-clad, as some believe. Accounts from the Cobden fruit region are of the gloomiest character, everything being given up for lost but the strawberries. The Fruit-Grower says they will have to rely on them and their truck patches this year, and advises an extension of early potatoes, tomatoes, and Japan melons. According to local records at Anna, there has been nothing like it since the first week in January, 1864; and the estimate of the damage done in '84 is computed from what followed in '64, rather than from what is absolutely known. Let us hope that they are mistaken, and that the Cobden fruit region will sustain its well-earned character as the source of a perennial fruit supply.

It appears the cold wave did not reach its minimum in Central Florida, lat. 27, till the night of the 9th, ice having been found on the morning of the 10th, near Enterprise, three-fourths of an inch thick. Oranges on the trees were frozen through, and the leaves killed so they will drop. But though here and there a branch may be frosted and will die and have to be removed, little permanent damage to the groves has probably resulted. Central Florida is distant, as the crow flies, from Central Illinois, about one thousand miles. Suppose the cold wave moved steadily southwest, it follows, then, its rate of speed was not far from 200 miles every twenty-four hours. It is easy to comprehend how a complete signal service might warn of the approach of cold waves in time to take every necessary precaution to meet and disarm them.

But as much of a stinger as the late cold turn was, it was a mere cool breeze compared with that which fell on Florida and the entire Southwest in the winter of 1834-35. Then snow covered all Northern Florida, and in Central Georgia it lay on the ground some days, a foot deep. The young orange trees were all killed to the ground, and few of the aged trees escaped without the loss of most of their branches. But they soon recovered—sprouting from the roots and stumps with great vigor, as they will again do after the late freeze. And this is one of the strong points of the orange. It will sprout from the stump or root when the trunk is removed, as surely as the young hickory or chestnut, and when transplanted young and trees of considerable size, will bear mutilation with about as much indifference as the Osage orange or soft maple.

Those who expect Congress to do anything that will hurt German and French importers, by way of retaliation for prohibiting pork and pork products, will be pretty sure to be disappointed. Senator Williams is responsible for the statement that the reason why agriculture is treated with so much contempt, is it sustains no lobby. But you may be sure the importers will not fail in that respect, as millions will be spent to prevent legislation which will seriously interfere with the enormous profits of the foreign importing houses in New York. Perhaps Senator Williams will inform us what it will cost to keep up a well appointed lobby in Washington, and how much the average one-horse lawyers in Congress expect, in money down, in the way of a retainer. Huntington could tell, and so could Jay Gould; but both are silenced for the present, and Villard too.

"Put your thumb down there." That the trees on low lands which bore big crops in 1874-75, are just the trees which bore crops equally in '83, and the very trees also which have made the most vigorous growth both previously and last year. The whole matter is a question of nutrition.

B. F. J.

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REMEMBER that \$2.00 pays for The Prairie Farmer from this date to January 1, 1885; For \$2.00 you get it for one year and a copy of The Prairie Farmer County Map of the United States, free! This is the most liberal offer ever made by any first-class weekly agricultural paper in this country.



Chicken Chat.

Somebody says that "Plymouth Rock pullets are not always early layers, for they often grow for ten or twelve months before laying, though some lay as early as six months after hatching."

Well that's news to us, and we have kept Plymouth Rocks quite a while, too. We have had Rock pullets commence laying at six months, and once we had a few that didn't do a thing toward earning their own living till they were almost eight months old; but seven months is nearer the average, and that is what we count on when selecting the pullets that are to be kept for winter layers. The pullets that are hatched from the first of March up to the first of May, commence laying all along from the middle of September to the first of December. Pullets that we want to commence laying in February, are selected from those hatched in July. It would really be very gratifying to me if the people who know no more about the Plymouth Rocks than they do about the fate of Charlie Ross, would keep their twaddle out of print.

One of my correspondents is very anxious to know if the Langshans are the "coming fowls." Hardly. Fanciers who have tried them pronounce them the "best birds that were ever imported from China," which is pretty high praise, but all the same they are not popular with farmers. They will never hold the place that the Plymouth Rocks hold. Since you wish to buy fowls of the breeds for which there will be the greatest demand next season, I should advise you get Plymouth Rocks and Wyandottes. These, in addition to the Light Brahmas and Brown Leghorns that you already have, will give you the four breeds that are the most popular, and if you have good stock, and let people know that you have eggs to sell for hatching, you will probably have orders for all the eggs that you will care to sell.

Another correspondent wants to know the meaning of the word "strain," as applied to fowls, and I don't wonder that he asks the question, for the word is used "promiscuous like" by every tyro in poultry breeding.

When any poultry-raiser has bred fowls of any breed long enough to fix his notion of what constitutes a standard fowl of that breed upon them permanently, he may claim a "strain." For instance: Smith believes that the Light Brahmas should have very short legs, and he breeds for short legs until they are permanently fixed, and everybody who knows anything about Light Brahmas knows one of Smith's short-legged Brahmas at sight; then, but not before, Smith may claim a strain of his own, and it is proper for others to speak of "Smith's strain" of Light Brahmas. But Johnson, who buys of Smith, or of some one who has Light Brahmas of Smith's strain, this year, should not next year talk about "my own strain" of Light Brahmas. It takes years of steady, judicious breeding after a certain type to establish what may truthfully be called a strain, and it can only be done by breeders of rare skill and long experience in mating fowls for breeding.

Fanny Field.

Chicken Houses.

I often read inquiries about the best plan for building hen houses. My plan is, for 100 fowls, to build a house for them to roost in, eight or even ten feet wide and sixteen feet long, one story high with tight floor of yellow pine flooring. I prefer a tight floor because it is easily cleaned out, and every time it is cleaned out and swept the floor should be well covered with slaked lime; one cleaning a week is often enough.

A building of the same size should be built with a dirt floor, or close one, as preferred, about ten or fifteen feet from the roosting house for the hens to lay and sit in. A petition may be made of laths dividing the house into two compartments, the front arranged for the laying hens and the back compartments for sitting hens; then the laying hens will not disturb the sitting hens. A closed passway should be made, say one and one half or two feet square leading from the roosting house to the laying house with a sliding door at each end to be used at pleasure. As it often happens in cold, snowy weather in winter it is not desirable to let the fowls out, then the slides at each end of the passway can be opened and feed and water placed in the laying house (because the floor in that house will always be cleanest), and all the fowls will soon learn to go in there to eat and drink, and lay if they want to. It is, I think, bad policy to force fowls to roost, lay, and sit all in the same room.

The boxes that contain the nests should be made so that they can be at any time taken out and the nests turned out in a pile, set on fire and the boxes held over the fire to kill any lice that may be sticking to them.

A PERSON signing himself a "Nobleman's Gardener," says in an English paper that it is a mistake to use poultry manure as a top-dressing for garden crops; for farm crops also, if the poultry and pigeon dung were in any considerable bulk. This, however, is not usually the case, and a hundred weight or two would not make much of an impression on a farm. The manure in question is a powerful fertilizer, containing ammonia, phosphates, and carbonate of lime in considerable quantity, also uric acid, all of which are valuable ingredients for the support of crops. The simplest method of preparing the manure for use is to partially dry it, then mix it with perfectly dry sifted soil or ashes in sufficient quantity that will enable the entire mixture to be rubbed through a half-inch sieve. A man can do this comfortably with the hand inclosed in a thick leather glove. In this finely powdered state it can be stored in a dry shed till wanted for use. It is an excellent top-dressing for onions, strawberries, and, in fact, for all vegetable crops that need assistance, also for fruit trees and lawns. It is best applied in showery weather in the spring—for lawns at the rate of two ounces, vegetable crops and strawberries three ounces, and fruit trees four ounces per square yard. If in very large bulk and needed for use in fields it would scarcely be necessary to pulverize it, as mixing it with dry soil, etc., and turning the heap over a few times would suffice for its ready application.

The strength of the donkey mind lies in adopting a course inversely as the arguments urged, which, well considered, requires as great a mental force as the direct sequence.

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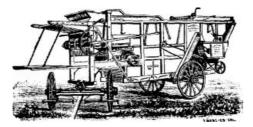
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NOTICES FROM THE PRESS.

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[Pg 59]

REMEMBER that \$2.00 pays for The Prairie Farmer from this date to January 1, 1885; For \$2.00 you get it for one year and a copy of The Prairie Farmer County Map of the United States, free! This is the most liberal offer ever made by any first-class weekly agricultural paper in this country.

Forestry.

Henry Stuart writes the New York Times: A wise and careful system of agriculture might have left our fields still fertile and productive, so an economical use of the forests might have made them a perennial source of wealth. Fortunately the injury is not beyond a remedy, for it is easier to restore a growth of timber than it is to bring back fertility to a barren soil. It is easy to care for what is left and to replant and renew the growth, and even to do this better and more quickly and with more and quicker profit than nature has done it. It is easy, too, by a wise and practical use of the forests that are left, to so husband them as to take regular harvests from them as the farmer regularly harvests his fields or selects the fatlings from his flocks. He does not gather in all these at one fell swoop, taking the fat and the lean and the young and the old, as the fisherman gathers all into his nets, and as the lumberman has felled the woods, but he selects those that are ripe and carefully rears the rest until they are ready. Had the timber been culled in this way from the forests year by year there would have been a periodical harvest, and as the mature trees were cut out a new growth would spring up. But, on the contrary, as in the old

fable, the goose has been killed for its golden eggs, and the source of a lasting profit has been recklessly sacrificed.

