The Project Gutenberg eBook of Prairie Farmer, Vol. 56: No. 12, March 22, 1884, by Various

Title: Prairie Farmer, Vol. 56: No. 12, March 22, 1884

Author: Various

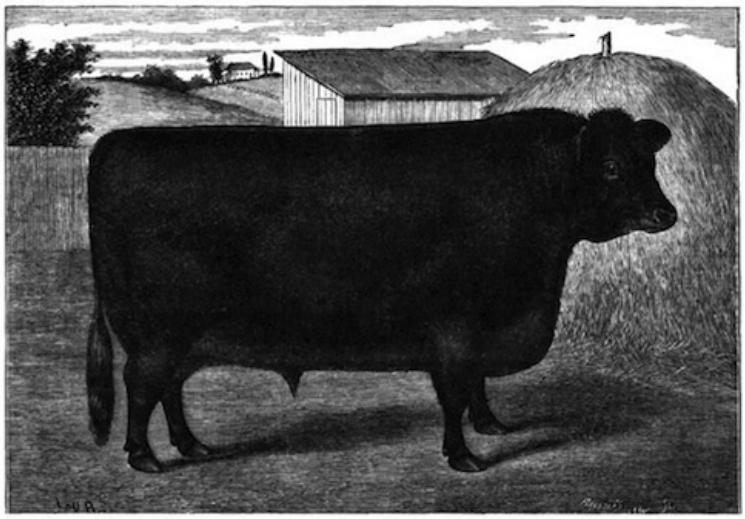
Release date: February 22, 2012 [EBook #38955]
Most recently updated: January 8, 2021

Language: English

Credits: Produced by Juliet Sutherland, Carol Brown, and the Online Distributed Proofreading Team at https://www.pgdp.net

THE PRAIRIE FARMER
A Weekly Journal for
THE FARM, ORCHARD AND FIRESIDE.

ESTABLISHED IN 1841.
ENTIRE SERIES: VOL 56—NO 12.
CHICAGO, SATURDAY, MARCH 22, 1884.
PRICE $2.00 PER YEAR IN ADVANCE.



ABERDEEN-ANGUS BULLOCK, "BLACK PRINCE." Owned by Geary Bros., London, Ont.

[Transcriber's Note: The Table of Contents was originally located on page 184 of the periodical. It has been moved here for ease of use.]

THE CONTENTS OF THIS NUMBER.

Drainage and Good Husbandry.

BY C. G. ELLIOTT, DRAINAGE ENGINEER.

I.

The practical advantage of drainage as it appears to the casual observer, is in the increased production of valuable crops. Ordinary land is improved, and worthless land so far reclaimed as to yield a profit to its owner, where once it was a source of loss and a blemish upon an otherwise fair district. The land-buyer who looks for a future rise in his purchase, recognizes the value of drainage, being careful to invest his capital in land which has natural drainage, or is capable of being drained artificially with no great expense, if it is suitable for use as an agricultural domain. The physician, though perhaps unwilling, is obliged to admit drainage as an important agency in the reduction of malignant diseases and much general ill-health among dwellers in both country and village. Our State Board of Health recognizes the influence of land drainage upon the healthfulness of districts where it is practiced. The Secretary of this Board gives it as his opinion that even good road drainage would diminish the number of preventable diseases 25 per cent.

Such are now some of the impressions as to the value of drainage among those who judge

from acknowledged effects. That a great change has been brought about by this practice is apparent to the most superficial observer, if he compares pre-drainage with the present.

A FEW FACTS.

The Indiana Bureau of Statistics made an investigation about two years ago of the influence of tile drainage upon production and health in that State. Two periods of five years were selected, one before drainage was begun, and the other after most of the farms had been drained, the area examined being one township in Johnson county.

As near as could be determined, the average yearly yield of wheat for a period of five consecutive years before drainage was nine and a half bushels per acre. The same land and tillage after drainage in a period of five consecutive years produced an average of nineteen and one-fourth bushels per acre. Comparing the corn crops in the same way for the same time, it was found that the average yearly yield before drainage was thirty-one and three-fourths bushels per acre, and after drainage seventy-four and one-fourth bushels per acre.

In order to determine the influence of drainage upon health, physicians, who had, during the same two periods of five years each, answered all calls in cases of disease, were asked to report from their books all cases of malarial fever. It was found from this data that, for the first period of five years before drainage, there had been 1,480 cases of malarial disease. During the next five years under a pretty good system of drainage, there were but 490 cases of such disease. These facts show that drainage not only brings material prosperity to the individual, but promotes the general healthfulness of the climate of that district, in which all are interested and all enjoy.

It is a matter of note that the Campagne about Rome, which in ancient days was the healthful home of a dense population, is now afflicted with the most deadly fevers. It is claimed by high authorities that this is due to the destruction and choking of the drains which in excavating are found everywhere, but always filled and useless.

It will be readily seen that this subject has at least two important bearings upon our prosperity, and though in considering and perfecting general farm drainage, the effect upon health may be manifested without effort being put forth in that direction, yet it should always be kept in mind and receive that consideration which it deserves.

DRAINAGE AND FANCY FARMING.

It is thought by many who have not yet tested the value of tile drainage, that it is one of those luxuries often indulged in by so-called fancy farmers. By such farmers is meant those who farm for pleasure rather than for profit; those who raise wheat which costs them $1 per bushel, but which is worth only eighty cents on the market; those who raise beef at a cost of ten cents per lb. and sell it for six cents per lb.; in short, they are men (and there are many of them) who receive their income from some other source, and cultivate a farm for recreation. That drainage properly belongs to this class of farmers is a mistaken notion, as hundreds of thrifty, money-making farmers in the West would prove, could they now give their experience. In the example previously given, drainage increased the production of wheat and corn fully 100 per cent, which was a township report for five years. In order to emphasize these statements, we will insert a few practical examples communicated to the Drainage Journal during last year.

Geo. P. Robertson: "One ten-acre field failed to produce anything except a few small ears. I drained it, and have cropped it for eight years successively, and have paid time and again for husking 100 bushels of corn per acre."

"Mr. Losee, Norwich, Canada, says that as a matter of actual test, his underdrained land yields one-third larger crops than his undrained fields, although the same treatment in other respects is applied, and the land is of the same character throughout. The average wheat yield of his undrained land is twenty bushels per acre, while the drained fields yielded an average of thirty bushels. As the cost of draining on his farm is estimated at $20 per acre, this preparation of the soil pays for itself in two years."

Horton Ferguson, Indiana: "The swamp contained twenty-seven acres, and was regarded by all neighbors as utterly worthless except for hunting grounds. Mr. Ferguson, who has great faith in underdraining, determined to undertake to reclaim the land, confident if successfully done, it would be a paying investment. Last year he tile drained and grubbed it, paying customary rates for all the labor and tile, and this year put it in corn, with the following result:

	Dr.	Cr.
Tile used for 27 acres	$544 87	
Paid for ditching	88 00	
Expense for clearing and grubbing	275 00	
Total expense	$907 87	
By 2,530 bushels of corn at 50 cents		$1,265 00

The land proved to be remarkably rich, having produced, as shown, ninety bushels to the acre, and Mr. F. assures us that several acres exceeded 100 bushels to the acre. It will thus be observed that he realized the first year of cultivation enough to pay the entire expense of reclaiming and had $357.13 left to pay on the crop expense. Next season, if favorable, he expects a still better yield." Every farmer knows that, in these times of easy transportation, [Pg 178] profits do not depend so much upon the price his product brings in the market as upon the quantity he has to dispose of. In other words, abundant crops are the farmer's source of income. There is evidence enough at hand to justify the statement that of all improvements put upon farms containing wet land valued at $40 per acre and upwards, drainage pays the largest profit for the outlay. Just what this profit will be will depend upon the soil drained, the necessary cost required to improve it, and the use and management of it after it is drained. All of these things vary so that each case must be considered by itself. Drainage is simply a necessary part of good husbandry which merits the careful consideration of all thinking farmers.

Plan for a Flood Gate.

To maintain a fence across a water course, is one of the trials and tribulations of the farmer. After a heavy rain, generally fences in such places are either badly damaged or entirely washed away. Having been troubled this way for years, I have hit upon the following plan, which, after two years' trial I find to be a success.

A stick of timber, three or four inches in diameter, is placed where the gate is needed, and fastened down with stakes, driven slanting, on each side, the tops of the stakes lapping over the piece so as to hold it securely, and driven well down, so as not to catch the drift, but allowing the piece to turn freely; inch and half holes are bored in the piece and uprights are fitted in them; the material of which the gate is made is fastened to these uprights. A light post is driven on the lower side and the gate fastened to it.

This will keep the gate in place in any ordinary flood, but when a Noah comes along, it turns down on the bottom of creek, and waters and drifts pass over it. When the water subsides all that is necessary to do is to turn the gate back to its upright position. If the gate is not needed during the winter, it is better to lay it down and let it remain in that position until spring, for if it is fastened with the post in an upright position, it will be broken with the spring floods.

A. E. B.
CARTHAGE, ILL.

Great Corn Crops.

It having been mentioned in the Iowa State Register some weeks ago that Mr. Hezekiah Fagan, of Polk county, in that State, had once grown one hundred and fifty-eight bushels of corn per acre, a son of Mr. Fagan writes the following regarding the kinds of corn, the ground, and the manner of cultivation:

"Father's farm joined Brown's Park on the north and run a mile north; the corn was raised where the old orchard now is; it was part prairie and part brush land, and was about the third crop. The ground was plowed in the spring, harrowed and marked out with a single shovel both ways, the rows being four feet apart each way. The corn was dropped by hand and covered with a hoe, and left without harrowing until large enough to plow, and was plowed twice with single shovel, and once with the two horse stirring plow and hilled up as high as possible, and hoed enough to keep clean. The seed was from corn father brought from Rockville, Ind., with him when he moved to Des Moines, in the spring of 1848, and was of the large, yellow variety which matured then and matures now with anything like a good season, and I verily believe that with as good ground and as good treatment and as much care in having every hill standing, and from three to four stalks in every hill, that the amount might be raised again, if it was over 150 bushels per acre, and I must say that I have never seen a large variety of corn that suited me so well, that would yield so much, or mature so well, and if any Iowa farmer will come and look at my crib of corn of this year's raising, and if he will say he can show a better average ear raised on similar ground, with similar treatment, I would like to speak for a few bushels for seed at almost any price, and I will not except the much-puffed Leaming variety."

The young man adds that his advice to Iowa farmers is, "to raise big horses, big cattle, big hogs, big corn, and big grass, and if the profits are not big, too, they had better make up their minds farming isn't their forte, and go at something else."

Being desirous of knowing something of his big corn yield we wrote to Mr. Clarkson, of the Register, for further information, and received the following reply:

> DEAR SIR: Yours of the 7th inst., relative to the Fagan corn received. The corn raised by Hezekiah Fagan was thirty years ago, and he received the premium for it at the Iowa State Fair in 1854. The only facts I have relative to it are in the published proceedings of

the State Agricultural Society. It states that he raised in Polk county, Iowa, on five acres, at the rate of 139½ bushels per acre, shelled corn. The whole, shelled, measured 697½ bushels, but weighed, it made 151 bushels and fifty-three pounds per acre.

At the same fair, J. W. Inskip exhibited, with all of the necessary proofs, 136 bushels per acre.

I think there was no mistake in these matters, as great care was taken to have statement correct; it is to this crop which his son refers in a late number of the Register. Yours truly,

C. F. Clarkson.
Des Moines, Iowa.

A Charming Letter.

At the head of the agricultural department in The Prairie Farmer I notice a standing invitation, viz.: "Farmers, write for your paper." All right! Now, if you will just move up a little I'll take a seat in your Communicative Association.

We, that is my wife and myself, eagerly read and discuss the interesting articles with which The Prairie Farmer is replete every week, and many are the practical hints that we have found therein.

It is not strange that, in the heart of a new country with vast undeveloped resources and unlimited possibilities, a young farmer who has his fortune yet to make, should be particularly enthusiastic. Tired of the atmosphere of the school-room, fagged out by ten years of study and teaching, and plainly seeing the improbability of being able to lay by enough for a rainy day or old age in this noble, but as a rule, unremunerative calling, my mind involuntarily reverted back to my early life on the old homestead in Illinois, to substantials implied in that word, and to its pleasant memories.

My mind was made up. With my portion of the old homestead in my pocket, I turned the key in the school-house door, grateful for the experience and lessons of patience gained inside of it, a friend of education, and with a heart full of sympathy for the teachers of our public schools. I came to "the land of the Dakotas" once more to break the "stubborn glebe" and enjoy the sweets of farm life. Next June I shall have had three years' experience in my new undertaking. I have succeeded fairly well. At some future time I may communicate something about raising wheat and vegetables in Dakota, to the readers of "our paper."

This winter is proving to be rather long and stormy, but with plenty of fuel, good books and papers, time has not hung heavily on my hands. Indeed, I consider these long Northern winters a decided advantage to those who regard the cultivation of the mind as important as the cultivation of the fields. I am afraid the majority of farmers do not lay enough stress upon mental culture. In this age of cheap books there can be no excuse for being without them. Systematic reading leads to the best results in mental culture just as systematic farming leads to the best results in agriculture. At the beginning of the winter I select some standard work as my principal reading matter and stick to it until I have it completed, reading for an interlude, good weekly newspapers, and one or two of the standard magazines, with which I always like to be supplied. This breaks up all monotony, and makes reading thoroughly enjoyable and instructive. This winter I am reading the works of Goethe, the great German author.

March, the last winter month, has come, and although the wind is still howling and snow flying, before the first of April we expect to see the railroads thronged with emigrant cars bringing new settlers, more thrift and more capital. Thousands of new homes will be established on the fertile prairies next summer.

Will you please regard this as a kind of an introduction into your "association?"

If we find that we are mutually agreeable perhaps we shall find occasion to meet again.

Kasper von Eschenbach.
Prairie Park Farm, Bath, D. T.

Prairie Roads.

The article on prairie roads in The Prairie Farmer of March 1st, 1884, by A. G. H., of Champaign county, was good, and I would like to see more on the same subject. If we get any better roads, we must keep the ball rolling.

The great objection to the Ross plan, or any plan of road-tiling here, is this. When tile is laid in the roadway the teams will travel right over it, and the black soil gets packed and puddled until it is as impervious to water as clay, and the water can't get into the tile. And on the clay hillsides, if the tile is covered with clay, the water can't get into it. This has been well tested here, for we have been road-tiling for six years.

The question seems to be to get the water into the tile. The answer is simple enough. We must provide sink holes for it. We must fill the ditch over the tile with sand, gravel, or anything that will let the water in, a yard in length, say, once every rod. Then I think the Ross plan would be perfect.

As to the cost, well, $750 per mile seems large, but to take an average of the roads in our county one-half that sum would answer, for it is only the worst places would need the full Ross plan.

In a good many places, one string of tile with gravel sinks would do, and others with the laterals to drain all to one side, thus saving the cost of one string of tile, or more than one-third of the whole cost.

Now, if we get the commissioners to commence the work, we must vote for men who are in favor of road-tiling as commissioners. There is where the battle must be fought. Buckle on the armor comrades and see that the work is done.

W. H. S.
McLean Co., Ill.

Experiments With Indian Corn.

On May 16, 135 kinds of corn were planted in the garden, with the intention of promoting the cross fertilization of the varieties in order to study the effects. The seed used was some of it selected on account of its purity; other seed was from named varieties, still other seed from varieties purposely hybridized, or presumed from their appearance or location on the ear to be hybridized; and seed which possessed peculiarities in appearance. The types represented were the three kinds of pop-corns, the flint pop, the pearl pop, and the rice pop; the flints in eight-rowed and twelve-rowed varieties, and soft or Tuscarora's; the sweets in two or more types of ear, the one corresponding to the flint, another to the dent corn ear; and the dents also in two or more types, the eight-rowed with broad kernel, and another, the many rowed, with deep kernel. We also had a pod or husk corn.

Through a study of the crop from these various seeds, we are enabled to make some general conclusions, which probably are sufficient to generalize from, but which certainly apply to the case in hand.

The seed of the preceding year gives uniformity of ear; that is, a dent corn seed may produce an eight-rowed flint, or an eighteen-rowed dent, but each ear will be perfect of its kind, and will be free from kernels of other type than its own. The flint corn kernel may produce several varieties of flint corn ear, or dent corn ear, but there will be no variety in the kernel upon the ear; a dent corn seed may furnish a sweet corn ear, and dent corn ears, but not mixed upon the cob. A pop-corn kernel may produce a sweet corn ear, of sweet corn type, a sweet corn ear of pop-corn type, or a pop-corn ear of the various types, without admixture of kernels upon the ears.

On the other hand, hybridization of the current year produces changes in the kernel, so that one ear of corn may bear kernels of various colors, and of various types, the tendency, however, being for the shape of the kernel to be governed by the type of the maize ear upon which it is found.