Fortunately the land is left, and can be put to its proper use as soon as it can be controlled. And still fortunately, by a wise administration, the forests may be made a profitable source of public income, instead of, as heretofore, the prey of the spoilers. It is useless to complain of past mistakes. They have been, as we have pointed out, mere incidents of our system, and possibly unavoidable. But the time has come when the system must be changed, and the necessity for a change has become so apparent that it can not be long delayed. It is not only the commerce of the country that must suffer by a continuance of the system, but agriculture suffers still more; and it is not only the public who will gain by a change, but the example will be followed by the farmers, who will doubtless soon learn to take care of their own timber lands and plant more, and so the benefit will be general. Besides, the farmers will not be long in discovering the profit in growing timber, and would plant groves as one of the most profitable crops that could be grown upon their rougher lands, or as a resting and restorative crop for their worn soil.

Before the New York Academy of Science a few days ago, Professor Albert R. Leeds gave some "facts gathered from eight years of personal inspection as to the alleged destruction of the Adirondack forests." He said that a rapid course of spoilation was going on in the outskirts of the forest, and the effect of it would soon be felt in the flow of the Hudson. The impression that the Adirondacks were pine-producing was a false one. Pine trees were seldom seen and the mountains were covered with spruce and hemlock. But the spruces, owing to a disease which attacked them a few years ago, are rapidly dying off. On the Ausable river and along the shores of Lake Champlain the destruction of the forest is especially great. Persons living about the forest start fires in the woodland which spread rapidly and are more destructive to the trees than the lumbermen. Professor Leeds thought that the railways which are making their way through the forests would be an important element in their destruction, for the sparks of the locomotives would originate forest fires. He said that the purchase of the forests by the State might not require so great an expenditure of money as was anticipated.

In closing an article on "Forestry and Farming," the Germantown Telegraph maintains that the idea that farmers and land-owners generally entertain that they may not live to enjoy the advantages of the tree-planting, should be utterly banished from their minds. It will require only about twenty years to realize the most liberal hopes of success; at least it will add to the value of the farm by the fact that the amount of timber is to be increased instead of diminished. We all know how anxious every purchaser of a tract of land is to know whether there is any and how much timber upon a farm offered for sale. In fact, there is no greater mistake made than to cut down the wood upon a farm when purchased, with a view to meet the second payment; and this mistake is invariably brought home to everyone in a few years. It is like taking the life-blood out of the land.



Official Weather Wisdom.

Almost from its invention the barometer has been vaunted an indicator of impending weather, and now we are in possession of numberless rules for interpreting its indications, mostly of a vague and indefinite purport, few, if any, pretending to accuracy and certainty. As mankind are always desirous of attaining weather wisdom, these rules have tended to give the barometer its widely recognized reputation, rather than any really infallible principles, clearly formulated. With no other philosophical instrument have people so deluded themselves as with the barometer. Meteorology having become almost an official monopoly, the officials seem to have made the readiest and largest amount of reputation out of the barometer as a weather glass; for all that they have had to do is to compile rules from a number of authors, without any necessity of acknowledgment, print as much as they please at the Government expense, give it away freely, and the notoriety of authorship is secured easily and expeditiously. Thus the British nation has been officially supplied with about eighteen different editions of the Barometer Manual, widely differing from each other according to the views of the authors; for although the book remains the self-styled authors change, much the same as with the Cambridge books on mathematics. A study of the edition, "Coast or Fishery Barometer Manual," teaches that the barometer foretells coming weather; that it does not always foretell coming weather; that only few are able to

understand much about what it does tell us; that it may be used by ordinary persons without difficulty; that its indications are sometimes erroneous: that any one observing it once a day may be always weatherwise; that its warnings do not apply always to the locality of the instrument; that storms frequently occur without its giving any warning; that barometer depressions happen with and without gales; and similar ambiguous or contradictory assertions ad nauseam. It is perfectly astounding to contemplate that official authority sanctions such inconsistent teaching, and moreover disseminates it far and wide, forcing its circulation by giving it away gratuitously on humane and eleemosynary grounds. Where only such confusing advice and direction can be given is it becoming to stamp it as official? it is lamentable inconsiderateness to expect fishermen to be able to dodge the weather by such guidance; and it is time to stop this easily concocted nostrum for notoriety; for it is vague and inconclusive in every precept, and has scarcely an assertion which is not contradicted by some other.—*Engineering*.

A Remarkable Electrical Discovery.

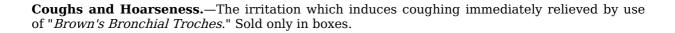
The London Times of recent date states that a new electrical contrivance has been perfected by Mr. A. St. George, the inventor of the telephone which bears his name. This invention, which is really supplemental to the telephone, will enable every description of conversation carried on through the instrument to be not only recorded but reproduced at any future time. Briefly stated, Mr. St. George's invention may be thus described: A circular plate of glass is coated with collodion and made sensitive as a photographic plate. This is placed in a dark box, in which is a slit to admit a ray of light. In front of the glass is a telephone diaphragm, which, by its vibrations, opens and closes a small shutter through which a beam of light is constantly passing and imprinting a dark line on the glass. Vibrations of the shutter cause the dark line to vary in thickness according to the tones of the voice. The glass plate is revolved by clock work, and the conversation as it leaves the telephone is recorded on the sensitive plate, the imprinted words spoken being fixed as is done in photography. The plate can be brought forward afterwards, and when replaced in the machine and connected with a distant telephone, will, when set in motion, give back the original conversation.

On October 15, 1881, a gentleman in Newburgh, N. Y., inclosed a spider in a small paper box. He carefully guarded and watched it, and affirms that for 204 days it partook of no food or water. It showed no emaciation, and appeared as active and strong as at first until within a very few days of its death on May 7, 1882. Tamerlane learned patience from a spider; perhaps Tanner was taught by them how to fast. The Hour, from which we take this item, also has the following: Another spider story is sent from California by the Rev. Dr. McCook, of honey-ant fame. He found a small cocoon of eggs and young spiders, which had no less than five other kinds of insects living in and about it. These intruders consisted of small red ants, a diminutive beetle, and a series formed by a minute chalcid, parasitic on a larger chalcid, which was parasitic on an ichneumon, which was parasitic on the spider. All were seeking to devour the eggs and spiderlings, yet the whole cocoonful, victims included, seemed to be living on most amicable terms.

Various methods for hastening the conversion of cider into vinegar have been recommended. A French method is as follows: Scald three barrels or casks with hot water, rinse thoroughly and empty. Then scald with boiling vinegar, rolling the barrels and allowing them to stand on their sides two or three days until they become thoroughly saturated with the vinegar. The barrels are then filled about one-third full with strong pure cider vinegar and two gallons of cider added. Every eighth day thereafter two gallons of cider are added until the barrels are two-thirds full. The whole is allowed to stand fourteen days longer, when it will be found to be good vinegar, and one-half of it may be drawn and the process of filling with cider be begun again. In summer the barrels are allowed to stand exposed to the sun and in cold weather kept where the temperature is 80 degrees.

A Party of the United States Geological Survey have found it practicable to ride to the highest peak of Mount Shasta, and suggest the establishment there of a third elevated station for weather observations, similar to those on Pike's Peak and Mount Washington.

A HERRING produces from 30,000 to 50,000 eggs, and the eggs are so small in size that 20,000 can be put one layer thick on a square foot of glass.



MISCELLANEOUS.

To Our Readers.

THE PRAIRIE FARMER is the **Oldest, Most Reliable**, and the **Leading Agricultural Journal of the Great Northwest**, devoted exclusively to the interests of the Farmer, Gardener, Florist, Stock Breeder, Dairyman, Etc., and every species of Industry connected with that great portion of the People of the World, the **Producers**. Now in the Forty-Fourth Year of its existence, and never, during more than two score years, having missed the regular visit to its patrons, it will continue to maintain supremacy as a **Standard Authority on matters pertaining to Agriculture and kindred Productive Industries**, and as a **Fresh and Readable Family and Fireside Journal**. It will from time to time add new features of interest, securing for each department the ablest writers of practical experience.

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[Pg 60]



For nothing lovelier can be found In woman than to study *household* good.—*Milton.*

CHRISTIAN CHARITY.

O stay not thine hand when the winter's wind rude Blows cold through the dwellings of want and despair, To ask if misfortune has come to the good, Or if folly has wrought the sad wreck that is there.

When the Savior of men raised His finger to heal, Did He ask if the sufferer was Gentile or Jew? When thousands were fed with a bountiful meal, Was it given alone to the faithful and true?

If the heart-stricken wanderer asks thee for bread, In suffering he bows to necessity's laws; When the wife moans in sickness, the children unfed, The cup must be bitter, O ask not the cause.

Then scan not too closely the frailties of those Whose bosoms may bless on a cold winter's day: And give to the wretched who tells thee his woes, And from him that would borrow, O turn not away!

 $-Dr.\ Reynell\ Coates.$

A CORRESPONDENT writes:

Will give the readers of The Prairie Farmer the favor of telling us all about making sandwiches. How thick should they be when complete? Best made of bread or biscuit? and if chicken or ham, how prepared? Please don't say shred the meat and sprinkle in salt, pepper, and mustard, but tell us how to shred the meat. Do you chop it, and how fine? and how much seasoning to a given quantity? or do cooks always guess at it?

Mrs. C. H.

—Will not some of our lady readers tell us how they make sandwiches. The question is an important one for city as well as country, where so many thousands of "lunches" have to be prepared daily.—[Ed].

A CORRESPONDENT writes the lady readers of The Prairie Farmer concerning a new line of work, which we hope many of them may find profitable:

Much has been written regarding proper and remunerative employment for women. Silk culture, poultry raising, and various other themes have been thoroughly ventilated, and the result has no doubt been very beneficial; but there are many ladies who have no opportunity to raise silk worms, or follow any business of that kind. To that class I wish to open what to me was an entirely new field.