The appearance of various types upon an ear allow of some curious generalizations. Thus, the rice pop kernel form does not appear upon ears of other character, nor does the pearl pop kernel form appear upon the rice pop ear. The flint pop does not seem to appear upon either the rice or the pearl pop type, so far as form is concerned, but its structure, however, influences. Sweet corn, however, appears upon the three types of pop-corn indiscriminately, but, on the other hand, the pop-corns do not appear upon the flint corn ears. While flint corn appears abundantly on sweet corn ears, on the other hand, sweet corn does not appear upon the flint corns. Dent corn kernels will appear upon the sweet corn whose type of ear is that of the dent ear, but not upon sweet corn whose type is that of the flint ear. The dent corn, again, does not appear upon the flint ear, but in some isolated instances the flint corn kernel may appear upon the dent ear.

The appearance of kernels of one variety upon ears of another variety, for each of the types, is of frequent and constant occurrence, except in the case of red ears. The red ears have a constancy of color which is truly remarkable: where sweet corn appears upon red pop and red dent ears the sweet corn partakes of the red color.

The practical value of these deductions consists in the guide they afford toward the improvement of the varieties of corn that we grow. For instance: by planting in adjoining hills, or, better still, the mixed seed of two varieties of corn, one of which is distinguished for its length of ear and smallness of cob, and the other for the large size of its kernel, we should anticipate, in many instances, the transfer of the large kernel to the small ear and of the small kernel to the large ear. By selecting from the crop those ears which have length and the large kernel, we should anticipate, by a series of selections, the attaining of a new variety, in which the large kernel and length of cob would be persistent. The same remarks hold true with the dent corns. But in the matter of selections the true principle would seem

to be to plant but one kernel of the desired type from an ear of the desired type, and to keep the plant from this kernel free from the influence of plants of another type, and securing the crop through self-fertilization. After the first year of this procedure, by the selection of two or more kernels of the same type from different plants, cross fertilization should be used, the crop being gradually purified by selection.

While the maize plant, as a rule, is not self-fertilized, that is, as a general thing the pollen from one plant fertilizes the silk of another, yet in very many cases the pollen and the silk upon the same plant is synchronous, and self-fertilization becomes possible, and undoubtedly is of frequent occurrence. The pollen ripens from below upward, and thus the fall of the pollen, through the successive ripening of the blooms, may last for three or four days, and there is a great variation in period of blooming as between individual plants. The silk maintains its receptivity for pollen for some little time, but for how long a period we do not yet know from direct observation. It seems, however, true, that closely following pollination[e], the silk loses its transparent structure and begins to shrivel, while before pollination is effected the silk retains its succulency for several days.—*E. Lewis Sturtevant, Director N. Y. Exp. Station.*

Specialty Farming.

I noticed in The Prairie Farmer of February 23d, a communication from Cape Girardeau, Mo., on "The Dignity of Our Calling." It contains some very good reasoning, but I do not indorse it all, and take this mode of expressing my views upon the subject. The point upon which[f] I beg leave to differ from the gentleman is, should a farmer have a smattering idea of everything pertaining to farming?

I believe that a man should make a specialty of some particular branch of farming, for it is universally conceded by all competent authority that no man can succeed in a given pursuit unless his time and energies are concentrated in that direction, consequently we have successful men in all the avenues of life—and why? from the simple fact that these men make a specialty of some particular branch of their calling; they are no jack-of-all-trades—not by any means.

So it is with farming; the man who endeavors to be proficient in all its departments is apt to be a failure, while his specialist neighbor succeeds, simply because he has his course marked out, and bends his energies in that direction. Life is too short for a man to comprehend everything. It is true, that the farmer has no fixed law by which to guide him; however, he must, in measure, be governed by past experience. If the farmer does his part, God will do the rest. In my opinion, what we want, is not learning in every branch of farming by the same individual, but we do want lore in a given direction, and then success will crown our every effort. Take as an example one of our large machine shops; do we find its workmen, each one, commencing a machine and completing it in all its parts. No; each man has a special task to perform, only that and nothing more. As to farmers' sons longing for other callings, I am forced to admit that it is a lamentable fact which can not be ignored. I believe the reason for this is that they are constantly coming in contact with nature in all her varied forms, and before they have yet reached their majority, they become inspired with an ambition which is prone to go beyond the boundary of farm life, hence we find them, step by step, climbing the ladder of fame. However, we have one consoling fact, and that is, they make some of the most noted men we have—find them where you may. A glorious example of this is in the person of a man who rose from the humble position of plowboy, to that of Chief Executive of the Nation.

A few words more and I am done. If the fathers of this land would have their sons follow the noble vocation of farming, let them educate them thoroughly for the branch which they would have them pursue, and by so doing teach them that proficiency in any given direction is sure to command respect and success.

Subscriber.

Field and Furrow.

One of the strong points in preparing horses for spring work is in having their shoulders in a good, sound condition. With this to start with and soft and well-fitting collars there need be but little fear of any difficulty in keeping them all right, no matter how hard the labor horses have to endure. By keeping the collars well cleared of any dirt which may accumulate upon them from the sweating of the horse, and by bathing them daily with cold water, there need be but little fear of bad shoulders.

Husbandman: Every member of the Elmira Farmers' Club present had used sapling clover, more or less, and all regarded it with favor, although for making hay common red clover is worth more, as it is also for pasture. Mr. Ward expressed the opinion, in which all shared, that there were really but two varieties of field clover in common use at the North, red clover, usually called medium, and the large, or sapling clover. The chief function of the

clover root as a fertilizer is in bringing nitrogen from the lower soil upward within reach of succeeding crops and changing its form to meet the requirements of the plant and crops that follow.

Brow Chemical Co. Circular: The wise farmer will change his seed from year to year. A remarkable feature of the variety in potatoes is that no two kinds of potato are made up of the same chemical components in precisely the same proportion. There are now over 300 varieties of potatoes of greater or less merit. Some are celebrated for their large size, some for their fineness of texture and some for the great increase which may be expected from them. One hundred and thirteen years ago there were but two known varieties of potatoes, one being white, the other red. If the soil is too poor potatoes starve, if too wet they catch cold, and refuse to grow to perfection.

Farmer's Advocate: Spring operations will soon commence, and with these a demand for good farm hands. The general rule that is followed in this country is to put off the hiring of men to the last moment, and trust to chances for some one coming along, and then probably some inferior workman has to be taken, or none at all. Men who know their business on a farm will not wait, and are early picked up in the neighborhood in which they may reside. The trusting to men coming along just at the exact moment you are crowded, is a bad policy. There should always be profitable employment for a man in the early spring months before seeding commences, and it will pay any farmer to secure good farm hands early; and pay them good wages.

Peoria Transcript: We prepared a half acre of ground as good as we knew how. Upon one-half of this plat we planted one bushel of seed obtained from Michigan, and upon the other half of home-grown seed, both being of the variety known as Snowflake. The two lots of seed cut for planting were similar in appearance, both as regards size and quality. The whole lot received the same[g] treatment during the growing season. The plants made about the same growth on the two plats and suffered equally from bugs; but when it came to digging, those from new seed yielded two bushels of large potatoes for every one that could be secured on the land planted with seed of our own growing. This difference in yield could be accounted for on no other theory than the change in seed, as the quality of seed, soil, and culture were the same. This leads to the belief that simply procuring seed of favorite varieties from a distance would insure us good crops at much less expense than can be done experimenting with new, high-priced seeds.

In another column a Kansas correspondent speaks of the crab grass in an exceedingly favorable way. We find the following regarding this grass in a late New York Times: Every Northern farmer knows the common coarse grass called door-yard grass, which has long, broad leaves, a tough, bunchy root, and a three-fingered spreading head, which contains large, round seeds. It is known as Eleusine Indica, and grows luxuriously in open drains and moist places. It appears late in the summer. This is an extremely valuable grass in the South. A friend who went to Georgia soon after the war bought an abandoned plantation on account of the grass growing upon it. It was this door-yard grass. He pastured sheep upon it and cut some for hay. Northern baled hay was selling at $30 a ton at that time. He wrote asking me to[h] buy him two mowers and a baling press, and went to baling hay for the Southern market, selling his sheep and living an easy life except in haying time. His three hundred acres of cleared land has produced an average of 200 tons of hay every year which gives him about four times as much profit as an acre of cotton would do. Perhaps there may come an end to this business, and the grass will run out for want of fresh seed, but with a yearly dressing of Charleston phosphate the grass has kept up its original vigor. Now why could we not make some use of this grass, and of others, such as quack-grass, which defy so persistently all our efforts to destroy them?

Insects in Illinois.

Prof. Forbes, State Entomologist, makes the following report to the State Board of Agriculture:

"Now that our year's entomological campaign is completed, a brief review of some of its most important features and results will doubtless be of interest. Early attention was given to the insects attacking corn in the ground, before the sprout has appeared above the surface. A surprising number were found to infest it at this period, the results of their injuries being usually attributed by farmers to the weather, defective seed, etc. Among these the seed corn maggot (Anthomyia zeæ) was frequently noted, and was received from many parts of the State. A small, black-headed maggot, the larva of a very abundant, gnat-like fly

(Seiara), was excessively common in ground which had been previously in grass, and attacked the seed corn if it did not germinate promptly and vigorously, but apparently did not injure perfectly sound and healthy grains. A minute yellow ant (Solenopsis fugax) was seen actually gnawing and licking away the substance of the sound kernels in the ground, both before and after they had sprouted. The corn plant-louse (Aphis maidis) was an early and destructive enemy of the crop, often throttling the young shoot before it had broken ground. It was chiefly confined to fields which had been just previously in corn or grass.

"The chinch-bug was found in spring depositing the eggs for its first brood of young about the roots of the corn, a habit not hitherto reported.

"With the increasing attention to the culture of sorghum, its insect enemies are coming rapidly to the front. Four species of plant-lice, two of them new, made a vigorous attack upon this crop in the vicinity of Champaign, and two of them were likewise abundant in broom-corn.

"The corn root-worm (Diabrotica longicornis) was occasionally met with in sorghum, but does not seem likely to do any great mischief to that plant. It could not be found in broom-corn. In fields of maize, however, it was again very destructive, where corn had been raised on the same ground a year or two before. The Hessian Fly did great damage throughout the winter wheat region of the State, many fields not being worth harvesting in consequence of its ravages. Several facts were collected tending to show that it is three brooded in the southern part of the State. Nearly or quite all the last brood passed the summer as "flax seeds" in the stubble, where they might easily have been destroyed by general and concerted action. Fortunately, the summer weather was unfavorable to their development; and the drouth conspired with their parasites to greatly diminish their numbers. In the regions under our observation, not one in a thousand emerged from the midsummer pupa-cases, and numbers of the larvæ were found completely dried up.

"The wheat straw-worm (Isosoma tritici), a minute, slender, yellow grub, which burrows inside the growing stem, dwarfing or blighting the forming head, was abundant throughout the winter wheat region of Southern Illinois, causing, in some places, a loss scarcely exceeded by that due to the Hessian Fly. Our breeding experiments demonstrate that this insect winters in the straw as larvæ or pupa, emerging as an adult fly early in spring, these flies laying their eggs upon the stems after they commence to joint. As the flies are very minute, and nearly all are wingless, their spread from field to field is slow, and it seems entirely within the power of the individual farmer to control this insect by burning or otherwise destroying the stubble in summer or autumn, and burning the surplus of the straw not fed to stock early in spring. A simple rotation of crops, devoting land previously in wheat to some other grain or to grass, will answer instead of burning the stubble.

"The life history of the wheat bulb-worm (Meromyza Americana) was completed this year. The second or summer brood did decided injury to wheat in Fulton county, so many of the heads being killed that some of the fields looked gray at a little distance. This species was also injurious to rye, but much less so than to wheat. It certainly does not attack oats at all; fields of that grain raised where winter wheat had been destroyed by it, and plowed up, being entirely free from it, while wheat fields adjacent were badly damaged. We have good evidence that postponement of sowing to as late a date as possible prevents the ravages of this insect, in the same way as it does those of the Hessian Fly.

"The common rose chafer (Macrodactylus subspinosus) greatly injured some fields of corn in Will county, the adult beetle devouring the leaves.

"The 'flea negro-bug' (Thyreocoris pulicarius) was found injurious to wheat in Montgomery county, draining the sap from the heads before maturity, so that the kernel shriveled and ripened prematurely. In parts of some fields the crop was thus almost wholly destroyed.

"The entomological record of the orchard and the fruit garden is not less eventful than that of the farm. In extreme Southern Illinois, the forest tent caterpillar (Clislocampa sylvatica) made a frightful inroad upon the apple orchard, absolutely defoliating every tree in large districts. It also did great mischief to many forest trees. Its injuries to fruit might have been almost wholly prevented, either by destroying the eggs upon the twigs of the trees in autumn, as was successfully done by many, or by spraying the foliage of infested trees in spring with Paris green, or similar poison, as was done with the best effect and at but slight expense by Mr. David Ayres, of Villa Ridge. Great numbers of these caterpillars were killed by a contagious disease, which swept them off just as they were ready to transform to the chrysalis; but vast quantities of the eggs are now upon the trees, ready to hatch in spring.

"A large apple orchard in Hancock county dropped a great part of its crop on account of injuries done to the fruit by the plum curculio (Conotrachelus nenuphar). There is little question that these insects were forced to scatter through the apple orchard by the destruction, the previous autumn, of an old peach orchard which had been badly infested by them.

"In Southern strawberry fields, very serious loss was occasioned by the tarnished plant-bug (Lygus lineolaris), which I have demonstrated to be at least a part of the cause of the damage known as the 'buttoning' of the berry. The dusky plant-bug (Derædoris rapidus) worked upon the strawberries in precisely the same manner and at the same time, in some

fields being scarcely less abundant than the other. I have found that both these species may be promptly and cheaply killed by pyrethrum, either diluted with flour or suspended in water, and also by an emulsion of kerosene, so diluted with water that the mixture shall contain about 3 per cent of kerosene.

"The so-called 'strawberry root-worm' of Southern Illinois proves to be not one species merely, but three—the larvæ of Colaspsis brunnae, Paria aterrima and Scelodonta pubescens. The periods and life histories of these three species are curiously different, so that they succeed each other in their attacks upon the strawberry roots, instead of competing for food at the same time. The three together infest the plant during nearly the whole growing season—Colaspsis first, Paria next, and Scelodonta last. The beetles all feed upon the leaves in July and August, and may then be poisoned with Paris green.

"The season has been specially characterized by the occurrence of several widespread and destructive contagious diseases among insects. Elaborate studies of these have demonstrated that they are due to bacteria and other parasitic fungi, that these disease germs may be artificially cultivated outside the bodies of the insects, and that when sown or sprinkled upon the food of healthy individuals, the disease follows as a consequence. We have in this the beginning of a new method of combating insect injuries which promises some useful results."

3354 to 3358 State St., Chicago Take cable car to factory. Mention this paper.

DEDERICK'S HAY PRESSES.
are sent anywhere on trial to operate against all other presses, the customer keeping the one that suits best.

Order on trial, address for circular and location of Western and Southern Storehouses and Agents.

TAKE NOTICE.—As parties infringing our patents falsely claim premiums and superiority over Dederick's Reversible Perpetual Press. Now, therefore, I offer and guarantee as follows:

First. That baling Hay with One Horse, Dederick's Press will bale to the solidity required to load a grain car, twice as fast as the presses in question, and with greater ease to both horse and man at that.

Second. That Dederick's Press operated by One Horse will bale faster and more compact than the presses in question operated by Two Horses, and with greater ease to both man and beast.

Third. That there is not a single point or feature of the two presses wherein Dederick's is not the superior and most desirable.

Dederick Press will be sent any where on this guarantee, on trial at Dederick's risk and cost.

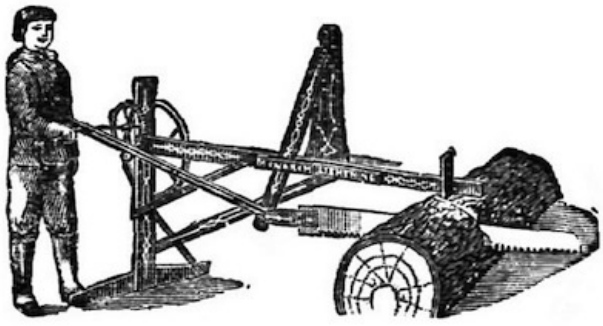
P. K. DEDERICK & CO., Albany, N. Y.

Sawing Made Easy

Monarch Lightning Sawing Machine!

Sent on 30 Days Test Trial.

A Great Saving of Labor & Money.



A boy 16 years old can saw logs FAST and EASY. Miles Murray, Portage, Mich., writes: "Am much pleased with the **MONARCH LIGHTNING SAWING MACHINE**. I sawed off a 30-inch log in 2 minutes." For sawing logs into suitable lengths for family stove-wood, and all sorts of log-cutting, it is peerless and unrivaled. Illustrated Catalogue, **Free**. **AGENTS WANTED.** Mention this paper. Address **MONARCH MANUFACTURING CO.**, 163 E. Randolph St., Chicago Ill.

MONARCH HORSE HOE
AND CULTIVATOR COMBINED

For Hoeing & Hilling Potatoes, Corn, Onions, Beets, Cabbages, Turnips, &c.

SENT ON **30 Days'** TEST TRIAL.