Some three months ago an uncle of mine from Albany, N. Y., was visiting at our house, and we were talking of plated ware, which he is engaged in manufacturing, and to gratify my curiosity he made a plating machine and replated our knives, forks, spoons and caster. It only cost \$4, and it did the work perfectly. Some of our neighbors saw what we had plated, and wanted me to do some plating for them. Since then I have worked twenty-two days, clearing in that time \$94.34. At almost every house I got from \$2 to \$3 worth of plating to do, and such work is most all profit. This business is as nice for ladies as it is for gentlemen, being all indoor work, and any one can do it. My brother, although he worked two days longer than I did, only made \$91.50. I am getting up a collection of curiosities, and to any of your readers that will send me a specimen I will send them full directions for making and using a plating machine like mine that will plate gold, silver

and nickel. Send small pieces of stones, ores, shells, wood, leaves of trees, plants, etc. Anything small will do. What I want to get is as many different specimens from as many different places all over the country as I can. Address

MISS M. F. CASSEY. OBERLIN, OHIO.

The Night Cap.

In a late letter to the August Constitution Jas. R. Randall discourses thus pleasantly of the efficiency of the night cap in producing sleep:

About 9 o'clock at night we boarded the sleeping coach for Washington. Just before retiring for the night my mind, somehow or other, reverted to an editorial article recently published in the New York Times, half serious, half earnest, concerning the latest theory of an English physician as to the prepotent cause of insomnia and nervous disorders generally. It may be remembered that to the abandonment of the night cap of our grandfathers (the cotton or flannel article, not the alcoholic) was attributed the modern tendency of sleeplessness that make even a philosopher like Herbert Spencer more or less of a crank. What I wanted, and wanted as the fellow did his pistol in Texas, was first-class slumber, just such unmitigated repose as occasionally comes to a highly organized baby, unvexed by colic or pure cussedness. I began to think that perhaps that British doctor was right, and that, if it were possible, I would return to the neglected custom of my ancestors. Just at that moment I plunged my hand into my coat pocket and pulled out a silk smoking-cap—a pretty thing, wrought for me long ago by the dainty, delicate, deft fingers of one who now rests in the graveyard at Augusta. This cap was the very thing. I placed it reverently upon my head, with an act of faith, and lay down. The result was magical. Never since I was a boy can I remember to have experienced so perfect and delicious a repose. Not a dream rippled the surface of my calm brain, and I awakened hours afterward with a sense of satisfaction that must be a foretaste of heaven itself. An incipient headache had vanished. Powers of mind that had been dulled were restored to animation and keenness. Not a trace of irascibility remained; but in its place came trooping the sweet angels that Father Faber says continually hover over the goodhumored man. I declare that the metamorphosis was so complete that I almost needed an introduction to my new self. And this prodigy was created by one grand, complete and unusual slumber, when wearing a nightcap! Subsequent experiments have been relatively successful; so I am getting to be an enthusiast on the subject. Some folks say that it is a delusion, a mere freak of the imagination. Be it so. If a nightcap can extinguish my imagination at bed-time, thank God for the discovery! My good old mother tells me that when I was a little fellow she used to tie a nightcap under my chin, and that I was a famous sleeper in those times. She is a firm believer in the efficacy. Likely enough if a man eats pickled pig's feet at midnight or drinks unlimited whisky, even a silk or cotton nightcap may not consign him to the arms of Morpheus; but it may work wonders for a sober person who is cursed with the pestilent habit of conjuring up all manner or odd fancies when his head touches the pillow, instead of dismissing the workmen who hammer on the forges of the brain. The majority of the men will rather suffer nocturnal horrors than be laughed at for wearing nightcaps; just as the majority of women will prefer to wear shoes that are instruments of disease and torture rather than have their feet shod comfortably and sensibly. I have a clear idea as to which is the course of wisdom and which the alternative of folly. But this is a diversion which you, readers, may smile at or not as the whim seizes you.

How to Treat a Boy.

Get hold of the boy's heart. Yonder locomotive comes like a whirlwind down the track, and a regiment of armed men might seek to arrest it in vain. It would crush them, and plunge unheeding on. But there is a little lever in the mechanism that at the pressure of a man's hand will slacken its speed, and in a moment bring it panting and still, like a whipped spaniel, at your feet. By the same little lever the vast steamer is guided hither and yonder upon the sea, in spite of the adverse winds or current. That sensitive and responsive spot by which a boy's life is controlled is his heart. With your grasp gently and firmly on that helm, you may pilot him whither you will. Never doubt that he has a heart. Bad and willful boys very often have the tenderest hearts hidden somewhere beneath incrustations of sin or behind barricades of pride. And it is your business to get at that heart, keep hold of it by sympathy, confiding in him, manifestly working only for his good by little indirect kindnesses to his mother or sister, or even his pet dog. See him at his home, or invite him into yours. Provide him some little pleasures, set him at some little service of trust for you; love him; love him practically. Anyway and every way rule him through his heart.

[&]quot;ETIQUETTE now admits of a second plate of soup." That is all right, but if a man's appetite will not admit of a second plate of soup, etiquette is nothing to him. And if he has the appetite, he will

Rand, Avery, & Co., Boston, announce a new story—a thrilling and powerful tale—involving the pregnant question of Mormonism. The book will be amply illustrated and sold by subscription. The publishers say that in their opinion this book will serve a purpose not unlike Uncle Tom's Cabin (of which, by the way, four hundred thousand copies—eight hundred thousand volumes—were issued in this country, every one of which bore their imprint). It will hasten the day for the uprising of an indignant nation, and their verdict will be as in the case of slavery—this disgrace must cease—the Mormon must go!

Pamphlets, Etc., Received.

Honey, as Food and Medicine. Presented by J. L. Harris, 697 W. Lake St., Chicago. This little work contains many valuable recipes showing how honey can be made useful medicinally and as an appetizer. For housekeepers in the country who have bees it will be found especially useful.

Spring catalogue and price list of the Eclectic Small Fruit Nursery. O. B. Galusha, Morris, Ill.

New State Fair Grounds: Statement by the executive committee, together with the rejoinder of the Ohio State Board of Agriculture to the Franklin County Society's reply. This pamphlet will be interesting to the farmers of that State.

Landreth's Companion for the Garden and Farm, Philadelphia, Pa. Price 10 cents. This book is, as usual, handsomely gotten up, and is truly a "companion." The prettily colored cover is but an index to the many colored pages within. It also contains many interesting plates showing the manner and extent of work carried on by this enterprising firm. The book is replete with valuable information.

Supplemental Report of the Department of Agriculture of Georgia, for the year 1883, Circular No. 49, new series. Shows the yield of the leading crops of the State as compared with 1882; the average yield per acre, and other matters of interest to the farmers of Georgia.

Descriptive Catalogue of C. A. Hiles & Co.'s saws and ice tools, 234 South Water street, Chicago.

Descriptive catalogue and price list of H. F. Dernell & Co.'s ice tools, Athens, N. Y.

A. E. Spaulding's annual descriptive catalogue and price list of flower seeds, plants, and tools, Ainsworth, Iowa.

Report No. 3 of the Department of Agriculture, Division and Statistics, December, 1883, Washington. This report is full of very useful statistical information.

Foreign Press Opinions of Madame Marcella Sembrich in Mr. Henry E. Abbey's Grand Italian Opera Company. These opinions are very flattering, and if true, the Madame deserves to be well patronized.

Chicago Medical Times, edited by W. H. Davis, M.D. \$2.00 per annum, 25 cents a single copy.

Special Report No. 3 of the Department of Agriculture, miscellaneous, Washington. This report is given up to the discussion of Mississippi, its climate, soil, productions, and agricultural capabilities. By A. B. Hurt, Special Agent.

The American Naturalist for January contains the usual number of well-written articles, and is finely illustrated. This magazine is devoted to the natural sciences in the broadest sense of that term

The Silver Dollar: The original standard of payment of the United States of America, and its enemies. By Henry Carey Baird, Philadelphia, Pa., 810 Walnut Street.

The twenty-first and twenty-second quarterly report of the Pennsylvania Board of Agriculture, 1883. Harrisburg, Pa.

The Storrs & Harrison Co.'s Catalogue (No. 2) for 1884. Painesville, Ohio. This catalogue is fully illustrated with cuts of flowers and vegetables of almost every known description, so that the purchaser can see just what he is buying before sending order.

Ohio Crop Report, December, 1883. With analyses and valuations of fertilizers, meteorological reports, etc.

Compiled Correspondence.

been below zero. It has been above the freezing point only on one morning, the 13th. Sleighing is good, except on some of the graveled roads. Cattle are in good condition. The horse distemper prevails in some localities among colts. Hay is plenty. A few fat hogs were sold last week. One farmer, in Kaneville, sold 80 hogs, averaging 443 pounds each, at \$6.10 per cwt. There are but very few fat hogs left. The cold, dry weather has improved the condition of corn in the cribs. Coarse feed is scarce. Considerable corn has been shipped here from Kansas. Bran and middlings are coming in from Minneapolis, and sell at \$15 and and \$17 per ton. Cheese factory dividends for November from \$1.50 to \$1.60 per cwt. Large quantities of milk are daily shipped into Chicago from this county.

J. P. B.			

I see that you request items in regard to the cold wave that swept over our country during the first week in this month. There is no doubt the cold was as intense over the country generally as it has been known for many years, or perhaps ever before, but so far as I can learn the damage to fruit trees, etc., is very slight. On the morning of the 16th of December we had our first snow, but the weather was quite pleasant to the end of the year, with occasionally slight freezing, but thermometer never down to zero.

The result of this favorable weather was the thorough ripening up of the wood of all fruit and ornamental trees, so that when on the 5th of the present month the mercury ran down to 26 degrees below zero, and in some parts of the country far below that even, the damage was very slight. The writer has been extensively engaged in cutting scions, and knows whereof he speaks. I have also examined some peach trees and find the wood slightly discolored but not dead. I did not thoroughly examine the fruit buds of the peach, but suppose, of course, they are all killed. Had this intense cold weather occurred early in December, there is no doubt but the damage would have been immense.