An immense saving of labor and money. We guarantee a boy can cultivate and hoe

---

REMEMBER *that $2.00 pays for* THE PRAIRIE FARMER *one year and, the subscriber gets a copy of* THE PRAIRIE FARMER[j] 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.*

[Pg 180]

Well-informed live stock men estimate the drive from Texas the coming spring at 325,000 head, unless shipping rates are unusually favorable, when it may go above 400,000 head.

A careful estimate of the stock on the range near the Black Hills is as follows: Cattle, 383,900 head; horses, 2,200; sheep, 8,700. It is asserted that the stock has wintered remarkably well, the loss not exceeding 1½ per cent.

A virulent disease resembling blind staggers has appeared among the horses of Oregon, and a large number of valuable animals have succumbed to it. Over 400 have died in two counties. So far the veterinarians have been unable to stay its progress.

The period of gestation in the mare is in general forty-eight weeks; the cow forty six weeks; the ewe twenty-one weeks, and the sow sixteen weeks. Having the date of service, the date at which birth is due may be easily ascertained. Careful breeders always keep strict record of each animal.

The Illinois State Board of Agriculture has adopted a rule requiring the slaughter of all sweepstakes animals at the next Fat Stock Show, in order that the judgment of the committees may be verified as to the quality of the animals. The premiums for dressed carcasses have been largely increased over last year.

Polled Aberdeen Cattle.

The subject of our 1st page illustration, Black Prince, is a representative of that black, hornless race, which had its foundation in Scotland several hundred years ago, known as Polled Aberdeen-Angus Cattle. This breed of cattle has grown into very high favor in America during the last five or six years; so much so, that, while in 1879 the number of representatives of this race in America were very few, now the demand for them is so great that the number imported yearly is easily disposed of at prices ranging from $250 to $2,000. Messrs. Geary Bros., London, Ont., say that the demand for such cattle during the past winter has never been equaled in their long experience. As the prevalence of the foot-and-mouth disease in Great Britain, will, without a doubt cause the importation of cattle from that country to be prohibited at an early day, it is safe to say that the value of such stock must rise, as the number of its representatives in America is limited, and those who have such stock in their possession fully appreciate their value; and not being under the necessity of selling, will hold their Aberdeen-Angus cattle unless enticed by a very high price. Therefore, the coming public sale of Aberdeen-Angus cattle in Chicago may be looked forward to as going to show unequaled average prices and especially of individual prize animals.

Black Prince was bought by Messrs. Geary Bros., London, Ont., in Scotland, and brought to America last year. In him are to be found all the fine characteristics of his race. He took the second place at the Smithfield Fat Stock Show of 1883; at the Kansas Fat Stock Show of the same year he was placed second to the Short-horn steer Starlight; and at the last Fat Stock Show of Chicago he took first place among the best three-year-olds of the country. At the time of entry for the Chicago Show he was 1,380 days old, and his weight 2,330 pounds, almost 175 pounds less than he weighed before leaving Scotland for this country. Besides the prizes above mentioned, Black Prince won numerous honors in his own country before coming here.

Their black, glossy, thick coats, their hornless heads, and particularly their low-set, smooth, round and lengthy bodies are the principal features of this breed.

Beef consumers will find them in the front rank for yielding wholesome, nourishing food, juicy, tender, and of the best flavor, free from all unpalatable masses of fat or tallow. It is these favorable characteristics which have gained such an excellent, and widespread reputation for the Aberdeen-Angus cattle. The growing belief that the best breed of beeves is the one that for a given quantity of food, and in the shortest time will produce the greatest weight of nutritious food combined with the smallest amount of bone, tallow, and other waste is going to make these cattle as popular with our beef consumers and producers generally as they have been with those who have long been familiar with their many superior qualities.

Grass for Hogs.

With plenty of milk and mill-feed to mix with the corn, good hogs may be grown without grass. But with corn alone, the task of growing and fattening a hog without grass costs more than the hog is worth.

To make hog-growing profitable to the farmer, he must have grass. In the older States where the tame grasses are plenty, it is a very thoughtless farmer who has not his hog pasture. But out here in Kansas and Nebraska, where we have plenty of corn, but no grass, except the wild varieties, the most enterprising of us are at our wits' ends. Hogs will eat these wild grasses while tender in the spring, and, even without corn, will grow long, tall, and wonderfully lean, and in the fall will fatten much more readily than hogs grown on corn. But fattening the lean hogs takes too much corn. We must have a grass that the hogs will relish, and on which they will both grow and fatten. They will do this on clover, orchard grass, bluegrass, and other tame grasses. But we have not got any of these, nor do we know how to get them. Hundreds of bushels of tame grass seeds are sold every spring by our implement dealers. A few have succeeded in getting some grass, but nine out of ten lose their seed. We either do not know how to grow it, or the seed is not good, or the soil is too new. The truth, perhaps, lies a little in all three. Our agricultural colleges are claiming to have success with these grasses, and their experience would be of value to the farmers if these reports could ever reach them. Not one farmer in a hundred ever sees them. I know of but one farmer of sufficient political influence to receive these reports through the mails. The rest of us can get them for the asking. But not many of us know this, fewer know whom to ask, and still fewer ask. I do not know a farmer that orders a single copy. Farmers, living about our county towns, and doing their trading there, and having leisure enough to loaf about the public offices, and curiosity enough to scratch through the dust-covered piles of

old papers and rubbish in the corner, are usually rewarded by finding a copy of these valuable reports. But we, who live far away from the county seat, do our farming without this aid, and mostly without any knowledge of their existence. This looks like a lamentable state of agricultural stupidity. Notwithstanding this dark picture we would all read, and be greatly profited by these reports, if they were laid on our tables.

If it pays to expend so much labor and money in preparing these reports and sending them half way to the people, would it not be wise to expend a little more and complete the journey, by making it the duty of the assessor to leave a copy on every farmer's table? Compulsory education.

As an explanation of much of the above, it must be remembered that we are nearly all recently from the East, that we have brought with us our Eastern experience, education, literature, and household gods; and that not until we have tried things in our old Eastern ways and failed, do we realize that we exist under a new and different state of things and slowly begin to open our eyes to the existence of Western agricultural reports and papers giving us the conditions on which the best results have been obtained.

There will be more grass seed planted this spring than ever before, and the farmers will be guided by the conditions on which the best successes seem to have been obtained. But this seeding will not give us much grass for this coming summer. What must we do? I write for our Western farmers who have no clover, orchard grass, blue grass, but have in their cultivated fields.

CRAB GRASS.

This grass, the most troublesome weed of the West, smothering our gardens and converting our growing corn-fields into dense meadows, makes the best hog pasture in the world, while it lasts. Put hogs into a pasture containing all the tame grasses, with one corner in crab grass, and the last named grass will all be consumed before the other grasses are touched.

Not only do they prefer it to any other grass, but on no grass will they thrive and fatten so well. Last spring I fenced twelve acres of old stalk ground well seeded to crab grass. With the first of June the field was green, and from then until frost pastured sixty large hogs, which, with one ear of corn each, morning and evening, became thoroughly fat. These were the finest and cheapest hogs I ever grew.

This grass is in its glory from June till frosts. By sowing the ground early in oats, this will pasture the hogs until June, when the crab grass will occupy all the ground, and carry them through in splendid condition, and fat them, with an ear of[jk] corn morning and evening.

A. D. Lee.
Centerville, Kan.

Note.—Many of our readers may be unfamiliar with the variety of grass spoken of by our correspondent. It is known as crop grass, crab grass, wire grass, and crow's foot (*Eleusine Indica*). Flint describes it as follows: Stems ascending, flattened, branching at the base; spikes, two to five, greenish. It is an annual and flowers through the season, growing from eight to fifteen inches high, and forming a fine green carpeting in lawns and yards. It is indigenous in Mississippi, Alabama, and adjoining States, and serves for hay, grazing, and turning under as a fertilizer. It grows there with such luxuriance, in many sections, as never to require sowing, and yields a good crop where many of the more Northern grasses would fail.—[Ed. P. F.]

A Stock Farm and Ranch.

Some years ago Prof. J. B. Turner, of Jacksonville, Ill., whom almost every reader of The Prairie Farmer in days gone by knows, personally, or by his writings, in company with one of his sons conceived the idea of running an Illinois stock farm in connection with a ranch in Texas. The young animals were to be reared on the cheap lands in the latter State where care and attention amount to a trifle, and to ship them North to finish them off for market on the blue grass and corn of the Illinois farm. To carry out this purpose they purchased nearly 10,000 acres in Coleman county, Texas, and they converted 1,000 acres in a body in Montgomery county, Illinois, into a home stock farm. Unfortunately, just as all things were in readiness for extensive operations, the son died, leaving the business to Prof. Turner, now nearly an octogenarian and entirely unable to bear the burden thus forced upon him. As a consequence, he desires to sell these large and desirable possessions, separate or together, as purchasers may offer.

The Illinois farm is well fenced and in a high state of cultivation. There are growing upon it more than 2,000 large evergreens, giving at once protection to stock and beauty to the landscape. There are also 1,500 bearing fruit trees, a vineyard, and a large quantity of raspberries, blackberries, currants, etc.

Besides a good farm-house, there is a large barn, in which there are often fed at one time 150 head of horses, with plenty of room for each animal; and an abundance of storage room in proportion for grain and hay. Also a large sheep shed, the feeding capacity of which is

3,000 head. Also a large hog house, conveniently divided into pens with bins for grain. Other numerous out-buildings, granary, hay sheds, stock and hay scales, etc., etc. There are on the farm twelve miles of Osage orange hedge, the best kind of fence in the world, in perfect trim and full growth; and four miles of good rail fence, dividing the farm off into conveniently sized fields of forty, eighty and one hundred and sixty acres each, access to which is easily obtained by means of gates which open from each field into a private central road belonging to the farm, and directly connected with the stock yards near the house, so that it is not necessary to pass over other fields in the handling of stock. Stockmen will appreciate this arrangement. Owing to its special advantages for handling stock, it has become widely known as a "Model Stock Farm." The lands are all naturally well drained; no flat or wet land, and by means of natural branches, which run through every eighty acres, the whole farm is conveniently and easily watered, by an unfailing supply. There are besides three large wind mills, with connecting troughs for watering the stock yards and remotest field. This supply of stock water has never failed. It is therefore specially adapted for all kinds of stock raising, and is well stocked. It has on it a fine drove of Hereford cattle and Norman horses, and is otherwise fully equipped with all the recent improvements in farming implements. This farm is only about fifty miles from St. Louis, Mo., two miles from a railroad station, and six miles from Litchfield, Illinois. Besides its location commercially, and its advantages for handling stock, this farm is in one of the best wheat and fruit producing sections of Illinois, and has now on it 200 acres of fine wheat.

The ranch in Texas consists of one body of 9,136 acres of choice land. By means of an unfailing supply of living water the whole ranch is well watered, and has besides a very large cistern. The soil is covered with the Curly Mesquite grass, the richest and most nutritious native stock grass known in Texas. There is also on the ranch a splendid growth of live oak trees, the leaves of which remain green the year round, furnishing shade in summer, and an ample protection for stock in winter.

There is on the ranch a large well built stone house, and also a fine sheep shed, with bins for 5,000 bushels of grain. This shed is covered with Florida Cypress shingles and affords protection for 2,000 head of sheep, and can be used just as well for other kinds of stock. Here can be bred and raised to maturity at a mere nominal cost, all kinds of cattle, horses, mules, and other stock, no feed in winter being required beyond the natural supply of grass. After the stock reaches maturity they can be shipped to the Illinois Farm; and while all the cattle easily fatten in Texas enough for the market, still as they are generally shipped to St. Louis or Chicago, it costs but little more, and greatly increases the profits, to first ship them to the Illinois Farm, and put them in prime condition, besides being near the markets, and placing the owner in position to take advantage of desirable prices at any time. With horses and mules this is a special advantage readily apparent to every one.

It will be seen at once that any individual with capital, or a stock company, or partnership of two or more men, could run this farm and ranch together at a great profit. All the improvements on both being made solely for convenience and profit and not anything expended for useless show.

I do not write this communication from any selfish motive, for I have not a penny's worth of interest in either farm or ranch, but I want to let people who are looking for stock farms know that here is one at hand such as is seldom found, and at the same time to do my life-long friend and yours a slight favor in return for the great and lasting benefits he has, in the past, so freely conferred upon the farmers of the State and country.

I know these lands can be bought far below their real value, and the purchaser will secure a rare bargain. I presume the Professor will be glad to correspond with parties, giving full particulars as to terms.

SUBSCRIBER.
MONTGOMERY CO., ILL.

Western Wool-Growers.

The Western wool-growers, in convention at Denver, Colorado, March 13th, unanimously adopted the following memorial to Congress:

> Whereas, The wool-growers of Colorado, Kansas, Utah, Wyoming, Nebraska, Idaho, New Mexico, and Minnesota, assembled in convention in the city of Denver, the 13th of March, 1884, representing 7,500,000 head of sheep, $50,000,000 invested capital, and an annual yield of 35,000,000 pounds of wool, and
>
> Whereas, Said Industry having been greatly injured by the reduction of the tariff bill of May, 1883, and being threatened with total destruction by the reduction of 20 per cent, as proposed by the Morrison tariff bill just reported to the House of Representatives by the Committee on Ways and Means; therefore
>
> Resolved, That we, the wool-growers in convention assembled, are opposed to the provisions of the Morrison bill now before Congress which aim to make a further reduction of 20 per cent on foreign wools and woolens, and that we ask a restoration of the tariff of 1867 in its entirety as relates to wools and woolens, by which, for the first

time in the industrial history of the country, equitable relations were established between the duties on wool and those on woolen goods.

Resolved, That we pledge ourselves to work for and to aid in the restoration of the tariff of 1867[l] on wools and woolens, and request all persons engaged or interested in the wool-growing industry to co-operate with us.

Resolved, That we as wool-growers and citizens pledge ourselves to stand by all committees and associations in giving full and complete protection to all American industries in need of the same, and cordially invite their co-operation in this matter.

The memorial concludes with an appeal to Western Senators and Representatives in Congress to do all in their power to restore the tariff of 1867.

The Cattle Disease Near Effingham.

Saturday, March 15, I visited the herds of Messrs. Du Brouck, Schooley and Fannce northeast of Effingham, Illinois, and carefully examined them with Mr. F. F. Hunt, of the university, as they were reported affected with foot-and-mouth disease. In each herd diseased cattle were found; about 20 distinctly marked cases, a few others having symptoms. The disease is unlike anything I have known, but does not resemble foot-and-mouth disease as described by any authority. Only the hind feet are affected, and these without ulceration. In most cases "scouring" was first noticed, followed by swelling above the hoofs. In the most severe cases, the skin cracked about the pastern joint or at the coronet. In four cases one foot had come off. Swelling of pastern and "scouring" were the only symptoms in several cases. The mouth and udders were healthful; appetites good. In one case there was slight vesicle on nostril and slight inflammation of gum. Some animals in contact with diseased ones for weeks remained healthful. Others were attacked after five weeks' isolation. The most marked cases were of eight to ten weeks standing. But one animal had died. [Pg 181]

What we saw is not foot and mouth disease as known abroad, nor is the contagious character of the disease proven from the cases in these herds.

G. E. Morrow,
University, Champaign, Ill.

Camembert Cheese.

The Camembert is one of the variety of French cheeses that find ready sale in England at high prices. Mr. Jenkins describes the process of making this cheese in a late number of the Journal of the Royal Agricultural Society of England which information we find condensed in the Dublin Farmer's Gazette:

The cows are milked three times a day, at 4.30 and 11.30 a. m., and at 6 p. m. In most dairies the evening's milk is highly skimmed in the morning, butter being made from the cream, and the milk divided into two portions one of which is added to the morning's and the other to the midday's milking. The mixture is immediately put into earthen[m] vessels holding twelve to fifteen gallons each, and after it has been raised to the temperature of about 86 deg. Fahr., a sufficient quantity of rennet is added to make the curd fit to be transferred to the cheese moulds in three or four hours, or, perhaps, a longer interval in winter. The mixture of the rennet with the milk is insured by gentle stirring, and the pots are then covered with a square board. The curd is ready for removal when it does not adhere to the back of the finger placed gently upon it, and when the liquid that runs from the fingers is as nearly as possible colorless. The curd is transferred, without breaking it more than can be avoided, to perforated moulds four inches in diameter. The moulds are placed on reed mats resting on slightly inclined slabs, made of slate, cement, or other hard material, and having a gutter near the outer edge. The curd remains in the moulds twenty-four or even forty-eight hours, according to the season, being turned upside down after twelve or twenty-four hours; that is, when sufficiently drained at the bottom. After turning the face of the cheese, the inside of[n] the mould is sprinkled with salt, and twelve hours afterward the opposite face and the rim of the cheeses are treated in the same way. The cheeses are then placed on movable shelves round the walls of the dairy for a day or two, after which the curing process commences by the cheeses being transferred to the "drying-room," and there placed on shelves made of narrow strips of wood with narrow intervals between them, or of ordinary planks with reed mats or clean rye straw. Here the greatest ingenuity is exerted to secure as dry an atmosphere and as equable a temperature as possible—the windows being numerous and small, and fitted with glass, to exclude air, but not light, when the glass is shut, with a

wooden shutter to exclude both light and air; and with wire gauze to admit light and air, and exclude flies and winged insects, which are troublesome to the makers of soft cheese.

The cheeses are turned at first once a day, and afterward every second day, unless in damp weather, when daily turning is absolutely necessary. In three or four days after the cheeses are placed in the drying-room they become speckled; in another week they are covered with a thick crop of white mold, which by degrees deepens to a dark yellow, the outside of the cheese becoming less and less sticky. At the end of about a month, when the cheese no longer sticks to the fingers, it is taken to the finishing room, where light is nearly excluded, and the atmosphere is kept very still and slightly damp. Here they remain three or four weeks, being turned every day or every second day, according to the season, and carefully examined periodically. When ready for market—that is to say, in winter, when ripe, and in summer, when half ripe—they are made up in packets of six, by means of straw and paper, with great skill and neatness.

Few Words and More Butter.

The Wisconsin Dairymen's Association last year offered prizes for the best essays on butter-making, the essays not to exceed 250 words. Competition was active, and many valuable little treatises was the result. The first prize was won by D. W. Curtis, of Fort Atkinson, and reads as follows. We commend it to all butter-makers and to all writers of essays as a model of the boiled-down essence of brevity:

COWS.

Select cows rich in butter-making qualities.

FEED.

Pastures should be dry, free from slough-holes, well seeded with different kinds of tame grasses, so that good feed is assured. If timothy or clover, cut early and cure properly. Feed corn, stalks, pumpkins, ensilage and plenty of vegetables in winter.

GRAIN.

Corn and oats, corn and bran, oil meal in small quantities.

WATER.

Let cows drink only such water as you would yourself.

CARE OF COWS.

Gentleness and cleanliness.

MILKING.

Brush the udder to free it from impurities. Milk in a clean barn, well ventilated, quickly, cheerfully, with clean hands and pail. Seldom change milkers.

CARE OF MILK.

Strain while warm; submerge in water 48 degrees. Open setting 60 degrees.

SKIMMING.

Skim at twelve hours; at twenty-four hours.

CARE OF CREAM.

Care must be exercised to ripen cream by frequent stirrings, keeping at 60 degrees until slightly sour.

UTENSILS.

Better have one cow less than be without a thermometer. Churns without inside fixtures. Lever butter worker. Keep sweet and clean.

CHURNING.

Stir the cream thoroughly; temper to 60 degrees; warm or cool with water. Churn immediately when properly soured, slowly at first, with regular motion, in 40 to 60 minutes. When butter is formed in granules the size of wheat kernels, draw off the buttermilk; wash with cold water and brine until no trace of buttermilk is left.

WORKING AND SALTING.

Let the water drain out; weigh the butter; salt, one ounce to the pound; sift salt on the butter, and work with lever worker. Set away two to four hours; lightly re-work and pack.

A MACHINE that can take hay, corn fodder, grass, and grain and manufacture them into good, rich milk at the rate of a quart per hour for every hour in the twenty-four, is a valuable one

and should be well cared for. There are machines—cows—which have done this. There are many thousands of them that will come well up to this figure for several months in the year, and which will, besides, through another system of organisms, turn out a calf every year to perpetuate the race of machines. Man has it in his power to increase the capacity of the cow for milk and the milk for cream. He must furnish the motive power, the belts, and the oil in the form of proper food, shelter, and kindly treatment. By withholding these he throws the entire machinery out of gear and robs himself.

Compiled Correspondence.

KANE COUNTY, MARCH 17.—Snow is nearly all gone. There is but little frost in the ground. The spring birds have come. Hay is plenty, winter wheat and winter rye look green, and have not been winter-killed to any great extent. Cattle and horses are looking well and are free from disease. We fear the spread of the foot-and-mouth disease. Every effort should be made to confine it within its present limits. Its spread in this county of so great dairy interests would be a great calamity. Our factory men[o] will make full cream cheese during the summer months. The hard, skim cheese made last season, and sold at 2 cts per pound, paid the patrons nothing. We hear of factory dividends for January of $1.60 to $1.66.

J. P. B.

GRAND PRAIRIE, TEX., MARCH 8.—The spring is cold and late here; but little corn planted yet. Winter oats killed; many have sown again. Farmers are well up with their work.

G. E. R.

Symptoms of Foot-and-Mouth Disease.

This disease, which is one of the most easily transmitted of contagious and infectious diseases of domestic animals, is characterized by the appearance of vesicles or small bladders on the mucous surfaces and those parts of the skin uncovered by hair, such as in the mouth, on the gums and palate, on the tongue, and the internal surface of the lips and cheeks; on the surface of the udder and teats, and between the claws. The disease passes through four different stages or periods; but for present purposes it will be sufficient to merely mention the most prominent of the successive changes and appearances, as they occur to the ordinary observer. The incubatory stage, or the time between contamination and the development of the disease, is very short (from twenty-four hours to one or two weeks), and the disease is ushered in by the general symptoms of fever, such as shivering, increased temperature, staring coat, dry muzzle, dullness and loss of appetite. The animals seek seclusion, preferably in sheltered places, where they assume a crouched position, or lie down, and there is more or less stiffness and unwillingness to move. The mouth becomes hot and inflamed looking, and covered with slime, the breath fetid; the animal grinds the teeth, smacks with mouth, and has difficulty in swallowing. There is more or less tenderness of feet and lameness, and in cows the udder becomes red and tender, the teats swollen, and they refuse to be milked. Depending upon the intensity of the fever and the extent to which the udder is affected, the milk secretion will be more or less diminished, or entirely suspended; but throughout the disease the quality or constituents of the milk become materially altered; its color changes to a yellow; it has a tendency to rapid decomposition, and possesses virulent properties. Soon yellowish-white blisters, of various sizes, from that of a small pea to a small hickory nut, appear on the mucous surface within the mouth, and which blisters often in the course of development become confluent or coalesce. They generally break within two to three days, and leave bright red, uneven, and ragged sores or ulcers, to the edges of which adheres shreds of detached epithelial tissue. The animal now constantly moves the tongue and smacks the mouth, while more or less copious and viscid saliva continually dribbles from the mouth. The lameness increases in proportion as the feet are affected, and if the fore feet are most affected, the animal walks much like a floundered horse, with the hinder limbs advanced far under the body, and with arched back. The coronet of the claws, especially toward the heels, becomes swollen, hot, and tender, causing the animal to lie down most of the time. The blisters, which appear at the interdigital space of the claws, and especially at the heels, break in the course of a day and discharge a thick, straw-colored fluid; the ulcers, which are of intensely red or scarlet color, soon become covered with exudating lymph, which dries and forms scabs. On the udder, the blisters

appear more or less scattered and variable, and they are most numerous at the base and on the teats. Ordinarily, the disease terminates in two or three weeks, while the animal, which during its progress refuses to partake of any other than sloppy food, gradually regains strength and flesh, and the udder resumes its normal functions. The mortality at times has proved very great in this disease when it has appeared with unusual virulency.

Shyness and Timidity.

In common "horse language," these propensities are confounded one with the other or else no proper and right distinction is made between them. A horse may be timid without being shy, though he can hardly be said to be shy without being timid. Young horses in their breaking are timid, frightened at every fresh or strange object they see. They stand gazing and staring at objects they have not seen before, fearful to approach them; but they do not run away from, or shy at them; on the contrary, the moment they are convinced there is nothing hurtful in them, they refuse not to approach or even trample upon them. This the shy horse will not do. He can not be persuaded to turn toward or even to look at the object he shies at; much less to approach it.

Timid horses, through usage and experience, get the better of their timidity, and in time become very opposite to fearful; but shy horses, unless worked down to fatigue and broken-spiritedness, rarely forget their old sins. The best way to treat them is to work them, day by day, moderately for hours together, taking no notice whatever of their shying tricks, neither caressing nor chastising them, and on no account whatever endeavoring to turn their heads either towards or away from the objects shied at.

Glanders.

With a view of shedding light on the important question of the contagiousness of glanders, we will mention the following deductions from facts brought forth by our own experience.

1. That farcy and glanders, which constitute the same disease, are propagable through the medium of stabling, and this we believe to be the more usual way in which the disease is communicated from horse to horse.

2. That infected stabling may harbor and retain the infection for months, or even years; and though, by thoroughly cleansing and making use of certain disinfecting means, the contagion may probably be destroyed, it would not perhaps be wise to occupy such stables *immediately* after such supposed or alleged disinfection.

3. That virus (or poison of glanders) may lie for months in a state of incubation in the horse's constitution, before the disease breaks out. We have had the most indubitable evidence of its lurking in one horse's system for the space of fifteen weeks.

4. That when a stud or stable of horses becomes contaminated, the disease often makes fearful ravages among them before it quits them; and it is only after a period of several months' exemption from all disease of the kind that a clean bill of health can be safely rendered.

MISCELLANEOUS.

Horticulturists, Write for Your Paper.

Sand Mulching of Orchard Trees.

In THE PRAIRIE FARMER I notice the interesting note of "O." of Sheboygan Falls, Wis., on the apparent benefit resulting from sand and manure mulching of pear trees.

In the very near future I expect to see much of this kind of work done by commercial orchardists. Already we have many trees in Iowa mulched with sand.

I wish now to draw attention to the fact that on the rich black prairie soils west of Saratov—about five hundred miles southeast of Moscow—every tree in the profitable commercial orchards is mulched with pure river sand. The crown of the tree when planted is placed about six inches lower than usual with us in a sort of basin, about sixteen feet across. This basin is then filled in with sand so that in the center, where the tree stands, it is three or

four inches higher than the general level of the soil. The spaces between these slight depressions filled with sand are seeded down to grass, which is not cut, but at time of fruit gathering is flattened by brushing to make a soft bed for the dropping fruit and for a winter mulch.

The close observer will not fail to notice good reasons for this treatment. (1.) The sand mulch maintains an even temperature and moisture of the surface roots and soil and prevents a rapid evaporation of the moisture coming up by capillary attraction from the sub soil.

(2.) The soil under the sand will not freeze as deeply as on exposed surfaces, and we were told that it would not freeze as deeply by two feet or more as under the tramped grass in the interspaces.

(3.) With the light colored sand about the trees, and grass between, the lower beds of air among the trees would not be as hot by several degrees as the exposed surface, even when the soil was light colored clay.

(4.) A bed of sand around the trunks of the trees will close in with the movement of the top by the summer and autumn winds, thus avoiding the serious damage often resulting from the swaying of the trunk making an opening in the soil for water to settle and freeze.

Still another use is made of this sand in very dry seasons, which as with us would often fail to carry the fruit to perfection. On the upper side of large commercial orchards, large cisterns are constructed which are filled by a small steam pump. When it is decided that watering is needed the sand is drawn out, making a sort of circus ring around the trees which is run full of water by putting on an extra length of V spouting for each tree. When one row is finished the conductors are passed over to next row as needed. To water an orchard of 1,200 trees—after the handy fixtures are once provided—seems but a small task. After the water settles away, the sand is returned to its place.

In the Province of Saratov we saw orchards with and without the sand, and with and without the watering. We did not need to ask if the systematic management paid. The great crops of smooth apples and pears, and the long lived and perfect trees on the mulched and watered orchards told the whole story of the needs of trees planted on black soil on an open plain subject to extreme variations as to moisture and temperature of air and soil.

J. L. Budd.
Iowa Agricultural College.

Pear Blight.—No. 2.

The mere "experience" of an individual, whether as a doctor of medicine, horticulture, or agriculture—however extensive, is comparatively worthless. Indeed the million "demonstrate it to be mischievous, judging from the success of quacks and empyrics as to money. An unlimited number of facts and certificates prove nothing, either as to cause or remedy."

Sir Isaac Newton's corpuscular theory "explained all the phenomena of light, except one," and he actually assumed, for it "fits." Nevertheless it will ever remain the most thinkable mode of teaching the laws of light, and it is not probable that any more than this will ever be accomplished as to any natural science—if that can be called science about which we must admit that "it is not so; but it is as if it were so."

Of more than 300 "Osband Summer" which I grafted on the Anger quince successfully, one remains, and this one was transplanted after they had fruited in a clay soil, to the same sort of soil between "the old standard" and a stable, both of which have occupied the same locality and within twenty yards, during much more than fifty years of my own observation—this "Osband Summer" flourishes. It has borne fruit in its present site, but grew so rapidly last year that the blossoms aborted thus illustrating the large proportion of vital force necessary to the production of fruit, as the site has a perennial supply of manure from the old stable. A number of standard trees, of the same variety, developed beautifully until they attained twenty or thirty feet, but then succumbed to the blight, after the first effort at fruiting. So also the Beurre Clairgean etc., etc. Their exposure to the same influences, and their growth during several years did not occasion the blight, but the debility which must inevitably attend fruiting seems the most prolific cause.

All the phenomena of pear blight can be accounted for, and we are greatly encouraged in protecting the trees therefrom if, we assume, it is only the result of weakness and deficient vitality; if so, as in epidemics, all the pear trees may be poisoned or ergotized, but only the weakest succumb; and perhaps this debility may be confined to one limb. The practical value of this view is manifest, as it is impracticable to avoid using the same knife, and remove every blighted leaf from the orchard. Moreover, if the limb is a large one, its prompt removal shocks the vitality of the whole tree[1] and thus renders other parts more vulnerable. On the contrary view, the limb may be allowed to drop by natural process, precisely as all trees in a forest shed their lower limbs, leaving hardly a cicatrice or scar, and this may be insured at any season by a cord of hemp twine, firmly bound around the limb. The inevitable strangulation, and the healing of the stump (without the mycelium of fungi which the knife

or saw inevitably propagates by exposing a denuded surface, if not more directly) proceed more rapidly than the natural slough of limbs by starvation. Moreover the fruit may mature on such limbs during their strangulation, as this may not be perfected before the subsequent winter.

The next practical result of my view is the fundamental importance of all those means which are calculated to husband the vital force of the tree during its first effort to fruit; one of these is the use of a soil that will not produce more than twenty bushels of corn without manure, thus a large proportion of the setts will be aborted, but one half of what remains should be removed, and subsequently the area beneath the limbs should have a wheelbarrow of good compost.

D. S.

[1] NOTE.—The shock as to vital force is demonstrated by the fact that when young trees are not trimmed at all their girth increases more rapidly, and they bear fruit sooner. Moreover, when old trees are severely pruned (though not half the proportion of wood is removed) they fail to bear during the next year. I find that a hemp cord about the size of the stem of a tobacco pipe (one-fourth inch diameter) will soon become imbedded in the bark if firmly tied around a limb, and perhaps this size is more efficient than a thicker cord.

The Black Walnut.

The black walnut is without doubt the most valuable tree we have for the rich lands of the "corn belt," West, and one which is very easily grown everywhere if the farmer will only learn how to get it started. How few we see growing on our prairies. Why? Simply because to have it we must grow it from the nuts. It is nearly impossible to transplant black walnut trees of any size and have them live; although it is a fact that whenever a non-professional attempts to grow them from the nuts he is almost sure to fail, it is also a fact that there is no tree that is more easily grown from the seed than this, if we only know how to do it.

It is my purpose in this note to tell how to do it, and also how not to do it.

In the first instance we will suppose a man lives where he can gather the nuts in the woods. When the nuts begin to fall let him plow deeply the plot of ground he wishes to plant and furrow it off three or four inches deep, the distance apart he wishes his rows to be. He will then go to the woods and gather what nuts he wishes to plant, and plant them at once, just as they come from the tree, covering them just out of sight in the furrows. This is all there is of it; simple, is it not? But it will not do to gather a great wagon box full, and let them stand in it until they heat, or to throw them in a great heap on the ground and let them lay there until they heat. It will not do, either, to hull them and let them lay in the sun a week or two, or hull them, dry them and keep them until spring, and then plant; none of these plans will do if you want trees. Of course if the nuts are hulled and planted at once they will grow; but this hulling is entirely unnecessary. Besides, the hulls seem to act as a special manure for the young seedlings, causing them to grow more vigorously.

Next, we will suppose one wishes to plant walnuts where they can not be had from the woods, but must be shipped in. There seems to be only one plan by which this can be done safely every time, which is as follows: Gather the nuts as they fall from the trees—of course when they begin to fall naturally all may be shaken down at once—and spread them not over a foot deep, on the bare ground under the shade of trees. Cover out of sight with straw or leaves, with some sticks to hold in place called a "rot heap;" then after they are frozen and will stay so, they may be shipped in bags, boxes, barrels, or in bulk by the car-load, and then, again, placed in "rot heaps," as above, until so early in the spring as the soil is in workable condition. Then plant as directed in the fall, except the soil should be firmly packed around the nuts. Keep free from weeds by good cultivation, and in due time you will have a splendid grove.

There was an immense crop of walnuts in this district last fall, and thousands of bushels were put up carefully, in this way, all ready for shipment before the weather became warm; many more thousands were planted to grow seedlings from, for, notwithstanding the walnut transplants poorly when of considerable size, the one year seedlings transplant with as little loss as the average trees.