There has been a great loss of potatoes in cellars and pits, as most people had worked themselves into the belief that we were to have a mild winter, and had not prepared their cellars to resist cold at the rate of 30 degrees below zero. The result is that thousands of bushels of potatoes are frozen and ruined, and although the largest crop of potatoes was raised last year that ever was raised in the United States, yet potatoes will be high priced before planting time.

H. A. Terry.	
Crescent City, Ia., Jan. 19.	
, , ,	

Seed Corn Famine.

Probably nineteen farmers in twenty must buy seed corn for next spring's planting, on account of the failure of the '83 crop to ripen. We must look sharp to the seeds we buy, that they are better than our own, as many unreliable parties will offer inferior stocks, to take advantage of the demand. We suggest that every corn grower should send to Hiram Sibley & Co., the reliable seedsmen at Rochester, N. Y., and Chicago, Ill., for their catalogue and seed-corn circulars. This house makes a specialty of seed-corn and we believe that they will do what they say they will.

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[Pg 61]



Jule Fisher's Rescue.

It had been an unusually severe winter, even for Northern Aroostook. Snow-fall had succeeded snow-fall, with no interval that could really be called "thaw," till the "loggers" had finished their work; and as they come plodding home on snow shoes, they all agreed that the snow lay from ten to twelve feet deep on a level in the woods.

No wonder, then, that the warm March sun came to shine upon it day after day, and the copious spring showers fell, there should have been a very unusual "flood," or freshet. Every one predicted that when the ice should break in the river, there would be a grand spectacle, and danger, too, as well; and all waited with some anxiety for the "break" to come.

One morning, we at the village were awakened by a deep, roaring, booming, crashing noise, and sprang from our beds, crying:

"The ice has broken up! The ice is running out!"

In hardly more time than it takes to tell it, we were dressed and at the back windows, which looked down upon the river!

It was indeed a grand sight!

Huge cakes of ice of every shape and size were driving, tumbling, crashing past, as if in a mad race with each other. The river, filled to overflowing, seemed in angry haste to hurl its icy burden down the falls below.

But after a few days the river ran clear, save for the occasional breaking of some "jam" above. Along the margin of the broad stream, however, there were here and there slight indentures, or notches, in the banks, where the ice had escaped the mad rush of waters and still clung in considerable patches.

It was upon one of these still undisturbed patches that "Jule" Fisher, a rough boy of fourteen, with several of his equally rough comrades, was playing on the lovely morning upon which my story opens.

These lads were not the sons of the steady, intelligent, church-going inhabitants of this quiet Northern hamlet, but were from the families of "lumbermen," "river-drivers" and "shingle-shavers." For some time they had been having boisterous sport, venturing out upon the extreme edges of the ice and with long poles pushing about the stray cakes which occasionally came within their reach.

At length they grew tired of this, and began to jump upon ticklish points of ice; and as these began to crack and show signs of breaking away, the boys would run, with wild whoops, back to shore, the very danger seeming to add to their enjoyment. Then, with poles and "prys," they would work upon the cracking mass until it floated clear and went whirling down the rapid current.

"Ahoy, boys!" called Jule, who was seemingly their leader. "Up yender's a big cake that only wants a shove! Come on! Let's set 'er a-going!"

No sooner said than done. Away went the noisy fellows to the projecting point of ice. A few smart jumps sent it creaking and groaning, as though still unwilling to quit its snug winter bed. One more jump, and the boys all ran with a shout beyond the place where the ice was cracking off—all save Jule.

It had not broken clear, and he was determined to set it going, when he would spring on the firm ice beyond, as he had done once or twice before.

But this time he was over-bold and not sufficiently watchful. A large cake of ice had come floating down the river unnoticed either by him or his friends, and striking the edge of the nearly loosened mass, shoved it out into the swift, black water.

Poor Jule! He ran quickly to the freshly-broken edge—but, alas! too late for the intended spring. The swiftly-rushing current had borne him many yards from the shore and from his companions.

There he stood—for an instant in dumb amaze—balancing himself upon his rocking raft with the

pole he had been using. To attempt to swim ashore would have been useless. He was a clumsy swimmer at best; and the cold, rushing waters and floating ice cakes made swimming almost impossible.

He could not get off. To stay seemed sure death. Dumb with fright, for a moment he stood in speechless terror. Then there rang across the wild, black river and through the quiet streets of the village, such a yell of abject fear as only a lusty lad of that age can give. It was a cry that chilled the heart of every one who heard it.

A "four-days' meeting" was in session. The village church-goers were just issuing from their houses in answer to the church bell, when that pitiful cry and the shouts of "Help! Help! A boy in the stream!" reached them, and drew them all quickly to the river bank.

In a few minutes the shore was lined with excited men and women. Yet all stood helplessly staring, while poor Jule on his ice-raft was floating steadily down toward the falls.

Never shall I forget how he looked as he stood there in the middle of his floating white throne! There was something almost heroic in his calm helplessness. For after the first wild cry, he had not once opened his lips.

Downward he floated, drawn swiftly and surely on by the deep, mighty rush of waters setting into the throat of the cataract. The heavy roar from far below sounded like the luckless lad's knell. He stood but a single chance—and that was hardly a chance—of his ice-raft lodging against a tilted-up "jam" of cakes and logs which had piled against a jagged ledge that rose in mid-stream, just above the brink of the precipice.

This "jam" had hung there, wavering in the flood, for thirty-six hours. Every moment it seemed about to go off—yet still it clung, in tremor, as it seemed, at the fatal plunge which would dash it to pieces in the thundering maelstrom below.

Good fortune—Providence, perhaps—so guided Jule's ice-raft that it struck and lodged against the "jam," just as the horrified watchers on shore expected to lose sight of the lad forever in the falls. "If it will only hang there!" muttered scores, scarcely daring as yet to speak a loud word.

They could see the cake, with Jule on it, heaving up and down with the mighty rhythmic motion of the surging torrent; and all ran along down the banks, to come nearer. The boy stood in the very jaws of death. Beneath, the cataract roared and hurled up white gusts of spray.

Just at this moment, a short, thick-set man, with a round, good-natured face, joined the crowd. For a moment he stood looking out at the lad, then slapping another young man on the shoulder, said, hurriedly, "Isn't there an old bateau stowed away in your shed, Lanse?"

"Yes," was the reply.

"Quick, then!" exclaimed the first speaker. "There isn't a moment to lose."

"But, Mac," answered Lanse, as he hurried after him. "I'm afraid she's no good; she's old and she's been stowed away all winter. Ten to one the old thing leaks like a riddlin' sieve.

"But we mustn't lose a chance!" exclaimed Mac. "That jam will go out within half an hour, if it doesn't within ten minutes!"

By this time the two had reached the shed. They quickly drew the bateau from its wintering place, and taking the long, light boat upon their shoulders, ran rapidly through the village and down to the river.

Meantime, two or three other men had run to fetch "dog warps" and "towing-lines," a large number of which are always kept in these backwoods lumbering hamlets, for use on the rivers and lakes, when logs are rafted out in the spring.

Acting under Mac's prompt orders, a six-hundred foot warp was at once made fast to a ring in the stern of a bateau, and another line laid ready to bend to the first.

Jumping into the bateau, paddle in hand, and a boat-hook laid ready for instant use, the bold young fellow now ordered the men to shove off the skiff into the river and then pay out the line, as he should direct—thus lowering him, yard by yard, down toward the "jam" where Jule stood.

Rod by rod, they let him down toward the roaring abyss of furious waters, till the bateau—guided by the paddle, and held back now by the main strength of twenty men—touched the ice-cake.

But even as it touched, the cake began to slide off the jam; and Jule was thrown on his hands and knees.

Quick as thought, however, his courageous rescuer struck his boat-hook into the ice and held fast while Jule, stiff with fright, tumbled in at the bow of the bateau.

He was hardly in the boat when the whole mass of ice and logs went over the falls.

A shout arose, and when a few minutes later the bateau was drawn safely back up the stream, and Mac stepped ashore with a rather bashful smile on his round, fresh face, every one joined in long and prolonged cheers.

As for Jule, he had to be helped out of the boat and led home; for he was, as they said, "limp as a

rag;" and it was noticed that after this perilous adventure he was a much more sober and thoughtful boy.

Pray do not imagine, reader, that I have been telling you a "made-up" story, for what I have related is true, the writer herself being an eye-witness to the incident while a teacher in a backwoods school-district on the banks of the Aroostook.

LIVE STOCK, Etc.

PUBLIC SALE OF Short-Horn Cattle

AT Somers, Kenosha Co., Wis. ON Wednesday, March 19, 1884.

I will sell at public sale, at my farm near Somers, Wis., at above time and place, my entire herd of Thoroughbred Short-horn cattle, numbering forty head. Among them are many of the choicest families. Included in the sale will be the grand young bull Orpheus 13th, bred at Bow Park, a beautiful red, and one of the finest bulls in the West. The cows are all Breeders, and will have calves by their sides, or be safe in calf. I offer this grand herd of cattle with reluctance, solely on account of my advanced age and failing health. Catalogues ready about Feb. 15. Lunch at 12. Sale to begin at 1. Free conveyances will meet the trains on morning of sale at Somers, on C. M. & St. Paul, and at Kenosha for C. & N. W. R. R.

WM. YULE, Somers, Kenosha Co., Wis.

J. W. Judy, Auctioneer.

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All of fine quality, solid color and bk. points. Ages, from six to eighteen months. Sons of Mahkeenae, 3290; brother of Eurotus, 2454, who made 778 lbs. butter in a year, and out of cows of the best butter blood, some having records of fourteen and fifteen lbs. per week. No fancy prices.