There is no tree better adapted for planting to secure timber claims with than the black walnut, and none more valuable when the timber is grown. For this purpose the land should be plowed deeply, then harrowed to fineness and firmness, and furrowed out in rows four, six, eight, or ten feet apart. The nuts may then be planted as directed. It is best to plant thickly in the rows, then if too thick they can be thinned out, transplanting the thinnings, or selling them to the neighbors. They should be thoroughly cultivated, until large enough to shade the ground, and thinned out as necessary as they grow larger. A walnut grove thoroughly cultivated the first ten years will grow at least twenty feet high, while one not cultivated at all would only grow two to three feet in that time.

D. B. WIER.
LACON, ILL.

Notes on Current Topics.

ARBOR DAY.

Why can not Illinois have an Arbor Day as well as Nebraska, or any other State. There ought to be ten millions of trees planted the coming spring within its borders—saying nothing of orchard trees—by the roadside, on lawns, for shade, for wind breaks, for shelter, for mechanical purposes, and for climatic amelioration. Nearly all our towns and villages need more trees along the streets or in parks; thousands of our farms are suffering for them; hundreds of cemeteries would be beautified by them, and numberless homes would be rendered more pleasant and homelike by an addition of one, two, or a dozen, to their bleak places. Can not THE PRAIRIE FARMER start a boom that will lead to the establishment of an Arbor Day all over the State? Why not? There is yet time.

HOT-BEDS.

For the benefit of those who can not command the usual appliances for hot-beds, I will say that they can be made so as to answer a good purpose very cheaply. Take a nice sunny spot that is covered with a sod, if to be had. Dig off the sod in squares and pile them carefully on the north side and the ends of the pit, to form the sides of the bed, with a proper slope. The soil thrown out from the bottom may be banked up against the sods as a protection. After the bed is finished, the whole may be covered with boards, to turn the water off. These answer in the place of glass frames. As the main use for a hot-bed is to secure bottom heat, very good results can be obtained in these cheaply constructed affairs. After the seeds are up, and when the weather will permit, the boards must be removed to give light and air—but replaced at night and before a rain. Of course, where large quantities of plants are to be grown, of tender as well as hardy sorts, it would be better and safer to go to the expense of board frames and glass for covering.

DON'T DO IT.

Of course, all the peach trees, and many of the other stone fruits, and most of the blackberry and raspberry plants, will show discoloration of wood when the spring opens—so much so that many will pronounce them destroyed, and will proceed to cut them away. Don't do it. Peaches have often been thus injured, and by judicious handling saved to bear crops for years afterward. But they will need to be thoroughly cut back. Trees of six or seven years old I have cut down so as to divest them of nearly all their heads, when those heads seemed badly killed, and had them throw out new heads, that made large growth and bore good crops the following season. Cut them back judiciously, and feed them well, but don't destroy them. And so with the berry plants. Wait and see, before you destroy.

PEARS FROM RUSSIA.

No one who reads Prof. Budd's articles on Russian Pears, can fail to be interested and struck with the prospect of future successful pear culture in the United States. It is highly probable that Russia is yet to give us a class of that fruit that will withstand the rigors of our climate. But how is this to be accomplished? Individual enterprise can, and doubtless will, accomplish much in that direction; but the object seems to me to be of sufficient importance to justify State or National action. The great State of Illinois might possibly add millions to her resources by giving material aid in the furtherance of this purpose—and a liberal expenditure by the General Government, through the Department of Agriculture, or the American Pomological Society, would be more usefully applied than many other large sums annually voted. At all events, another season of fruitage ought not to be allowed to pass without some concerted action for the purpose of testing the question.

Some of our strongest nurserymen will likely be moving in the work, but that will not be enough. The propagator of that fruit, however, who will succeed in procuring from the European regions a variety of pears that will fill the bill required by the necessities of our soil and climate, has a fortune at his command.

OLD WINTER

lingers in the lap of spring, truly, this year of grace, 1884. Here it is the 10th of March, and for over one hundred days we have had winter—winter; but very few real mild and bright days, such as we had "when I was a boy." The Mississippi is frozen over still, with no signs of breaking up, and men, women, and children are sighing for sunshine and showers, and daisies and violets. The wood and coal bills have been enormous; the pigs squeal in the open pens, and cattle roam, as usual, shivering in the lanes and along the streets. The song of a robin to-morrow morning would be a joyous sound to hear.[p]

T. G.

Prunings.

Tree-worship among the ancients had a most important influence on the preservation of forests in circumscribed places. Beautiful groves, which would otherwise have been

sacrificed on the altar of immediate utility, were preserved by the religious respect for trees. —Milwaukee Sentinel.

F. K. Phœnix. "Small trees have larger roots in proportion, (2) they cost less, (3) expressage of freight is less—expressing small trees is usually cheaper than freighting large ones, and then so much more speedy, (4) less labor handling, digging holes, etc., (5) less exposed to high winds which loosen roots, and kill many transplanted trees, (6) planters can form heads and train them to their own liking, (7) with good care in, say five years, they will overtake the common larger sized trees. Without good care, better not plant any size."

The coming currant is Fay's Prolific. It originated with Lincoln Fay, of Chautauqua county, N. Y. For many years he endeavored to raise a currant that would combine the size of the Cherry currant with the productiveness of the Victoria. To this end he fertilized one with the pollen of the other, and raised some thousands of seedlings, from out of which he selected this as the one that most nearly realized his desires. It is now sixteen years since this seedling was obtained. For some eight or nine years Mr. Fay tested this variety by the side of all the sorts in cultivation, until becoming convinced of its superiority in several particulars over any of these, he planted it extensively for his own marketing.

At a late meeting of the Pennsylvania Horticultural Society, the currant worm came in for a good deal of talk. Mr. Satterthwaite said that hellebore, as we have often printed, was the most effectual "remedy." He mixed it with water and applied it with a brush or whisk of straw. If not washed off by rain for twenty-four hours and used every year, the worms were easily got rid of. Mr. Saunders, Superintendent of the Government Gardens at Washington, [Pg 183] and a gentleman thoroughly conversant with every branch of horticulture, said that there was nothing so effectual with insects as London purple, and, though equally poisonous as Paris green, was much cheaper. Tobacco stems and refuse have also been found of great value in fruit culture. Pyrethrum, he said, would also kill all sorts of leaf-eating insects; it is now largely cultivated in California, and is hardy at least as far north as Washington.

Josiah Hoopes in New York Tribune: In Eastern Pennsylvania and New Jersey, where, literally, no pears have been grown of late years, the Kieffer is doing well. I know of no fruit so variable. I ate specimens last season finely flavored and delicious; again when they were weak and watery. This fruit needs thinning on the trees and careful ripening in the house. Don't understand me to say that Kieffer is "best of all." But here it is the most profitable for market that I know of, as this is not a pear country, as are portions of New York State. As we go further south the Kieffer seems to improve, and I think Mr. Berckmans, of Georgia, will give it a good name with him. Yes, the Kieffer will command a higher price in Philadelphia than any other pear, and we think some people there know what good fruit is. Don't imagine I have any axe on the grindstone in this matter; pecuniarily the Kieffer is no more to me than the Bartlett or dozens of other varieties.

Some New Plants.

ABUTILON THOMSONII PLENA.

It is one of the peculiarities of plant culture, that after a certain number of years of cultivation, any plant having the properties of sporting freely, that is, changing greatly from the original wild character of the plant, will become double. In most cases it first arises from seed, but with the plant under notice it appears that it was what is called a bud variation, that is, that from some freak of a particular branch of a plant of the well-known A. Thomsonii, the ordinary single flowers were found to be double. This happening on a plant under the eye of a professional florist was taken off the plant and rooted, and at once became its established character. This phenomena of variation being "fixed" by separate propagation, is by no means rare, and not a few of our choice fruits, flowers, and vegetables had their origin by the same means. It remains to be seen whether in this case it will be of much value except as a curiosity, it having precisely the same leaf markings as the original, which are a very distinct yellow mottling of the leaf in a field of green, and for which the plant is valuable alone, the flowers being quite of a secondary character. The flowers are said to be perfectly double, resembling in form a double hollyhock, color deep orange, shaded and streaked with crimson. This is the first year it has been sent out, and we shall not be surprised if it is soon followed by others, for usually, when the "double" condition of things has arrived no one has a monopoly of the curiosity.

ALTERNANTHERA AUREA NANA.

This is a charming new plant of decided merit to the carpet style of bedding or edging, being very compact in growth, easily kept to a line of the finest character, and producing what is

of great importance in the summer, a line of golden yellow. At times the old kind, A. aurea, would come very good, but more often it had far too much of a green shade to furnish the contrast sought after, and, as a result, failed to bring out the effect the planter studied to produce. It is a fitting companion to A. amabilis, A. paronychioides, and A. versicolor, and will be hailed with delight by our park florists and other scientific planters.

BOUVARDIA THOMAS MEEHAN.

Here we have a double scarlet bouvardia from the same raisers, Nanz and Neuner, that astonished the floral world a few years back, with the double white B. Alfred Neuner. This new addition, unlike the old, which was another "bud variation," was secured by a cross between the old B. leiantha, scarlet with a single flower, and Alfred Neuner, double white. If this is the real origin of the kind, which we somewhat doubt, for if our theory is correct, that a certain amount of cultivation predisposes to double variation, then it is not necessary to cross the double, which in fact can not be done with a perfectly double flower—the organs of fructification being wanting with that of a single and seed-producing kind, to account for the origin of a new double.

As is well known the old leiantha is one of the best scarlets yet, and this new candidate for favor is said to unite the brilliant color and profuse blooming qualities of the old favorite B. leiantha with the perfect double flowers of B. Alfred Neuner.

There are now of this class of plants the three colors—white, scarlet, and pink—in double as well as single; for instance, a pink President Garfield sported from and was "fixed" from the white A. Neuner, a year or two ago.

STATICE SUWOROWII REGAL.

In this we have a right regal plant. We first heard of it from the German catalogues, early in the past winter. This plant is now offered for sale by the florists of this country. Its description from the catalogues is as follows: "One of the finest novelties in the list of showy annuals lately introduced. Its branching flower spikes, of a very bright rose, with a crimson shade, appear successively from ten to fifteen on each plant, and measure, each, fully fifteen to eighteen inches in height[q], and from one-half to one inch in breadth; the foliage, laying flat on the ground, is comparatively small, and completely hidden by the numerous flower spikes, each leaf being five inches long, and from one-half to two inches broad, undulated and glaucous. It is constantly in bloom during the summer and autumn, and when in full bloom is a truly magnificent sight, being one mass of flowers." This class of plants are great favorites, and we should judge by the colored flowers and description that this variety is a decided novelty.

TEA ROSES, WHITE BON SILENE.

This is another new aspirant for favor, and comes out with the high sounding character of being in a white what the old Bon Silene is as a red winter tea rose. The description from the catalogue is: "The buds are larger and more double than its parent (the red B. S.) and will produce more flower buds than any other white rose in cultivation."

It was raised by Francis Morat, of Louisville, Ky., four years ago; it is also a "sport," and from the old B. silene. Should it retain the good flowering qualities, fragrance, and substance of the original kind, with a pure white bud, it will very soon work its way into popular favor. Usually a white variation has not the vitality that its colored progenitor had, so that we say, wait and see.

EDGAR SANDERS.

Pamphlets, Etc., Received.

A full and detailed account of the Polled Galloway breed of cattle is sent us by the Rev. John Gillespie, M. A., Dumfries, Scotland. The catalogue has also an appendix containing a correspondence on Polled-Angus versus Galloway cattle for the Western States of America.

Jabez Webster's descriptive wholesale and retail price list of fruit and ornamental nursery stock, etc., Centralia, Ill.

Illustrated catalogue and price list of grape vines, small fruits, etc. John G. Burrow, Fishkill Village, Dutchess county, N. Y.

The Canadian Entomologist, by William Saunders, London, Ontario. This is an exceedingly neat little pamphlet, and contains articles upon many of the most important subjects relating

to entomology, by a number of prominent and well-known writers of the day.

The Argus Almanac for 1884. This almanac is replete with useful information concerning the Government, public debt, State elections from 1873 to 1883, finances of State of New York, biographical sketches of State officers and members of the Legislature, etc., etc. Price, 25 cents, Albany, N. Y.

"A Primer of Horticulture for Michigan Fruit Growers." This pamphlet has been prepared for the use of beginners in horticulture by Charles W. Garfield, Secretary of the Michigan State Horticultural Society, and will be found very helpful to all such. Price, 15 cents.

Waldo F. Brown's illustrated spring catalogue of vegetable and flower seeds. Oxford, Ohio.

R. H. Allen & Co.'s descriptive catalogue of choice farm, garden, and flower seeds. Nos. 189 and 191 Water St, N. Y.

The Manifesto, a pamphlet devoted to the interests of our Shaker friends. Compliments of Charles Clapp, Lebanon, Ohio.

"THE THIRD HOUSE."

Its Good and Bad Members—The Remarkable Experiences of a Close Observer of Its Workings During a Long Residence at Washington.

[*Correspondence Rochester Democrat.*]

No city upon the American continent has a larger floating population than Washington. It is estimated that during the sessions of Congress twenty-five thousand people, whose homes are in various parts of this and other countries, make this city their place of residence. Some come here, attracted by the advantages the city offers for making the acquaintance of public men; others have various claims which they wish to present, while the great majority gather here, as crows flock to the carrion, for the sole purpose of getting a morsel at the public crib. The latter class, as a general thing, originate the many schemes which terminate in vicious bills, all of which are either directed at the public treasury or toward that revenue which the black-mailing of corporations or private enterprises may bring.

While walking down Pennsylvania avenue the other day I met Mr. William M. Ashley, formerly of your city, whose long residence here has made him unusually well acquainted with the operations of the lobby.

Having made my wants in this particular direction known, in answer to an interrogative, Mr. Ashley said:

"Yes, during my residence here I have become well acquainted with the workings of the 'Third House,' as it is termed, and could tell you of numerous jobs, which, like the 'Heathen Chinee,' are peculiar."

"You do not regard the lobby, as a body, vicious, do you?"

"Not necessarily so, there are good and bad men comprising that body; yet there have been times when it must be admitted that the combined power of the 'Third House' has overridden the will of the people. The bad influence of the lobby can be seen in the numerous blood-bills that are introduced at every session."

"But how can these be discovered?"

"Easily enough, to the person who has made the thing a study. I can detect them at a glance."

"Tell me, to what bills do you refer?"

"Well, take the annual gas bills, for instance. They are introduced for the purpose of bleeding the Washington Gas Light company. They usually result in an investigating committee which never amounts to anything more than a draft upon the public treasury for the expenses of the investigation. Another squeeze is the *abattoir* bills, as they are called. These, of course, are fought by the butchers and market-men. The first attempt to force a bill of this description was in 1877, when a prominent Washington politician offered a fabulous sum for the franchise."

"Anything else in this line that you think of, Mr. Ashley?"

"Yes, there's the job to reclaim the Potomac flats, which, had it become a law, would have resulted in an enormous steal. The work is now being done by the Government itself, and will rid the place of that malarial atmosphere of which we hear so much outside the city."

"During your residence here have you experienced the bad results of living in this climate?"

"Well, while I have not at all times enjoyed good health, I am certain that the difficulty which laid me up so long was not malarial. It was something that had troubled me for years. A shooting, stinging pain that at times attacked different parts of my body. One day my right arm and leg would torture me with pain, there would be great redness, heat and swelling of

the parts; and perhaps the next day the left arm and leg would be similarly affected. Then again it would locate in some particular part of my body and produce a tenderness which would well nigh drive me frantic. There would be weeks at a time that I would be afflicted with an intermitting kind of pain that would come on every afternoon and leave me comparatively free from suffering during the balance of the twenty-four hours. Then I would have terrible paroxysms of pain coming on at any time during the day or night when I would be obliged to lie upon my back for hours and keep as motionless as possible. Every time I attempted to move a chilly sensation would pass over my body, or I would faint from hot flashes. I suffered from a spasmodic contraction of the muscles and a soreness of the back and bowels, and even my eyeballs become sore and distressed me greatly whenever I wiped my face. I became ill-tempered, peevish, fretful, irritable and desperately despondent."

"Of course you consulted the doctors regarding your difficulty?"

"Consulted them? well I should say I did. Some told me I had neuralgia; others that I had inflammatory rheumatism, for which there was no cure, that I would be afflicted all my life, and that time alone would mitigate my sufferings."

"But didn't they try to relieve your miseries?"

"Yes, they vomited and physicked me, blistered and bled me, plastered and oiled me, sweat, steamed, and everything but froze me, but without avail."

"But how did you finally recover?"

"I had a friend living in Michigan who had been afflicted in a similar way and had been cured. He wrote me regarding his recovery and advised me to try the remedy which cured him. I procured a bottle and commenced its use, taking a teaspoonful after each meal and at bed-time. I had used it about a week when I noticed a decrease of the soreness of the joints and a general feeling of relief. I persevered in its use and finally got so I could move around without limping, when I told my friends that it was Warner's Safe Rheumatic Cure that had put me on my feet."

"And do you regard your cure as permanent?"

"Certainly, I haven't been so well in years as I am now, and although I have been subjected to frequent and severe changes of weather this winter, I have not felt the first intimation of the return of my rheumatic trouble."

"Do you object to the publication of this interview, Mr. Ashley?"

"Not at all, sir. I look upon it as a duty I owe my fellow creatures to alleviate their sufferings so far as I am able, and any communication regarding my symptoms and cure that may be sent to me at 506 Maine avenue will receive prompt and careful attention."

"Judging from your recital, Mr. Ashley, there must be wonderful curative properties about this medicine?"

"Indeed, there is, sir, for no man suffered more nor longer than did I before this remedy gave me relief."

"To go back to the original subject, Mr. Ashley, I suppose you see the same familiar faces about the lobby session after session?"

"No, not so much so as you might think. New faces are constantly seen and old ones disappear. The strain upon lobbyists is necessarily very great, and when you add to this the demoralizing effect of late hours and intemperate habits and the fact that they are after found out in their steals, their disappearance can easily be accounted for."

"What proportion of these blood-bills are successful?"

"A very small percentage, sir. Notwithstanding the power and influence of the lobby, but few of these vicious measures pass. Were they successful it would be a sad commentary upon our system of government, and would virtually annihilate one branch of it. The great majority of them are either reported adversely or smothered in committee by the watchfulness and loyalty of our congressmen."

J. E. D.

MISCELLANEOUS.

BUY

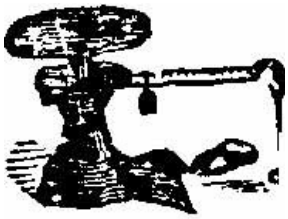
them on the lowest and best terms, also the full text of the U. S. land laws and how to secure

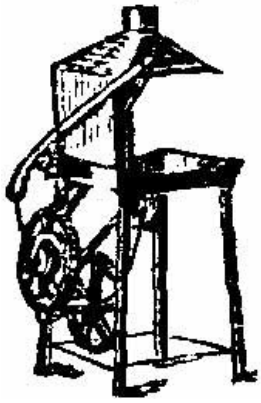
320 ACRES

of Government Lands in Northwestern Minnesota and Northeastern Dakota.

ADDRESS:

JAMES B. POWER,
Land and Emigration Commissioner,
ST. PAUL, MINN.

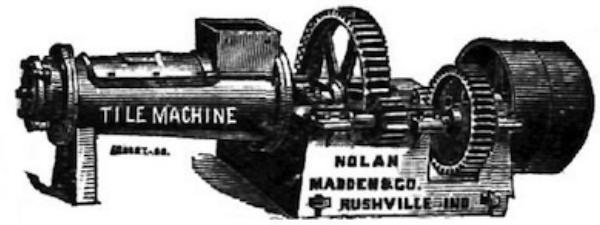




CHICAGO SCALE CO.
2 TON WAGON SCALE, $40, 3 TON, $50.
4 Ton $60, Beam Box Included.
240 lb. FARMER'S SCALE, $5.
The "Little Detective," ¼ oz. to 25 lb. $3.
300 OTHER SIZES. Reduced PRICE LIST FREE.

FORGES, TOOLS, &c.
BEST FORGE MADE FOR LIGHT WORK, $10.
40 lb. Anvil and Kit of Tools. $10.
Farmers save time and money doing odd jobs.
Blowers, Anvils, Vices & Other Articles
AT LOWEST PRICES, WHOLESALE & RETAIL.

HOOSIER AUGER TILE MILL.



Mills on hand. Prompt delivery.
FOR PRICES AND CIRCULARS, ADDRESS
NOLAN, MADDEN & CO., Rushville, Ind.

DON'T you want a **$30**, 26 Shot Repeating Rifle for **$15**, a **$30** Breech Loading Shot Gun for **$16**, a **$12** Concert Organette for **$7**, a **$25** Magic Lantern for $12.00.

YOU can get any of these articles FREE, if you get up a club for the New American Dictionary. Send **$1.00** for a sample copy and try it. If you have a Lantern you can start a business that will pay you from **$10** to **$50** every night.

WANT Send at once for our Illustrated Catalogue ofWatches, Self-cocking Revolvers, Spy Glasses, Telescopes, Telegraph Instruments, Organ Accordeons, Violins, &c. It may start you on the road to rapid wealth.

WORLD MANUFACTURING CO.
122 Nassau Street, New York.

RUPTURE

Absolutely cured in 30 to 90 days, by Dr. Pierre's Patent Magnetic Elastic Truss. Warranted the only Electric Truss in the world. Entirely different from all others. Perfect Retainer, and is worn with ease and comfort night and day. Cured the renowned Dr. J. Simms of New York, and hundreds of others. New Illustrated pamphlet free, containing full information.

MAGNETIC ELASTIC TRUSS COMPANY.

134 MADISON ST., CHICAGO, ILL.

A PRIZE.

Send six cents for postage, and receive free, a costly box of goods which will help all, of either sex, to more money right away than anything else in this world. Fortunes await the workers absolutely sure. At once address

TRUE & CO.,
Augusta, Maine.

$1000
Every 100 Days

Positively sure to Agents everywhere selling our New **SILVER MOULD WHITE WIRE CLOTHES-LINE**. Warranted. Pleases at sight. Cheap. Sells readily at every house. Agents clearing $10 per day. Farmers make $900 to $1200 during Winter. *Handsome samples free.*

Address, **GIRARD WIRE MILLS, Philadelphia, Pa.**

PUBLISHERS' NOTICE.

[Pg 184]

THE PRAIRIE FARMER *is printed and published by The Prairie Farmer Publishing Company, every Saturday, at No. 150 Monroe Street.*

Subscription, $2.00 per year, in advance, postage prepaid.

Subscribers wishing their addresses changed should give their old at well as new addresses.

Advertising, 25 cents per line on inside pages; 30 cents per line on last page—agate measure; 14 lines to the inch. No less charge than $2.00.

All Communications, Remittances, &c., should be addressed to THE PRAIRIE FARMER PUBLISHING COMPANY, *Chicago. Ill.*

Entered at the Chicago Post Office as Second-Class Matter.
CHICAGO, MARCH 22, 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.

RENEW! RENEW!!

Remember that every yearly subscriber, either new or renewing, sending us $2, receives a splendid new map of the United States and Canada—58x41 inches—FREE. Or, if preferred, one of the books offered in another column. It is not necessary to wait until a subscription expires before renewing.

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

The next fair of the Jefferson County, Wisconsin, Agricultural Society will be held the second week in September.

The potato which has sold for the highest price in Boston all the season is the Early Rose. This has been one of the most remarkable potatoes known in the history of this esculent.

A Gentleman residing at Milk's Grove, Iroquois county, Illinois has obtained a patent for a new and cheap building material; this material is straw and concrete pressed together and bound with wires. He thinks he has a good thing. Time will tell.

The Chamber of Commerce at Lyons, France, protests to the government against the embargo on American pork. Trichiniasis prevails in various parts of the German empire. It is traced to the use of uncooked home-grown pork. Here we score two points in favor of the American hog product.

The excellent articles on Silk Culture by E. L. Meyer, Esq., have attracted very general attention, as is proven by the number of letters we have received asking for his address. This was unintentionally omitted. Mr. Meyer resides at Hutchinson, Kan. The article was originally prepared for the quarterly report of the Kansas Board of Agriculture.

Our Indiana friends should remember that in that State, Arbor Day occurs April 11th. A general effort is being made to interest the teachers, pupils, and directors of the district schools in the observance of the day by planting of trees and shrubs in the school yards. It is to be hoped that the people generally will countenance the observance in all possible ways.

Prof. S. A. Forbes writes us that there is needed for the Library of the State Natural History Society, back numbers of The Prairie Farmer for the following years and half years: 1852, 1855, 1856, 1857, 1858, 1859, 1860, second half year of 1862, 1864, and 1874. Persons having one or all of these volumes to dispose of will confer a favor by addressing the Professor to that effect at Normal, Ill.

Florida vegetables are coming into Chicago quite freely. Cucumbers are selling on South Water street at from $1.50 to $2 per-dozen. They come in barrels holding thirty dozen. Radishes now have to compete with the home-grown, hot-house article, and do not fare very well, as the latter are much fresher. Lettuce is comparatively plenty, as is also celery. Apples sell at from $4 to $6 per barrel, and the demand is good.

Mercedes, the famous Holstein[r] cow owned by Thos. B. Wales, Jr., of Iowa City, died on the 17th inst., of puerperal fever, having previously lost her calf. Mercedes enjoyed the reputation of being the greatest milk and butter cow in the world. Her last year's calf it will be remembered was sold for $4,500. The cow and calf just dropped were valued at $10,000. The butter record alluded to was ninety-nine pounds six and one-half ounces in thirty days. The test was in 1883.

The Mark Lane Express in its review of the British grain trade last week says the trade in cargoes off coast was more active, but the supply bare. California was taken at 39@41s per quarter. Two cargoes have gone to Havre at 39s 11½d@39s 3d without extra freight. Seven cargoes have arrived, ten were sold, eight withdrawn, and one remained. Sales of English wheat for a week, 59,699 quarters at 37s. 7d. per quarter, against 57,824 quarter at 42s. 2d. the corresponding week of last year.

At the next American Fat Stock Show in Chicago, there promises to be an extensive exhibit of dairy products. The Illinois Dairymen's Association will have it in charge, and the State Board of Agriculture has decided to appropriate $500 as a premium fund for the Dairymen's Association. It is rather strange, yet nevertheless true, that Illinois has never yet had an exhibition of dairy products at all commensurate with the importance of the dairy interest of the State. It may now be reasonably predicted that this remark will not remain true after November next. We have heard nothing said about it, but it is to be presumed there will be no extra charge to visit this exhibit. The managers of the Fat Stock Show have not been satisfied, we believe, with experiments in this direction.

Many years ago a young Scotch gardener brought from Mexico to Kenosha, Wis., a specimen of the Century plant. It was then supposed to be about twenty years old. For more than forty

years this man cared for his pet with unflagging faithfulness. Dying at the age of sixty-five he left it to the care of a little daughter of a lady who had shown him kindness. This girl grew to womanhood and to middle age caring tenderly for the plant. About two years ago the plant exhibiting signs of blooming, a gentleman joined with the lady and erected a building for it near the Exposition building, in this city. Here it has since been, but through carelessness it was unduly exposed to the terrible freeze of the first week in January last, and the plant is now past recovery. The lady had expended upon it about all the means she possessed expecting to reap from admission fees to see it a rich reward. Thus eighty years of care and constant expense came to naught in a single night. A neglect to order coal resulted in the fire going out just when the cold was the most intense. One can hardly imagine the disappointment and regret of the lady who had nursed it with such care for nearly a lifetime.

LUMBER AND SHINGLES.

The white pine lumber product of the Northwest last year was according to latest returns, 7,624,789,786 feet against 3,993,780,000 in 1873, and more than double what it was in 1874. In 1882 the production was nearly 100,000,000 feet less than last year. The smallest product of the decade was in 1877—3,595,333,496 feet. What is termed the Chicago District, including the points of Green Bay, Cheboygan, Manistee, Ludington, White Lake, Muskegon, Grand Haven, and Spring Lake, and a few scattering mills gave a product in 1883 of 2,111,070,076 feet. At Ludington and Grand Haven there has been a decline in the product since 1873; at all the other points the increase has been considerable, amounting to a total of nearly 800,000,000 feet. The largest cut is on the Mississippi river in what is known as the West of Chicago District. Here in 1873 the product amounted to 650,000,000 feet; last year it reached 1,290,062,690 feet. The Saginaw Valley gives the next greatest yield 961,781,164 feet. The total Saginaw district gave last year 1,439,852,067 feet against 792,358,000 ten years ago. The total of the West of Chicago District was 3,134,331,793 against 1,353,000,000 in 1873. The Railroad and Interior Mills District has increased something over 200,000,000 feet in this period.

In shingles we have the grand product in all the Northwest of 3,964,736,639 against 2,277,433,550 in 1873. The greatest increase was in the Chicago District as given above, and here Ludington and Grand Haven come in for an increase at the former place of over 33,000,000, and the latter of more than 100,000,000. The total production of shingles in 1882 was larger than last year by about 130,000,000, but with that exception was the largest ever known.

The census of 1880 placed the annual lumber product of the United States at 18,000,000,000 feet. The Northwest then produced 5,651,295,000 feet or nearly one-third the entire product of the country. If this ratio has been uniform since we must now have a yield of over 20,000,000,000 feet. These are figures of enormous magnitude and of varied import. They mean employment to an army of men, a large shipping interest, vast investments in mills and machinery, and vast incomes to owners of pine lands; they mean houses and barns and fences to a new and populous empire; they mean numberless farms and millions of live stock. They also signify a rapid destruction of our immense forests from the face of the earth, enormous prices for lumber to future generations, and possible floods to devastate our river bottoms, and drouths to scourge the highlands. They should impress us all with the necessity and the profitableness of timber planting on the unsettled and newly settled prairies and in thousands of places in all the older States.

FOOT-AND-MOUTH DISEASE.

Alarming reports from different parts of the country announcing the presence of foot-and-mouth disease have caused no inconsiderable excitement among the people and in Government circles. First there came news of an outbreak in Effingham county, Illinois, then in Louisa county, Iowa, quickly followed by similar information from Adair county, Missouri.

Dr. Paaren, dispatched to Effingham county by the Governor, reports the trouble there not foot-and-mouth disease. There does exist a disease there, however, similar to foot-rot in sheep, that is proving fatal to many cattle. There have also been outbreaks of disease among cattle near Duquoin and Xenia, Illinois, which Dr. Paaren has been directed to investigate.

No official reports as to the disease in Iowa and Missouri have been received, though Government Veterinary inspectors are now upon the ground making their investigations. It is said that several hundred head of cattle are affected in Missouri, though this is probably an exaggeration.

There is no news regarding the disease in Maine.

Reports from Kansas say the infected herds are strictly quarantined, and that as yet no fresh outbreaks have occurred. It is proposed to annihilate the five infected herds.

Gov. Glick has convened the Legislature of Kansas in order that proper measures may be taken to protect the cattle interests of the State.

A Des Moines dispatch dated the 15th, says letters from Louisa county to the Governor in regard to the new cattle disease were read in the House, and on motion of Mr. Watrous that body adopted the substitute for the bill providing for the appointment of a State veterinary surgeon. The substitute authorizes the veterinary surgeon to destroy all stock affected with contagious disease. The bill is intended to enable the State to take action in the foot-and-mouth disease now affecting the stock. Discussion then followed upon the substitute, which was taken up section by section, and it was for the most part adopted.

The series of reported outbreaks mentioned has aroused Congress to the necessity of action. The Senate on Monday passed a joint resolution appropriating $50,000 for the suppression of the disease in whatever State or Territory it appears.

It is to be hoped that the Animal Industry bill will at once pass and become a law. The cattle dealers at the Chicago Union Stock Yards have organized a Live Stock Exchange, and the first action taken by it is to fight this bill in Congress. Emory A. Storrs, attorney for the heavy brokers, is in Washington working might and main for its defeat. He finds it uphill work, evidently, for on Monday he sent a dispatch to Nelson Morris in these words: "Send to-day a delegation of strong men; everything now depends on backing; wire me at once protest; have seen several senators this morning; advise me when delegation starts; have them stop at Riggs house."

Acting under this advice the Exchange passed the following resolutions of "unbelief."

> Whereas, It is the universal sentiment of the Chicago Live Stock Exchange, at the Union Stock Yards in Chicago, that the bill now pending before Congress, known as the "Animal Industry bill," is dangerous in its design, not called for by the condition of the live stock interest in this country, and tends to place too much power in the Department of Agriculture at Washington; therefore,
>
> Resolved, That Elmer Washburn, Allan Gregory, F. D. Bartlett, B. F. Harrison, and H. H. Conover, members of this exchange, be, and hereby are, appointed a committee, with instructions to proceed forthwith to Washington, and present these resolutions to the proper authorities to prevent the passage of said "Animal Industry bill."
>
> Resolved, Further, that owing to the present excitement throughout the United States over the false alarm of pleuro-pneumonia and "foot-and-mouth" disease, that we, as a body, should express our views fully upon this question.
>
> 1. We do not believe there is such a disease as contagious pleuro-pneumonia existing throughout the United States.
>
> 2. We do not believe that such a disease as the foot-and-mouth disease exists in either Illinois, Iowa, or Kansas.
>
> 3. That at no time within the space of twenty years have the cattle, sheep, or hogs of this country been in as healthy a condition as at the present time; for while we are in favor of strict quarantine laws to prevent any importation of disease into this country from abroad, we believe if any disease should break out in this State, or any other State, that the citizens would be interested sufficiently to stamp it out without expense to the National Government.

While these resolutions were being discussed Dr. Detmers appeared in the hall (accidentally of course!) and gave it as his opinion that not a single case of foot-and-mouth disease existed in America to-day. But the Doctor has so often put his foot in it in his mouthings about animal diseases in the past that his beliefs or disbeliefs have little weight with the public. The Doctor is evidently "put out" because he was not called upon to visit the infected districts, for he is reported as ending his harangue by declaring he was tired of working for the Government, and offered his services to the Live Stock Exchange.

Such, in brief, is a summary of the news of the week concerning the foot-and-mouth disease outbreaks in the States.

PREMIUMS ON CORN.