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N. B.—If I make sales as formerly will send a car with man in charge to Cleveland, getting lowest rates.

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we furnish a tool which can scarcely be worn out; and when worn, the wearable parts, a prepared wood journal, and movable thimble in the hub (held in place by a key) can be easily and cheaply renewed. We guarantee our "BOSS" to plow more acres than any other three Coulters now used.

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[Pg 62]



BETWEEN THE TWO LIGHTS.

No use talking, missy—no use talking
'Bout de daylight and dat kind ob ting
'Tween the two lights—sunset and sunrising—
Dis ole nigger happier dan a king.
Dis ole nigger don got all he want to,
All he want, and more 'an he can say;
Gib him night, de darker and de better,
White folks more 'an welcome to de day.

In de day him ole and pore and wretched,
Got to tote de load and swing de hoe,
Got to do jest what de white folks tole him,
Got to trabel when dey tole him go.
Don't own nothing but an empty cabin;
Got no wife, no chillen at him knee;
Got no nothing but a little pallet,
And a pot to bile him hominy.

In de day him gits no 'spectful notice, Him is only "dat ole nigger Brown;" In de night him tells you, little missy, Things git mightily turned upside down. Den somehow him's young and rich and happy, Den him own more acres dan him see: Den him got a powerful lot ob hosses, Den de white folks stop an speak to he.

Den him hab a big house like ole massa's,
Dan Melinda is him lubly wife;
Den de little chillen call him pappy,
Den him see de bery best ob life.
Den sometimes him talking in de meeting.
An' him feel de biggest in de town,
For at night him neber "dat ole nigger,"
Him the Reberend Mister Isaac Brown.

"Dreaming," is him? Dreaming, do you call it?
Then him s'pose it's living in de day.
Well, him likes de night-time and de dreaming,
For him griefs wid sunshine go away.
No use talking, missy, no use talking
'Bout de sunshine and dat kind ob ting;
'Tween de two lights—sunset and sunrising—
Dis ole nigger happier dan a king.

THE TWO OVERCOATS.

When Amos Derby came out of Levi Rosenbaum's pawnshop, the richer by five dollars, but leaving his overcoat in the hands of the Jew, he made his way directly to Sillbrook's saloon, where, he felt sure, he should meet half a dozen at least of his boon companions.

He was not mistaken. The bar-room was crowded, and a general shout of welcome greeted him as he entered, for Amos was a generous fellow, and was always willing to treat.

The five dollar bill was quickly broken by the jovial bar-keeper, and two hours later when Amos waked rather unsteadily out of the saloon, he had not a cent in his pocket. But this did not trouble him in the least. He had spent too much money in Sillbrook's during the last two years to think anything of squandering in one evening such a paltry sum as five dollars.

As he left the saloon by the main entrance, he saw a man emerge from a side door of the building, and cross the street with rapid strides; a tall man, well dressed, and bearing about him a look of prosperity. He wore a very handsome overcoat with sealskin cuffs and collar, a sealskin cap, and well fitting gloves. Drunk as Amos was he recognized him at once; it was Sillbrook himself.

"Been in the back room countin' up his gains, most likely," he muttered thickly. "He's above standin' behind the bar nowadays."

Amos could well remember when Sillbrook had been only a mill-hand like himself, earning twelve dollars a week. But he had been a prudent, saving man always, and had early made up his mind to be rich, no matter at what cost of conscience and principle. With this end in view he had purchased a saloon, and cordially invited his former fellow workers at the mill to patronize him. This they were very willing to do, for Sillbrook knew how to make his saloon attractive; and he soon had as much custom as he could well attend to. At length he hired a bar-keeper, and after a couple of years was never seen behind the bar himself. He had grown rich very rapidly, and now owned one of the finest houses in the town, and was able to gratify every taste and whim, while those who had helped him to his wealth by drinking his liquors were as poor as ever—many of them poorer.

Amos Derby had been one of Sillbrook's best customers ever since the saloon had been opened, and as a natural consequence had had little to spend in comforts for his wife and children. He still lived in the small cottage he had bought on first moving to the town, and had seen it grow more and more dilapidated every year without making any attempt to repair it.

But though the outside was far from attractive, the inside was always neat and clean, for, whatever her faults of temper, Jane Derby was a woman who believed thoroughly in abiding by heaven's first law, and who labored early and late to make both ends meet, something she would not have been able to accomplish had she not possessed skill as a dressmaker, for Amos seldom gave her any of his earnings. She was sitting in the kitchen sewing when her husband came in, and a bitter expression crossed her face as she saw his condition.

"Drunk, as usual," she said, harshly, "when were you anything else?"

"When you was kinder spoken, perhaps," answered Amos, with spirit. "This is the sort of welcome I get every night in the week. 'Tain't much wonder I go to Sillbrook's." He dropped into a chair as he spoke, and began to pull off his boots.

"If you didn't have one excuse you'd make another," said Jane, flushing, and bending closer over

her sewing. "Perhaps you think I ought to feel pleasant when you come home in this state. Well! it ain't human nature, that it ain't! I mind the time you brought home your wages reg'lar, every Sat'day night, and I was willin' enough then to speak kind to you. Now the children would starve if it wasn't for me. Where's your overcoat?" a sudden pallor creeping into her face as she asked the question. "Yes! where is that overcoat?—what have you done with it that you haven't it on—where is it?"

"Where d'ye s'pose?" said Amos, roughly.

"Down at the pawn-shop, of course," cried his wife, angrily, "where every decent coat you ever had has gone. But you promised me you'd never part with this one, Amos Derby, and you've broke your word. I might have known you would! And to think how I worked for it, and let the children do without shoes! It's too bad! I declare it is! I gave twelve dollars for it only a month ago, and I'll wager you let Levi have it for half o' that. It's a shame, a dreadful shame."

"Stop that. I won't have it," said Amos in a threatening tone. "There's no use whining over it now. If you say another word about it I'll go out again, right off."

"Go!" said Jane, fiercely, "and I wish it was forever! I wish I was never to look on your face again! You're naught but a trouble and a disgrace to us all!"

"All right," said Amos, as he pulled on his boots again, "I'm goin'. I'll take you at your word. You won't see me again in a hurry; now you just mark that. A trouble and a disgrace, am I?"

"Yes, you are!" said Jane, her anger increasing as her mind dwelt upon the loss of the coat she had worked so hard to earn. "I mean all I've said, and more, too! Go! go to Sillbrook's! Ask him to show you the overcoat he's wearin'. I saw it yesterday, and yours wasn't a circumstance to it! Go! Give him every penny you've got! He needs it!" with a bitter little laugh. "His children's feet are all out on the ground, and his wife hasn't a decent dress to her name," with a glance at her faded calico gown. "Help him all you can, Amos Derby, he's in need o' charity."

Amos made no answer. He was considerably more sober than when he had left the saloon, for the walk home through the fresh winter air had done him good, and he felt the force of his wife's words. They rung in his ears as he slammed the kitchen door behind him, and, taking the road which led by the mill, walked rapidly away.

He was soon in the heart of the town, but he did not think or care where he was going. His only idea was to get away from the sound of Jane's sharp voice, and he turned down first one street and then another, without pausing, until he came to Elm Avenue, on which were situated the handsomest houses in the town. There was a large, square brick house on the corner, with stables in the rear, a conservatory on one side, and a beautiful lawn in front, and this place seemed to possess some strange fascination for Amos, for he stopped suddenly at the gate and stood there for fully five minutes, admiring, perhaps, the mansion's air of solid comfort and wealth.

The iron gate was open, and presently, as if impelled by some impulse he could not resist, he entered, and walking softly up the graveled path, looked in at one of the long windows.

The room upon which he gazed was very handsomely furnished. The chairs were luxuriously cushioned, a large mirror hung over the mantel, the carpet was of velvet, a crystal chandelier depended from the ceiling, and a bright fire burned in the open grate, before which sat a lady richly dressed, reading aloud to three children, sitting on ottomans at her feet.

For a long, long time Amos Derby stood by the window, his eyes wandering from one article of luxury to another, a dark frown on his face, and his teeth set hard together.

"My money," he muttered, when at last he turned away. "I've given it to him, cent by cent, and dollar by dollar, and I've naught to show for it, while he! he's got his fine house, and his rich carpets, and his handsome clothes. It's the same money, only I've spent it in one way, and he in another."

As the last words left his lips a hand fell heavily upon his shoulder, and a voice—the voice of Sillbrook—asked him harshly what he wanted.

"A look into your fine parlor," answered Amos roughly. "Strange I wanted to see it, wasn't it? It ought not to matter to me, of course, what use you make o' my money."

"Your money!" said Sillbrook, with a loud laugh. "That's a crazy joke! Come, my man, you're drunk. Get out of here, or I'll have you put where you can make your jokes to yourself."

"You think you're rich enough now to speak to me as you choose," said Amos hotly. "Time was when you wouldn't have dared. But I tell you, Jason Sillbrook, I've come to my senses to-night. It's a poor bargain where the gain's all on one side. We started even, and you've got all and I nothin'. But I tell you now, that, heaven helpin' me, you'll never have another dollar o' mine to spend. You'll never buy another coat like this out o' my money," and he struck in sudden passion the seal-trimmed garment which covered Sillbrook's ample proportions.

"Be off with you," said the saloon-keeper. "You're too drunk to know what you're talking about."

"And who made me drunk? answer that question, Jason Sillbrook," screamed Amos.

"I'll answer nothing," said Sillbrook, and, tearing his coat from the grasp Amos had laid upon it,

he strode up the path and disappeared within the house.

The next morning, when the superintendent made his round of the mill, he missed one of the machine hands.

"Where's Derby?" he asked, angrily.

No one could answer his question. No one had seen Derby that day. And no one at the mill saw him for many a day to come.

"I might have been kinder to him," thought Jane, when at last she became convinced that her husband had in truth left her. "Perhaps I did say more'n I should at times. Poor Amos! he was no more to blame than I was, after all. Perhaps he would have kept out o' that saloon if I'd only coaxed 'stead o' railing at him. He wasn't bad-hearted, an' he never meant more'n half he said."

And as the days went by, and she forgot her past sorrows, she had only kind thoughts of her absent husband, and blamed only herself for their mutual misery. She wished with all her heart that she could "begin all over again," and try the effect of kindness and forbearance on Amos.

But no such opportunity was given her, and she had little time for bitter thoughts or unavailing regret.

The superintendent of the mill gave her eldest child, a lad of fourteen, a situation where he could earn \$4 a week, and a girl a year younger found work in a millinery store. Thus Jane was relieved of much anxiety, and she was so skilful with her needle that she soon found herself able to "lay by something for a rainy day," as she expressed it.

Gradually the children were provided with comfortable clothes and were sent to church and to Sunday-school, from which they had been debarred for several years, owing to a lack of decent apparel; the house was repaired, new furniture bought, a flower garden laid out in front of the cottage, and a new fence erected. People began to speak of Jane as a surprisingly smart woman, and to say that her husband's desertion had been a blessing in disguise. But in spite of her prosperity there was an ache ever at Jane's heart, and a regret which no good fortune could stifle.

"If I'd only been kinder!" she would say to herself, as she lay awake at night and thought of her absent husband. "It was my fault he drank; I see that now. He was always telling me that my temper'd ruin him in the end, and now his word's come true."

She felt as if she ought to make some atonement for her past sin, even though she was never to see her husband again, and with this end in view she determined to cure herself of the habit of scolding and fault-finding about which poor Amos had complained so bitterly.

After a few struggles at first, she found her new path very pleasant to her feet, and was encouraged to persevere by the artless comments made by her children on the improvement in her temper.

"You're so good, now, mother," they would say, when, instead of the sharp rebuke they had expected on the commission of some childish folly, came very kind words of regret and gentle reproof. "You are so different from what you used to be. If father could only come home and live with us now how happy we would all be."

But Amos did not come. Year after year passed, and he sent no word or sign; and at length both wife and children grew to think of him as dead.

Seven years! Seven years to a day had passed since Amos Derby had left his home, and up the street and past the mill came a tall man, with a cap of sealskin pulled low over his eyes, and handsome overcoat trimmed with the same costly fur over his arm. He whistled as he walked, and seemed in great good humor, for occasionally he would break out into a loud laugh.

But as he came near the cottage where Jane Derby lived, he became more quiet, and an anxious expression stole into his face.

"I wonder if she'll know me," he muttered.

Going up to the window of the kitchen, he shaded his eyes with one hand and looked in.

Jane was setting at supper, her five children about her. The room looked warm and comfortable. A bright fire burned in the stove, the kettle sang merrily, and a big maltese cat dozed among some plants on the broad window seat.

Fred, the eldest son, a muscular young man of twenty-one now, was speaking, and his words came distinctly to the ears of the watcher outside.

"Brooks goes to-morrow," he said, "and we are to have a new superintendent from ——. I hope he'll have a better temper than Brooks, and I wish——Who's that?" as a sudden knock came upon the door.

"The new superintendent," said the tall man, as he walked into the room and threw his overcoat on a chair.

"Jane, don't you know me?"

With a glad cry that was almost a sob, Jane sprang forward, and was folded in the stranger's arms.

"Children," she said, when she could speak, "this is your father, come back to us at last."

"And to stay, please God," said Amos Derby, fervently, as in turn he embraced his children affectionately. "Jane, you shall have no room to complain of me in the future. I mean to make up to you for all I made you suffer before I found out what a fool I was to think more of my appetite than of my wife and children. Do you know what taught me my lesson?—Sillbrook's overcoat; and I've got one just like it. It will be a reminder, you know. And I've something better still—the place of superintendent at the mills here. I've worked hard, Jane, but my reward has come at last. When I left here I resolved never to come back until I could make myself worthy of you and the children. I found a place in the mills at ——, and worked my way up to be superintendent. Where there's a will, there's always a way, you know. I learned that you didn't need my help, so I waited on year after year, and now——"

"We are together, never to part again this side the grave," finished Jane, "Amos, God rules us all for the best. Let us thank Him for the blessings He has bestowed upon us; and then—suppose you let us see how you look in the overcoat you've come by so justly."

The news that Amos Derby was the new superintendent soon flew about the town, and great was the surprise thereat. No one was more astonished, perhaps, at the turn affairs had taken than Jason Sillbrook, and he wondered greatly at the good fortune of the man he had once so despised; but he never knew that it was largely due to the lesson Amos had learned from the saloon-keeper's overcoat.—*The Christian at Work*.

CONSUMPTION CURED.

An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellows. Actuated by this motive and a desire to relieve human suffering, I will send free of charge, to all who desire it, this recipe, in German, French, or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper.

W.A. Noyes, 149 Power's Block, Rochester, N.Y.

Honesty of purpose must not be held as evidence of ability.

[Pg 63]



BAIT OF THE AVERAGE FISHERMAN. H. C. DODGE.

This is the bait the
fishermen take,
the fishermen
take, the fishermen take,
when they start out the
fish to wake so
early in the
morning. They
take a nip before they go—a
good one, ah! and long and slow,
for fear the chills will lay them low
so early in the morning. Another when
they're on the street, which they repeat each

time they meet for "luck"—for that's the way to greet a fisher in the morning. And when they are on the river's brink again they drink without a wink-to fight malaria they think it proper in the morning. They tip a flask with true delight when there's a bite; if fishing's light they "smile" the more till jolly tight, all fishing they are scorning. Another nip as they depart: one at the mart and one to part, but none when in the house they dart, expecting there'll be mourning. This is the bait the fishermen try who fishes buy at prices high and tell each one a bigger lie of fishing in the morning.

Whose Cold Feet?

"Are you troubled with cold feet on retiring?" asked Yeast of Crimsonbeak, Saturday night, as they were returning from market freighted with provender.

"I should say I was!" replied Crimsonbeak emphatically, while a regular chills-and-fever shudder was seen to distribute itself over his frame at the recollection which the question recalled.

"I suppose you would like to learn how to avoid them?" replied the philanthropist, smiling at the thought of an opportunity to fire off one of his pet theories.

"I would give almost anything to be fortunate enough to escape them," said the despairing Crimsonbeak, in all truthfulness.

"Well it is easy enough done," went on his companion; "soak your feet in cold water the first thing when you get up in the morning; towards night run about three-quarters of a mile, and then soak your feet again in cold water on retiring."

"Well, I can't see how that is going to keep her feet from troubling me."

"Her cold feet from troubling you!" repeated Yeast, a little confused. "What do you mean?"

"Mean? Why, I mean that my wife's cold feet are the ones that chill me with an Arctic region touch. Whose feet did you suppose I meant, my mother-in-law's?" shouted the excited Crimsonbeak, darting into his gate and leaving his neighbor to his own reflections.

Changed Relations.

"Now that we are engaged," said Miss Pottleworth, "come and let me introduce you to papa."

"I believe that I have met him," replied young Spickle.

"But in another capacity than that of son-in-law."

"Yes—er, but I'd rather not meet him to-night."

"Oh, you must," and despite the almost violent struggles of the young fellow, he was drawn into the library, where a large, red-faced man, with a squint in one eye, and an enlargement of the nose, sat looking over a lot of papers.

"Father," said the girl.

"Hum," he replied, without looking up.

"I wish to present to you—"

"What?" he exclaimed, looking up and catching sight of young Spickle. "Have you the impudence to follow me here? Didn't I tell you that I would see you to-morrow?"

"Why, father, you don't know Mr. Spickle, do you?"

"I don't know his name, but I know that he has been to my office three times a day for the past week with a bill. I know him well enough. I can't pay that bill to-night, young man. Come to my office to-morrow."

"I hope," said Spickle, "that you do not think so ill of me. I have not come to collect the bill you

have referred to, but—"

"What? Got another one?"

"You persist in misunderstanding me. I did not come to collect a bill, I can come to-morrow and see you about that. To-night I proposed to your daughter, and have been accepted. Our mission is to acquaint you with the fact and gain your consent to our marriage."

"Well," said the old fellow, "is that all? Blamed if I didn't think you had a bill. Take the girl, if that's what you want, but say, didn't I tell you to bring the bill to-morrow?"

"Yes, sir."

"Well, you needn't. Our relations are different now. Wish I had a daughter for every bill collector in town."

It Makes a Difference.

"So you have been fighting again on your way home from school!"

"Y-yes, sir."

"Didn't I tell you this sort of business had got to stop?"

"Yes, pa, but-"

"No excuses, sir! You probably provoked the quarrel!"

"Oh, no! no! He called me names!"

"Names? What of it? When a boy calls you names walk along about your business. Take off that coat!"

"But he didn't call me names!"

"Oh, he didn't? Take off that vest!"

"When he called me names I never looked at him, but when he pitched into you, I—I had to fight!"

"What! Did he call me names?"

"Lots of 'em, father! He said you lied to your constituents, and went back on the caucus and had!"—

"William, put on your coat and vest, and here's a nickel to buy peanuts! I don't want you to come up a slugger, and I wish you to stand well with your teacher, but if you can lick the boy who says I ever bolted a regular nomination or went back on my end of the ward, don't be afraid to sail in!"—Free Press.

One of the Harvard students has fitted up his room at a cost of \$4,000. We suspect that the young man's room is better than his company.

"Don't be afraid," said a snob to a German laborer: "sit down and make yourself my equal." "I would haff to blow my brains out," was the reply of the Teuton.