As briefly stated in a previous issue of The Prairie Farmer, the Illinois State Board of Agriculture offers a premium of $100 for the best bushel of corn (in ear) grown this year in the northern division of the State, and $50 for the second best bushel: and a like premium for the best and second best bushel grown in the central and southern divisions. These divisions correspond with the three judicial divisions of the State. The following are the conditions:

Each of the parties awarded the first premium to deliver twenty-five bushels, and each of the parties awarded the second premium to deliver fifteen bushels of corn in the ear in sacks to the State Board of Agriculture at Springfield, Ill. The corn delivered to be equal in quality to the samples awarded the respective premiums. The premiums to be paid when the premium bushels of corn and the amounts called for are compared at the rooms of the Department of Agriculture and favorably reported upon by the committee. [Pg 185]

Affidavit as to measurement of land and yield of corn are required.

We suppose also that competitors are to furnish characteristics of soil, variety of seed, kinds of manure used, mode of cultivation etc., as these facts would seem to be necessary if the public is to receive the full benefits of the experiments the premiums are likely to bring out.

It is understood that the corn delivered to the State Board as per above conditions is to be in some judicious manner distributed to the corn-growers of the State for planting in 1885.

THE FIRST UNFORTUNATE RESULT.

There recently began in Scotland an earnest movement to induce the British Government to remove the restrictions regarding the importation of American cattle, so far at least as to allow the admission of store cattle for feeding purposes. Meetings have been held in various parts of Scotland at which petitions like the following were adopted.

> To the Right Honorable William Ewart Gladstone.
>
> We, the undersigned, farmers and others, respectfully submit that the present law which allows the importation of cattle from the United States, and shuts out store cattle, is unjust and oppressive to the farmers of this country, and enhances the price of meat to the public. We therefore crave that her Majesty's Government would open the Scottish ports to the introduction of store cattle from the Western States where disease does not exist.

At a meeting at Montrose, where the above petition was favorably acted upon, Mr. Falconer, an Angus farmer, in supporting the motion, said that the first great remedy for the present depression was to get cheap store cattle, and that would never be got until they opened their ports to the Western States of America. He held that if farmers would agree to insist on live store cattle being allowed to be landed in Britain, they would soon get them. When they get them, he, if then alive, would be quite willing to take all the responsibility if they found an unsound or unhealthy animal amongst them. He appealed to butchers in Montrose, who had been in the way of killing States or Canadian cattle, if they were not totally free of disease; and he would like to ask them how many Irish cattle they killed which were perfectly healthy. If they got stores from America, they would not effect a saving in price, but, as they all knew, sound healthy cattle fed much quicker than unsound, and were of better quality, and thus an additional item of profit would be secured to the farmer.

Mr. A. Milne, cattle-dealer, Montrose, corroborated Mr. Falconer's statements as to the healthiness of American stock, while Irish cattle, as a rule, he said, had very bad livers.

Mr. Adamson, Morphie, said he had recently been in the Western States of America, and had seen a number of the ranches in Nebraska, Wyoming, and Colorado. The cattle there were certainly fine animals—well bred, as a rule, either from Herefords or Short-horns, with a dash of the Texan cattle in them. When there, he made careful inquiries as to the existence of disease, and he was universally told that such a thing as epidemic disease was unknown. No doubt in the southern part of Texas there was a little Texan fever, but that, like yellow fever, was merely indigenous to the district. It was never seen out of these parts. He considered it would be a great boon to the farmers of Scotland if they could get cattle £3 or £4 cheaper than at present. It would save a very considerable amount of money in stocking a farm, and would also tell on the profits of the feeders, and the prices paid by the consumers. They had them to spare in America in the greatest possible abundance.

At a late meeting of the Prairie Cattle Company, having headquarters in Scotland, sheriff Guthrie Smith expressed the opinion that the great profit in the future of American ranch companies must be the trade in young cattle. He believed that Scottish farmers would ere long get all their young cattle, not from Ireland, but from the United States. It did not pay them to breed calves; they were better selling milk. The fattening of cattle for the butcher was the paying part of the business, but the difficulty was to get yearlings or two-year-olds at their proper price.

Here promised to arise a new outlet for American stock, and one which most of us probably never thought of. The proposition had in it the elements for the building up of a great commercial industry and of affording a new and rapid impetus to the breeding of cattle upon the plains. But just at this time comes the outbreak of foot-and-mouth disease in Kansas, Maine, and Illinois, and of course puts an end to all hopes in this direction, for many months at least. This is the result of the disease at its first appearance. Here is prospective loss before the Government veterinary surgeons fairly reach the field of operations against its spread—the loss of a trade which would have been worth many millions to the cattle raisers of the great West. It is to be feared that this is but the beginning of the losses the disease will entail upon us. Can Congress longer hesitate in this matter of providing an efficient law for protection from contagious animal diseases? It would seem not. Our State authorities, also, must be alert, and render all possible aid in preventing the spread of this wonderfully infectious disease.

We have a large number of letters and postal cards asking where various seeds, plants, shrubs, trees, silk-worm eggs, bone dust and so on and so forth to an indefinite extent, may be obtained. We have answered some of these inquiries by letter, some through the paper,

but they still keep coming. We have one favor to ask of those seeking this sort of information: First look through the advertisements carefully, and see if what is wanted is not advertised. The seedsmen's advertisements do not, of course, enumerate all the parties have for sale, but it may be taken for granted that they keep nearly all kinds of grass, grain, and vegetable seeds. We would also say to seedsmen that it will probably be found to pay them to advertise the seeds of the new grasses, alfalfa, the special fertilizers, etc., that are now being so much inquired about. We have a large number of inquiries about where to obtain silk-worm eggs. Persons who have them certainly make a mistake in not advertising them freely.

Questions Answered.

O. G. B., Sheboygan Falls, Wis.—Will you give directions which will be practical for tanning skins or pelts with the fur or hair on by the use of oak bark?

Answer.—We know of no way the thing can be done unless a part of the methods are used that are employed in the tanning of goat skins for making Morocco leather. These are: to soak the skins to soften them; then put them into a lime vat to remove the hair, and after to take the lime out in a douche consisting of hen and pigeon dung. This done, the skins are then sewed up[s] so as to hold the tanning liquid, which consists of a warm and strong decoction of Spanish sumac. The skins are filled with this liquid, then piled up one above the other and subsequently refilled, two or three times, or as fast as the liquid is forced through the skins. If the furs or pelts were first soaked to soften them, all the fatty, fleshy matter carefully removed, after sewed up as goat skins are, and then filled and refilled several times with a strong decoction of white oak bark, warm, but not hot, no doubt the result would prove satisfactory.

Dr. J. F. Schlieman, Hartford, Wis.—Are there any works on the cultivation of the blueberry, and if so could you furnish the same? Do you know of any parties that cultivate them?

Answer.—We have never come across anything satisfactory on the cultivation of the blueberry except in Le Bon Jardiniere, which says: "The successful cultivation of the whole tribe of Vacciniums is very difficult. The shrubs do not live long and are reproduced with much difficulty, either by layers or seeds." The blueberry, like the cranberry, appears to be a potash plant, the swamp variety not growing well except where the water is soft, the soil peaty above and sandy below. The same appears also to be true of the high land blueberry; the soil where they grow is generally sandy and the water soft. You can procure Le Bon Jardiniere (a work which is a treasure to the amateur in fruit and plants) of Jansen, McClurg & Co., of Chicago, at 30 cents, the franc. Some parties, we think, offer blueberry plants for sale, but we do not recollect who they are.

H. Harris, Holt'S Prairie, Ill.—Will it do to tile drain land which has a hard pan of red clay twelve to eighteen inches below the surface?

Answer.—It will do no harm to the land to drain it if there is a hard pan near the surface, but in order to make tile draining effective on such land, the drains will have to be at half the distance common on soils without the hard pan.

Subscriber, Decatur, Ill.—In testing seed corn, what per cent must sprout to be called first-class. I have some twenty bushels of Stowell's Evergreen that was carefully gathered, assorted, and shelled by hand. This I have tested by planting twenty-one grains, of which sixteen grew. How would you class it?

Answer.—Ninety-five, certainly. If five kernels out of twenty-one failed to grow, that would be 31 per cent of bad seed, and we should consider the quality inferior. But further, if under the favorable condition of trial, 31 percent failed, ten grains in every twenty-one would be almost sure to, in the field. It was a mistake to shell the corn; seed should always remain on the cob to the last moment, because if it is machine or hand-shelled at low temperature, and put away in bulk, when warm weather comes, it is sure to sweat, and if it heats, the germ is destroyed. Better spread your corn out in the dry, and where it will not freeze, as soon as you can.

L. C. Leaniartt (?) Nebraska.—I wish to secure a blue grass pasture in my timber for hogs. 1. Will it be necessary to keep them out till the grass gets a good start? 2. Shall I follow the directions you gave Mr. Perkins in The Prairie Farmer, February 9? 3. Is not blue grass pasture the best thing I can give my hogs?

Answer.—1. Better do so, and you will then be more likely to get a good catch and full stand. 2. Certainly, if the conditions are the same. 3. Blue grass is very good for hogs, but it is improved by the addition of clover.

C. C. Samuels, Springfield, Ill.—1. What pears would you recommend for this latitude? 2. Are there any which do not blight? 3. I have some grape vines, light colored fruit, but late, Elvira, I think the nurseryman told me, which appear to be suffering from something at the roots. What is the phylloxera, and what shall I do to my grape vines if they infest the roots?

Answer.—The Bartlett for *certain*—it being the best of all the pears—and the Kieffer and Le

Conte for *experiment*. If the latter succeed you will have lots of nice large fruit just about as desirable for eating as a Ben Davis apple in May. 2. We know of one only, the Tyson, a smallish summer pear that never blights, at least in some localities, where all others do more or less. 3. If your Elviras are afflicted with the phylloxera, a root-bark louse, manure and fertilize them at once, and irrigate or water them in the warm season. The French vine-growers seem at last to have found out that lice afflict half starved grape roots, as they do half starved cattle, and that they have only to feed and water carefully to restore their vines to health.

J. S. S., Springfield, Ill.—I am not a stock man nor a farmer; but I have some pecuniary interests, in common with others, my friends, in a Kansas cattle ranch. I am therefore a good deal exercised about this foot-and-mouth disease. Is it the terrible scourge reported by one cattle doctor, who, according to the papers, says, "the only remedies are fire or death." What do you say?

Answer.—The disease is a bad one, very contagious, but easily yields to remedies in the first stages.

Thomas V. Johnson, Lexington, Ky.—There is a report here that your draft horses of all breeds are not crossing with satisfaction on your common steeds in Illinois, and that not more twenty five in one hundred of the mares for the last three years have thrown foal, nor will they the present season. Can you give me the facts?

Answer.—Our correspondent has certainly been misinformed, or is an unconscious victim of local jealousy, as he may easily convince himself by visiting interior towns, every one of which is a horse market.

Wayside Notes.

BY A MAN OF THE PRAIRIE.

A neighbor of mine who has been intending to purchase store cattle and sheep at the Chicago Stock Yards soon, asked me last night what I thought about his doing so. I asked him if he had read what The Prairie Farmer and other papers had contained of late regarding foot-and-mouth disease in Maine, Kansas, Illinois, and Iowa. He had not; did not take the papers, and had not heard anything about the disease here or in England. Then I explained to him, as best I could, its nature, contagious character, etc., and having a Prairie Farmer in my pocket, read him your brief history of the ailment in Great Britain. Well, that man was astonished. Finally, said he, What has that got to do with my question about buying cattle and sheep at the stock yards? Just this, I replied: every day there are arrivals at the stock yards of many thousands of cattle from these infected States. Perhaps some of them come from the very counties where this disease is known to exist. The disease may break out any day in scores of places in all these States. It may appear—indeed is quite likely to do so at the stock yards. For aught I know it may be there now. The cattle brokers will not be very likely to make known such an unwelcome fact a minute sooner than they are obliged to. In fact, from what they have lately been saying about the absurdity of new and stringent enactments concerning animal diseases, I conclude they will labor to conceal cases that may really exist. Now you go there to pick up cattle to consume your pasturage this spring and summer, and don't you see you run the risk of taking to your home and neighborhood a disease that may cost you and your neighbors many thousands of dollars? If I were you I would pick up the stock I want in my own neighborhood and county, even though not exactly the kind I would like to have, and though it would cost me a great deal more time and trouble. You see to a Man of the Prairie things look a little squally in this cattle business. We have all got to be careful about this thing. We have a terrible enemy at our stable doors and pasture gates, and we must guard them well. I am not an alarmist, but I would run any time, almost, rather than get licked, and I have always tried to keep a lock on the stable door before the horse is stolen. I am in favor of *in*-trenchment. Perhaps my advice to my neighbor was not sound, but according to the light I have, I have no desire to recall it till I hear more from the infected districts.

To show the difference between the winter in Colorado and the States this way and further west, the Farmer, of Denver, mentions the fact that it knows a farmer who has had about two hundred acres of new land broken between the middle of November and the first of March. Still, these Eastern States have advantages which render them rather pleasant to live in. Our farmers find plenty of time in fall and spring in which to do their plowing and sowing, and our severe winters don't seem to hurt the ground a bit. In fact, I suppose it has got used to them, sort of acclimated, as it were. We have pretty good markets, low railway fares, good schools and plenty of them, and we manage to enjoy ourselves just as well as though we could hitch up to the plow and do our breaking in December and January. We can't all go to Colorado, Dakota, Montana, or Washington Territory, nor to those other Edens at the South and Southwest where a man, so far as winter is concerned, may work about every day in the year; but don't do so any more than we here at the North where we have the excuse of severe weather for our laziness between November and April. I like Colorado and Wyoming, Arkansas and Texas, Alabama and Florida—for other people who

like to make their homes there, but my home is here and I like it. "I don't *have* to" plow in winter, and I don't need to. I am going to try to do my duty and be happy where I am, believing Heaven to be just as near Illinois as any other State or any Territory.

I read in the dispatches this morning that the barns on a ranch near Omaha burned the other night. With the barns were consumed twenty-six cows, eighteen horses, 1,000 bushels of corn and a large lot of hay and oats. In all the loss amounted to above $10,000 and there was no insurance. From all over the country and at all times of the year I read almost daily of similar losses varying from $100 up into the thousands, and the closing sentence of about nine out of ten of these announcements is "no insurance." Now I am neither an insurance agent nor a lightning rod peddler, but there are two luxuries that I indulge in all the time, and these are an insurance policy to fairly cover my farm buildings and their contents, and what I believe to be well constructed lightning rods in sufficient number to protect the property from electric eccentricities. True, my buildings have never suffered from fire or lightning and these luxuries have cost me no inconsiderable amount of cash, but this money has brought me relief from a heap of anxiety, for I know in case my property is swept away I am not left stripped and powerless to provide for my family, and I know that it will not be necessary to mortgage the farm to furnish them a shelter. I don't take *cheap* insurance either, but invest my money in the policy of a company which I believe has abundant capital and is cautiously managed. A wealthy man can take his fire risks in his own hands if he chooses, but for a man of small or moderate means it seems to me the height of folly to do so. I would rather go without tobacco or "biled shirts" than insurance and lightning rods.

I don't know that an American farmer ever had the gout. Certainly I never heard of such a case. If one does get the ailment, however, if he keeps bees he always has a sure remedy at hand. A German has discovered that if a bee is allowed to sting the affected part, a cure is instantaneous. Why don't Bismarck try this home remedy for his complication of gout and trichinæ?

Poultry-Raisers. Write for Your Paper

Chicken Chat.

One of my correspondents writes: "My hens don't eat well—they just pick over the food as if it were not good enough for them—and they don't lay well; in fact they don't do much of anything except to mope about—not as if sick, but as if lazy."

Probably you have fed the same thing every day for the last six months, and the hens are getting tired of it. Hens are like other people—they like a change of provender once in awhile—especially when confined indoors. Sometimes over-feeding will cause indigestion, and then the biddies will exhibit the symptoms you describe. In either case, let the fowls fast for a whole day, and then for a few days feed lightly with food that is different from what they have been living on. Give plenty of green food, also Douglas' mixture in the drinking water twice a week.

Another correspondent wants to know why I always advise giving cooked food to fowls and chicks when uncooked food is the natural diet.

I advise cooked food because experience has taught me that it is much better for poultry than the raw articles would be. Because raw bugs and worms constitute the "natural diet" of fowls in their wild state, it does not follow that raw meal and potatoes would be the best and most economical food for our domestic fowls. Other things being equal, chicks that are fed on cooked food grow fatter, are less liable to disease, and thrive better generally than those who worry along on uncooked rations.

If you are short of sitting hens and don't own an incubator, make the hens do double duty. Set two or more at the same time, and when the chicks come out, give two families to one hen, and set the other over again. To do this successfully, the chicks must be taken from the nest as soon as dry and given to the hen that is to raise them; for if a hen once leaves the nest with her chicks, no amount of moral suasion will induce her to go back. Before giving

the hen fresh eggs, the nest should be renovated and the hen dusted with sulphur or something to prevent lice.

A lady who commenced raising thoroughbred poultry last season writes me that she proposes to sell eggs for hatching this season, and asks for information about advertising, packing eggs, etc.