"Yes," said Mrs. Egomoi, "I used to think a great deal of Mrs. Goode, she was always so kind to me; but then, I've found out that she treats everybody just the same."

Jerrold said to an ardent young gentleman, who burned with a desire to see himself in print: "Be advised by me, young man: don't take down the shutters before there is something in the window."

Arthur—"I say, what do you mean by fighting my hog all the time?"

Bismarck—"I means nodding in de vorld; I vash not fighting dot pig. We vash choost playing mit one anudder."

"Yes," said a fashionable lady, "I think Mary has made a very good match. I heard her husband is one of the shrewdest and most unprincipled lawyers in the profession, and of course he can afford to gratify her every wish."

PRINTER'S INK.

Little drops of printer's ink, A little type "displayed," Make our merchant bosses And all their big parade.

Little bits of stinginess,
Discarding printer's ink,
Busts the man of business,
And sees his credit sink.

"Jump on the scale," the butcher said
Unto a miss one day,
"I'm used to weighing, and," said he,
"I'll tell you what you weigh."
"Ah, yes," came quick the sweet reply
From lips seemed made to kiss,
"I'm sure, sir, that it would not be
First time you've weighed amiss."
The butcher blushed; he hung his head
And knew not what to say;
He merely wished to weigh the girl—
Himself was given away.

"What did that lady say?" asked Mr. Buyem of his confidential clerk. "I'd rather not repeat her words, sir," replied the clerk. "But I must know, Mr. Blume—must know, sir." "Oh! if you insist upon it, sir, I suppose I must tell you. She said you were all business, but you lacked culture." "So?" exclaimed Mr. Buyem, in astonishment. "Lack culture, eh? Look here, Mr. Blume, d'ye know you' oughter told me that long ago? Let's have some right away before Scribe & Blowhard can get ahead of us."

OUT OF THE DEPTHS.

Our Correspondent's Researches and a Remarkable Occurrence He Describes.

St. Albans, Vt., Jan. 10, 1884.

Messrs. Editors: The upper portion of Vermont is one of the pleasantest regions in America during the summer, and one of the bleakest during the winter. It affords ample opportunity for the tourist, providing he chooses the proper season, but the present time is not that season. Still there are men and women here who not only endure the climate, but praise it unstintingly, and that, too, in the face of physical hardships the most intense. The writer heard of a striking illustration of this a few days since which is given herewith:

Mr. Joseph Jacques is connected with the Vermont Central Railroad in the capacity of master mason. He is well advanced in years, with a ruddy complexion and hale appearance, while his general bearing is such as to instantly impress one with his strict honor and integrity. Several years ago he became afflicted with most distressing troubles, which prevented the prosecution of his duties. He was languid, and yet restless, while at times a dizziness would come over him which seemed almost blinding. His will power was strong, and he determined not to give way to the mysterious influence which seemed undermining his life. But the pain and annoying symptoms were stronger than his will, and he kept growing gradually worse. About that time he began to notice a difficulty in drawing on his boots, and it was by the greatest effort that he was

able to force his feet into them. In this manner several weeks passed by, until finally one night, while in great agony, he discovered that his feet had in a short while, swollen to enormous proportions. The balance of the narrative can best be described in his own words. He said:

"When my wife discovered the fact that I was so bloated, she sent for the doctor immediately. He made a most careful examination and pronounced me in a very serious condition. Notwithstanding his care, I grew worse, and the swelling of my feet gradually extended upward in my body. The top of my head pained me terribly; indeed, so badly that at times it seemed almost as if it would burst. My feet were painfully cold, and even when surrounded with hot flannels and irons felt as if a strong wind were blowing on them. Next my right leg became paralyzed. This gave me no pain, but it was exceedingly annoying. About this time I began to spit blood most freely, although my lungs were in perfect condition, and I knew it did not come from them. My physicians were careful and untiring in their attentions, but unable to relieve my sufferings. My neighbors and friends thought I was dying and many called to see me, fully twenty-five on a single Sunday that I now recall. At last my agony seemed to culminate in the most intense, sharp pains I have ever known or heard of. If red hot knives sharpened to the highest degree had been run through my body constantly they could not have hurt me worse. I would spring up in bed, sometimes as much as three feet, cry out in my agony and long for death. One night the misery was so intense that I arose and attempted to go into the next room, but was unable to lift my swollen feet above the little threshold that obstructed them. I fell back upon the bed and gasped in my agony, but felt unable even to breathe. It seemed like death.

"Several years ago Rev. Dr. J. E. Rankin, now of Washington, was stationed here as pastor of the Congregational church. We all admired and respected him, and my wife remembered seeing somewhere that he had spoken in the highest terms of a preparation which had cured some of his intimate friends. We determined to try this remedy, accordingly sent for it, and, to make a long story short, it completely restored my health, brought me back from the grave, and I owe all I have in the way of health and strength to Warner's Safe Cure, better known as Warner's Safe Kidney and Liver Cure. I am positive that if I had taken this medicine when I felt the first symptoms above described, I might have avoided all the agony I afterward endured, to say nothing of the narrow escape I had from death."

In order that all possible facts bearing upon the subject might be known, I called on Dr. Oscar F. Fassett, who was for nineteen years United States Examining Surgeon, and who attended Mr. Jacques during his sickness. He stated that Mr. Jacques had a most pronounced case of Albuminuria or Bright's disease of the kidneys. That an analysis showed the presence of albumen and casts in great abundance and that he was in a condition where few if any ever recover. His recovery was due to Warner's Safe Cure.

Mr. John W. Hobart, General Manager of the Vermont Central railroad, stated that Mr. Jacques was one of the best and most faithful of his employes, that his sickness had been an exceedingly severe one and the company were not only glad to again have his services, but grateful to the remedy that had cured so valuable a man.

Mr. James M. Foss, assistant superintendent and master mechanic of the Vermont Central railroad, is also able to confirm this.

I do not claim to be a great discoverer, but I do think I have found in the above a most remarkable case and knowing the unusual increase of Bright's disease feel that the public should have the benefit of it. It seems to me a remedy that can accomplish so much in the last stages ought do even more for the first approach of this deceptive yet terrible trouble.

ougni do even in	ore for the first approach of this deceptive yet terrible trouble.	
F. B.		
	r own way is some comfort. When so many people would ruin us, it is a triump of the world to be ruined after one's own pattern.	h
	MISCELLANEOUS.	

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GENERAL NEWS.

[Pg 64]

FLORIDA farmers are now planting Irish potatoes.

THE St. Charles Hotel, Paducah, Ky., was burned Sunday night.

Another relief party for the Greeley arctic expedition is to be sent out.

WM. H. GUION, of the Steamship firm of Williams has failed for \$2,000,000.

Music Hall, in Whitechapel, London, burned on Monday; loss \$200,000.

 $\ensuremath{\mathsf{Ice}}$ has prevented the ferry boats from crossing the St. Clair river at Port Huron.

The prohibitionists declare that they will place a presidential ticket in the field next fall.

Lowell manufacturers have given employes notice that there will be a reduction of ten per cent in wages beginning Feb. 1.

An elevated road, adapted both to passengers and freight, is to be constructed along the levee at New Orleans within two years.

There was a railway wreck, caused by a broken rail, on the Wabash road near Macon, Mo., on Monday; several persons were injured.

It is estimated that the United States Senate is the wealthiest deliberative body in the world, the seventy-six members of that body representing \$180,000,000.

A RUMOR is in circulation at Ottawa, Canada, that the Canadian Pacific road has asked the government for additional assistance to the amount of \$14,000,000.

A colored base-ball club of professionals has been formed at Chicago, and will be ready to take the road May 1. They are backed by a stock company.

It is claimed that there is at the present time between 100 and 150 foreign vessels engaged in the oyster traffic on the Virginia coast without right or authority.

The people of Ouray, Col., lynched Mike Cuddigan and wife Saturday, on suspicion of having murdered a child whom they took from a Catholic asylum at Denver.

 I_T is said that the buffaloes have come north of the Missouri river, in Montana, and the Indians killed eleven hundred in one day not far from the mouth of the Musselshell.

The horror of the week was the wrecking of the steamer City of Columbus off Martha's Vineyard, January 19th. There were 129 persons on board of whom ninety-seven were lost.

A SEAL was discovered in the track of the steamer Armstrong, at Morristown, N. Y., on the St. Lawrence river. This was the third or fourth seal seen in that vicinity in the last half-dozen years.

THE candle factory of E. L. Schneider & Co., located on the corner of Wallace and McGregor streets, Chicago, was Sunday swept away by fire. The loss is \$150,000, and the insurance \$57,000.

The friends of Mr. Hintz, the unsuccessful candidate for postmaster at Elgin, Illinois, threaten to defeat the re-election of Representative Ellwood in the next campaign, who is held responsible for his defeat.

Two Irish members of the British Parliament, Matthew Arnold and P. J. Sheridan,—the latter supposed to be the mysterious No. 1 of the Phœnix Park assassination scheme—are in Chicago the present week.

MRS. DUKES, a sister of the murdered Zura Burns, has left her home in Dakota, in company with her father, to give what she claims is damaging evidence against O. A. Carpenter, before the grand jury at Lincoln, Ill.

The matter of the final disposition of the assets of the estate of B. F. Allen is being heard by a register at Des Moines. A firm which has purchased a large share of the claims at 5 per cent offers \$330,000 for the property remaining, but other creditors hold out for \$400,000.

Judge Shepard, in the Superior Court of Chicago, Saturday, dismissed three bills for divorce, holding that when a wife separated from her husband her residence as well as her domicile follows his, and that the Illinois statutes excludes from its courts all suits for divorce in behalf of persons not legal residents.

The Onondaga (New York) Indians have held another council, at which it was shown that a majority of the nation is opposed to dividing the lands in severally, but is willing to agree to a division of such timber lands as can not be protected against depredations. The Christian party is to be represented at the next conference with the State commissioners.

Nearly one-fourth of the business portion of Leipsic, O., was burned Friday night, and flames swept away 1,145 bales of cotton at Murrell's Point, La., and twenty-one buildings at Lowell, Mich. A boiler explosion at Cincinnati, in the Corrugating company's manufactory, Saturday, led to the destruction of \$50,000 in property.



FINANCIAL AND COMMERCIAL.

Office of The Prairie Farmer, Chicago. Jan 22, 1884.

Papers devoted to finance and trade inform us that the number of business failures in 1883 was 9,184 against 8,782 in the hard times of 1877. The fear is, that the worst is not yet come, but this feeling happily is not by any means universal among most far seeing business men.

The transactions at the Chicago banks were a trifle slower than last week. The regular loan market was quotable on Monday at 6@7 per cent.

Eastern exchange was firm at 60c per \$1,000.

The stock markets at the East were a little feverish and here the same feeling was noticeable. There are rumors of financial embarrassment in high places, and Mr. Gould himself is said to be a little nervous over the weakness in many of his stocks.

Government securities are as follows:

4's coupon, 1907 Q. Apr. $123\frac{1}{4}$ 4's reg., 1907 Q. Apr. $123\frac{1}{4}$ $4\frac{1}{2}$'s coupon, 1891 Q. Mar. $114\frac{1}{8}$ $4\frac{1}{2}$'s registered, 1891 Q. Mar. $114\frac{1}{8}$ 3's registered Q. Mar. 100

GRAIN AND PROVISIONS.

The receipts of flour at this point for the forty-eight hours ending Monday morning were greatly in excess of those for the corresponding week last year. In wheat last year the receipts were 28,007 bushels; this year 50,532. Corn last year 189,661; this year 226,990.

Flour was unchanged, the article not yet feeling the uncertain condition of the wheat market.

Choice to favorite white winters	\$5 25@5 50
Fair to good brands of white winters	4 75@5 00
Good to choice red winters	5 25@5 50
Prime to choice springs	4 75@5 00
Good to choice export stock, in sacks, extras	4 25@4 50
Good to choice export stock, double extras	$4\ 50@4\ 65$
Fair to good Minnesota springs	4 50@4 75
Choice to fancy Minnesota springs	5 25@5 75
Patent springs	6 00@6 50
Low grades	2 25@3 50

Wheat.—Red winter, No. 3, 92; car lots of spring, No. 2, sold at 88%; No. 3, do. 81@84.

Corn.—Moderately active. Car lots No 2, 51@52c; rejected, 43@44; new mixed, 48@50½c.

Oats.—No. 2 in store, closed 321/2@323/4.

RyE.—May, in store 57@57½.

Barley.—No. 2, 49 in store; No. 3, f. o. b. 52½c.

FLAX.—Closed at \$1 52 on track.

Timothy.—\$1 31½@1 35 per bushel. Little doing.

CLOVER.—Quiet at \$6 05@6 10 for prime.

Provisions.—Mess pork, February, \$14 75@14 78 per bbl; Green hams, $10\frac{1}{2}$ c per lb. Short ribs, \$7 65 per cwt.

Lard.—February, \$8 65.

LUMBER.

Lumber unchanged. Quotations for green are as follows:

Short dimension, per M	\$ 9 50@10 00
Long dimension, per M	10 00@11 50
Boards and strips, No. 2	11 00@13 00
Boards and strips, medium	13 00@16 00
Boards and strips, No. 1 choice	16 00@20 00
Shingles, standard	2 10@ 2 20
Shingles, choice	2 25@ 2 30
Shingles, extra	2 40@ 2 60
Lath	1 65@ 1 70

COUNTRY PRODUCE.

Note.—The quotations for the articles named in the following list are generally for commission lots of goods and from first hands. While our prices are based as near as may be on the landing or wholesale rates, allowance must be made for selections and the sorting up for store distribution.

Bran.—Quoted at \$15@12 25 per ton;

BEANS.—Hand picked mediums \$2 00@2 10. Hand picked navies, \$2 15@2 20.

Butter.—Dull and without change. Choice to extra creamery, 33@36c per lb.; fair to good do 25@32c; fair to choice dairy, 23@28c; common to choice packing stock fresh and sweet, 18@22c; ladle packed 10@13c; fresh made, streaked butter, 9@11c.

Broom-corn.—Good to choice hurl 61/2@71/2c per lb; green self-working 5@6c; red-tipped and pale

do 4@5c; inside and covers 3@4c; common short corn $2\frac{1}{2}@3\frac{1}{2}c$; crooked, and damaged, 2@4c, according to quality.

Cheese.—Choice full-cream cheddars $13@13\frac{1}{2}$ c per lb; medium quality do 9@10c; good to prime full cream flats $13@13\frac{1}{4}$ c; skimmed cheddars 9@10c; good skimmed flats 7@9c; hard-skimmed and common stock 3@4c.

Eggs.—In a small way the best brands are quotable at 27@28c per dozen; 20@23c for good ice house stock; 15@18c per pickled.

Hay.—No 1 timothy 9@9 50 per ton; No 2 do 800@8 50; mixed do 7@8; upland prairie 800@10 75; No 1 prairie 6@7; No 2 do 450@5 50. Small bales sell at 25@50c per ton more than large bales.

HIDES AND PELTS.—Green-cured light hides $8\frac{1}{4}$ c per lb; do heavy cows 8c; No 2 damaged green-salted hides 6c; green-salted calf $12@12\frac{1}{2}$ cents; green-salted bull 6c; dry-salted hides 11 cents; No. 2 two-thirds price; No. 1 dry flint $14@14\frac{1}{2}$ c. Sheep pelts salable at 28@32c for the estimated amount of wash wool on each pelt. All branded and scratched hides are discounted 15 per cent from the price of No. 1.

Hops.—Prime to choice New York State hops 25@26c per lb; Pacific coast of 23@26c: fair to good Wisconsin 15@20c.

POULTRY.—Prices for good to choice dry picked and unfrozen lots are: Turkeys 13@14c per lb; chickens 9@10c; ducks 12@13c; geese 9@11c. Thin, undesirable, and frozen stock 2@3c per lb less than these figures; live offerings nominal.

POTATOES.—Good to choice 30@33c per bu. on track; common to fair 30@35c. Illinois sweet potatoes range at \$3 50@4 per bbl for yellow.

Tallow and Grease.—No 1 country tallow $7@7\frac{1}{4}c$ per lb; No 2 do $6\frac{1}{4}@6\frac{1}{2}c$. Prime white grease $6@6\frac{1}{2}c$; yellow $5\frac{1}{4}@5\frac{3}{4}c$; brown $4\frac{1}{2}@5$.

Vegetables.—Cabbage, \$8@12 per 100; celery, 25@35c per doz bunches; onions, \$1 00@1 25 per bbl for yellow, and \$1 for red; turnips, \$1 35@1 50 per bbl for rutabagas, and \$1 00 for white flat.

Wool.—from store range as follows for bright wools from Wisconsin, Illinois, Michigan, Indiana, and Eastern Iowa—dark Western lots generally ranging at 1@2c per lb. less.

Coarse and dingy tub	25@30
Good medium tub	31@34
Unwashed bucks' fleeces	14@15
Fine unwashed heavy fleeces	18@22
Fine light unwashed heavy fleeces	22@23
Coarse unwashed fleeces	21@22
Low medium unwashed fleeces	24@25
Fine medium unwashed fleeces	26@27
Fine washed fleeces	32@33
Coarse washed fleeces	26@28
Low medium washed fleeces	30@32
Fine medium washed fleeces	34@35

Colorado and Territory wools range as follows:

Lowest grades 14@16 Low medium 18@22 Medium 22@26 Fine 16@24

Wools from New Mexico:

Lowest grades 14@16 Part improved 16@17 Best Improved 19@23

Burry from 2c to 10c off; black 2c to 5c off.

LIVE STOCK MARKETS.

The total receipts and shipments for last week were as follows:

Received. Shipped.
Cattle 42,110 18,986
Calves 527 346
Hogs 140,814 34,161
Sheep 24,600 11,815

CATTLE.—Very few choice lots are coming in. Receipts have fallen off some 3,000 head. Of those that arrive the "unripe" predominate. Some of our feeders are undoubtedly inclined to market too young. Some cattle by experienced breeders and feeders may be "ripened" at two years, but in the majority of cases, especially with anything else than high grade short-horns, this can not be done. There is more money in holding common stock a few months longer. The feeling on Monday was very firm, and prices advanced considerably. Good heavy cattle brought as high as \$6 65, though the majority sold at less. Six steers averaging 1,523 lbs brought \$7. Cattle for shippers and canners went at \$4 65@5; bulls \$2 50@4; cows \$2 25@4 75; stockers and feeders scarce at \$3 40@4 45 with some of the latter at \$4 50@5.

Hogs.—The hogs now arriving are light and the number is not large. Since November 1st, Chicago packers have put up 325,000 less hogs than for the corresponding period last year, and the total packing of the country has fallen off 285,000 head. Our packing houses are now running to about one half their capacity. Prices are firm. Common to fair stock \$5 25@5 75; good to choice heavy \$5 80@6 30; skips and culls \$4 25@5 15.

Note.—All sales of hogs are made subject to a shrinkage of 40 lbs for piggy sows and 80 lbs for stags. Dead hogs sell for $1\frac{1}{2}$ c per lb for weights of 200 and over and [Transcriber's Note: blank in original] for weights of less than 100 lbs.

Sheep.—Arrivals are large. Several carloads from Texas came in on Monday. Common to good $\$330@487\frac{1}{2}$; fancy head \$575.

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