The advertising is easy enough: all you have to do is to write a copy of your "ad.," send it to The Prairie Farmer and other papers that circulate among farmers, pay the bills, and answer the postals and letters as they come. But if I were in your shoes, I would "put my foot down" on the postals to begin with; they don't amount to anything anyway; the people who ask a long string of questions on a postal card are not, as a rule, the ones who become customers. Before we went into the poultry business an old poultry-breeder said: "Don't have anything to do with postals, it don't pay." We thought differently, but to satisfy ourselves, we kept track of the postals, and to-day I have the addresses of over 300 people who wrote us on postal cards. How many of those people became customers? Just one, and he was an Ohio man. When I go into that branch of the poultry business again, my advertisements will contain a postscript[t] which will read thusly: "No postals answered."

And you need not expect that every letter will mean business; people who have not the remotest idea of buying eggs will write and ask your prices, etc., and you must answer them all alike. Here is where circulars save lots of work and postage. I have sent you by mail what I call a model circular, and from that you can get up something to fit your case. Pack your eggs in baskets in cut straw or chaff, first wrapping each egg separately in paper. The eggs should not touch each other or the basket. Put plenty of packing on top, and with a darning needle and stout twine sew on a cover of stout cotton cloth. For the address use shipping tags, or else mark it plainly on the white cotton cover; I prefer the latter way. A day or two before you ship the eggs send a postal telling your customer when to look for them; that's all that postals are good for.

Concerning the duplicating of orders in cases of failure of the eggs to hatch, I quote from one of my old circulars: "I guarantee to furnish fresh eggs, true to name, from pure-bred, standard fowls, packed to carry safely any distance. In cases of total failure, when the eggs have been properly cared for and set within two weeks after arrival, orders will be duplicated free of charge." I furnished just what I promised, and when a total failure was reported I sent the second sitting free—though sometimes I felt sure that the eggs were not properly cared for, and once a man reported a failure when, as I afterwards learned, eight eggs of the first sitting hatched. But, generally speaking, my customers were pretty well satisfied. It sometimes happens that only one or two eggs out of a sitting will hatch, and naturally the customer feels that he has not received the worth of his money. In such cases, if both parties are willing to do just what is right, the matter can be arranged so that all will be satisfied. And you will sometimes get hold of a customer that nothing under the heavens will satisfy; when this happens, do just exactly as you would wish to be done by, and there let the matter end.

If the lady who wrote from Carroll county, Illinois, concerning an incubator, will write again and give the name of her postoffice, she will receive a reply by mail.

Fanny Field.

Spring Care of Bees.

Although yesterday was very cold and inclement, to-day (March 11th) is warm and pleasant, and bees that are wintered upon their summer stands will be upon the wing. It would be well on such days as this to see that all entrances to hives are open, so that no hindrances may be in the way of house-cleaning. This is all we think necessary for this month, provided they have plenty of stores to last until flowers bloom. Handling bees tends to excite them to brood rearing, and veterans in bee-culture claim that this uses up the vitality of bees in spring very fast. Although more young may be reared, it is at the risk of the old ones, as they leave the hive in search of water; many thus perish, which often results in the death of the colony, as the young perish for want of nurses. Sometimes, also, in handling bees early in the season the queens are lost, as they may fall upon the ground, yet chilled, and perish.

Bees consume food very fast while rearing brood; naturalists tells us that insects during the larvæ state consume more food than they do during the remainder of their existence. Where a bee-keeper has been so improvident as to neglect to provide abundance of stores for his bees he should examine them carefully, and if found wanting, remove an empty frame, substituting a full one in its place. Where frames of honey are not to be had, liquid honey

and sugar can be kneaded together, forming cakes, which can be placed over the cluster. Care should be taken that no apertures are left, thus forming a way for cold drafts through the hive. These cakes are thought to excite bees less than when liquid food is given; they have another advantage, also, viz., bees can cluster upon them while[u] feeding, and do not get chilled.

Bees that have been wintered in cellars, or special repositories, are often injured by being removed too early to their summer stands. It would be better to let them remain, and lower the temperature during warm days with ice, until warm weather has come to stay. An aged veteran in Vermont that we visited the season following the disastrous winter of 1880-81, told us that his neighbors removed their bees from the cellar during a warm spell early in spring, and they were then in splendid condition. He let his bees remain until pollen was plentiful, and brought them out, all being in fine order; by this time his neighbors' colonies were all dead.

Good judgment and care must be exercised in removing bees from the cellar, or disastrous results will follow. We know of an apiary of over one hundred colonies that was badly injured, indeed nearly ruined, by all being taken from the cellar at once on a fine, warm day. The bees all poured out of the hives for a play spell, like children from school, and having been confined so long together in one apartment had acquired, in some measure, the same scent, and soon things were badly mixed. Some colonies swarmed, others caught the fever, and piled up together in a huge mass. This merry making may have been fun for the bees, but it was the reverse of this for the owner, as many queens were destroyed, and hives that were populous before were carried from the cellar and left without a bee to care for the unhatched brood.

When it is time to remove bees from the cellar the stands they are to occupy should be prepared beforehand. They should be higher at the back, inclining to the front; if the height of two bricks are at the back, one will answer for the front. This inclination to the front is an important matter; it facilitates the carrying out of dead bees and debris from the hive, the escape of moisture, and last, and most important item, bees will build their comb straight in the frame instead of crosswise of the hive, and their surplus comb in boxes correspondingly. If a few hives are removed near the close of the day and put in different parts of the apiary, the danger from swarming out is avoided, for the bees will become quiet before morning, and being far apart will not mix up when they have their play spell. The success of bee-keeping depends upon the faithful performance of infinite little items.

The many friends of the Rev. L. L. Langstroth will be pained to learn that he has a severe attack of his old malady and unable to do any mental work. May the Lord deal kindly and gently with him.

During the last fall and winter he has been the light of many conventions, and it will be remembered as a pleasant episode in the lives of many bee-keepers that they had the privilege of viewing his beaming countenance, hearing the words of wisdom as they escaped from his lips, and taking the hand of this truly great and good man.

MRS. L. HARRISON

Extracted Honey.

A couple of copies of THE PRAIRIE FARMER have lately come to my desk, a reminder of my boyhood days, when, in the old home with my father, I used to contribute an article now and then to its columns. There is an old scrap-book on the shelf, at my right, now, with some of those articles in it, published nearly thirty years ago. But my object in writing now is to add something to Mrs. Harrison's article on Extracted Honey. Last year my honey crop was about 3,000 pounds, and half of this was extracted, or slung honey, as we bee-keepers often call it; but for next year I have decided to raise nearly all comb honey, for the reason that I do not get customers so readily for extracted honey. I have never extracted until the honey was all, or nearly all, capped over, and then admitted air into the vessels holding it, so as to be absolutely sure of getting it "dry," and proof against souring. This method has given me about half the amount others obtained by extracting as soon as the combs were filled by the bees, and ripening afterward.

But in spite of all these precautions I find so much prejudice against extracted honey, growing out of the ignorance of the public with regard to this sweet, ignorance equaled only by the ignorance in regard to bees themselves, that the sale of such honey has been very slow; so slow that while my comb honey is reduced at this date to about 150 pounds, I have several ten-gallon kegs of pure white honey still on hand.

Especially is there a prejudice against candied honey, though that is an absolute test of purity, and it can be readily liquified, as Mrs. H. says, without injury. When I say that it is an absolute test of purity I mean that all honey that candies evenly is pure, though some of the best honey I have ever had never candied at all. In one case I knew the honey to candy in the combs of a new swarm early in autumn; but some seasons, particularly very dry ones, it will hardly candy at all. This difference seems to be due to the varying proportion of natural glucose, which will crystallize, and levulose, or mellose, which will not crystallize.

Manufactured glucose will not crystallize; and some of our largest honey merchants, even the Thurbers, of New York, have mixed artificial glucose with honey to avoid loss by the ignorant prejudice of the public.

WM. CAMM.
MORGAN CO., ILL.

South'n Wisconsin Bee-keepers' Ass'n.

The bee-keepers met in Janesville, Wis., on the 4th inst., and organized a permanent society, to be known as the Southern Wisconsin Bee-keepers' Association. The following named persons were elected officers for the ensuing year: President, C. O. Shannon; Vice-President, Levi Fatzinger; Secretary, J. T. Pomeroy; Treasurer, W. S. Squire.

The regular sessions of the association will be held on the first Tuesday of March in each year. Special meetings will also be held, the time of which will be determined at previous meeting.

The object of the association is to promote scientific bee-culture, and form a bond of union among bee-keepers. Any person may become a member by signing the constitution, and paying a fee of fifty cents. The next meeting will be held at the Pember house, Janesville, on the first Tuesday in May at 10 o'clock A. M. All bee-keepers are cordially invited to attend. The Secretary, of Edgerton, Rock Co., Wis., will conduct the correspondence of the association.

[Pg 187]

Silk Culture.

Osage for Silk-Worms.

In a private letter to the editor of THE PRAIRIE FARMER Dr. L. S. Pennington, of Whiteside County, Illinois, says: "Many thanks for your instructive articles on Silk Culture. Could the many miles of Osage orange found in this State be utilized for this purpose, the industry would give employment to thousands of dependent women and children, by which means

they could make themselves, at least in part, self-supporting. I hope that you will continue to publish and instruct your many readers on this subject."

Anent this subject we find the following by Prof. C. V. Riley in a late issue of the American Naturalist:

"There is a strong disposition on the part of those who look for making money by the propagation and sale of mulberry trees, to underrate the use of Osage orange as silk-worm food. We have thoroughly demonstrated, by the most careful tests, on several occasions, that when Maclura aurantiaca is properly used for this purpose, the resulting silk loses nothing in quantity or quality, and we have now a strain of Sericaria mori that has been fed upon the plant for twelve consecutive years without deterioration. There has been, perhaps, a slight loss of color which, if anything, must be looked upon as an advantage. It is more than likely, how ever, that the different races will differ in their adaptability to the Maclura, and that for the first year the sudden transition to Maclura from Morus, upon which the worms have been fed for centuries, may result in some depreciation. Mr. Virion des Lauriers, at the silk farm at Genito, has completed some experiments on the relative value of the two plants, which he details in the opening number of the Silk-Grower's Guide and Manufacturer's Gazette. Four varieties of worms were reared. The race known as the "Var" was fed throughout on mulberry leaves. The "Pyrenean" and "Cevennes" worms were fed throughout on leaves and branches of Osage orange, while the "Milanese" worms were fed on Maclura up to the second molt and then changed to mulberry leaves. At the close examples of each variety of cocoons were sent to the Secretary of the Silk Board at Lyons, and appraised by him The Maclura-fed cocoons were rated at 85 cents per pound, those raised partly on Osage and partly on mulberry at 95 cents per pound, and those fed entirely on mulberry at $1.11 per pound.

"This, Mr. des Lauriers thinks, seems to show that the difference between Maclura and Morus as silk-worm food is some 'twenty-five to thirty per cent in favor of the latter, while it is evident that the leaf of the Osage orange can be used with some advantage during the first two ages of the worms, thus allowing the mulberry tree to grow more leafy for feeding during the last three ages.' The experiment, although interesting, is not conclusive, from the simple fact that different races were used in the different tests and not the same races, so that the result may have been due, to a certain extent, to race and not to food."

SCIENTIFIC AND USEFUL.

A writer in an English medical journal declares that the raising of the head of the bed, by placing under each leg a block of the thickness of two bricks, is an effective remedy for cramps. Patients who have suffered at night, crying aloud with pain, have found this plan to afford immediate, certain, and permanent relief.

California stands fifth in the list of States in the manufacture of salt, and is the only State in the Union where the distillation of salt from sea water is carried on to any considerable extent. This industry has increased rapidly during the last twenty years. The production has risen from 44,000 bushels in 1860 to upwards of 880,000 bushels in 1883.

The amount of attention given to purely technical education in Saxony is shown by the fact that there are now in that kingdom the following schools: A technical high school in Dresden, a technical State institute at Chemnitz, and art schools in Dresden and Leipzig, also four builders' schools, two for the manufacture of toys, six for shipbuilders, three for basket weavers, and fourteen for lace making. Besides these there are the following trade schools supported by different trades, foundations, endowments, and districts: Two for decorative painting, one for watchmakers, one for sheet metal workers, three for musical instrument makers, one for druggists (not pharmacy), twenty-seven for weaving, one for machine embroidery, two for tailors, one for barbers and hairdressers, three for hand spinning, six for straw weaving, three for wood carving, four for steam boiler heating, six for female handiwork. There are, moreover, seventeen technical advanced schools, two for gardeners, eight agricultural, and twenty-six commercial schools.

The Patrie reports, with apparent faith, an invention of Dr. Raydt, of Hanover, who claims to have developed fully the utility of carbonic acid as a motive agent. Under the pressure of forty atmospheres this acid is reduced to a liquid state, and when the pressure is removed it evaporates and expands into a bulk 500 times as great as that it occupied before. It is by means of this double process that the Hanoverian chemist proposes to obtain such important benefits from the agent he employs. A quantity of the fluid is liquified, and then stowed away in strong metal receptacles, securely fastened and provided with a duct and valve. By opening the valve free passage is given to the gas, which escapes with great force, and may be used instead of steam for working in a piston. One of the principal uses to which it has been put is to act as a temporary motive power for fire engines. Iron cases of liquified carbonic acid are fitted on to the boiler of the machine, and are always ready for use, so that while steam is being got up, and the engines can not yet be regularly worked in the usual way, the piston valves can be supplied with acid gas. There is, however, another remarkable

object to which the new agent can be directed, and to which it has been recently applied in some experiments conducted at Kiel. This is the floating of sunken vessels by means of artificial bladders. It has been found that a bladder or balloon of twenty feet diameter, filled with air, will raise a mass of over 100 tons. Hitherto these floats have been distended by pumping air into them through pipes from above by a cumbrous and tedious process, but Dr. Raydt merely affixes a sufficient number of his iron gas-accumulators to the necks of the floats to be used, and then by releasing the gas fills them at once with the contents.

DAIRY SUPPLIES, Etc.

CHOCOLATES.

MISCELLANEOUS.

This Elegant **Solid** Plain Ring, made of **Heavy 18k. Rolled Gold** plate, packed in Velvet Casket, warranted **5 years**, post-paid. **45c.**, **3** for **$1.25**. **50 Cards, "Beauties," all Gold, Silver, Roses, Lilies, Mottoes, &c.**, with name on, **10c., 11 packs for a $1.00 bill and this Gold Ring FREE**.

U. S. CARD CO., CENTERBROOK, CONN.

SEEDS, Etc.

THE DINGEE & CONARD CO'S
BEAUTIFUL EVER-BLOOMING

ROSES

The **Only** establishment **making a SPECIAL BUSINESS of ROSES. 60 LARGE HOUSES for ROSES alone.** We **GIVE AWAY**, in **Premiums** and **Extras**, more **ROSES** than most establishments grow. Strong Pot Plants suitable for immediate bloom delivered safely, post-paid, to any post office. **5** splendid varieties, **your choice**, all labeled, for **$1**; **12** for **$2**; **19** for **$3**; **26** for **$4**; **35** for **$5**; **75** for **$10**; **100** for **$13**. Our **NEW GUIDE**, *a complete Treatise on the Rose*, 70 pp, *elegantly illustrated* F R E E

THE DINGEE & CONARD CO.
Rose Growers, West Grove, Chester Co., Pa.

1884—**SPRING**—1884.

TREES

Now is the time to prepare your orders for **NEW** and **RARE** Fruit and Ornamental

Shrubs, Evergreens,
ROSES, VINES, ETC.

Besides many desirable Novelties; we offer the largest and most complete general Stock of Fruit and Ornamental Trees in the U. S. Abridged Catalogue mailed free. Address **ELLWANGER & BARRY,**

Mt. Hope Nurseries,
Rochester, N. Y.

FOREST TREES.

Largest Stock in America.

Catalpa Speciosa, Box-Elder, Maple, Larch, Pine, Spruce, etc.

Forest and Evergreen Tree Seeds.

R. Douglas & Sons,
WAUKEGAN, ILL.

EVERGREENS

For everybody. Nursery grown, all sizes from 6 inches to 6 feet. Also

EUROPEAN LARCH AND CATALPA

and a few of the Extra Early Illinois Potatoes. Price List FREE. Address

D. HILL, Nurseryman, Dundee, Ill.

FOREST TREE SEEDS!

I offer a large stock of Walnuts, Butternuts, Ash, and Box Elder Seeds, suitable for planting. All the growth of 1883. I control the entire stock of the

SALOME APPLE,

a valuable, new, hardy variety. Also a general assortment of Nursery stock. Send for catalogue, circular, and price lists. Address

BRYANT'S NURSERY, Princeton, Ill.

SEED CORN.

Yellow and White Dent,
Michigan Early Yellow Dent,
Chester-White King Phillip,
Yellow Yankee, Etc., Etc.

Also the Celebrated MURDOCK CORN.

L. B. FULLER & CO.,
60 State St., Chicago.

CUTHBERT RASPBERRY PLANTS!

10,000 for sale at Elmland Farm by

L P. WHEELER, Quincy, Ill.

SPECIALTY FOR 1884.

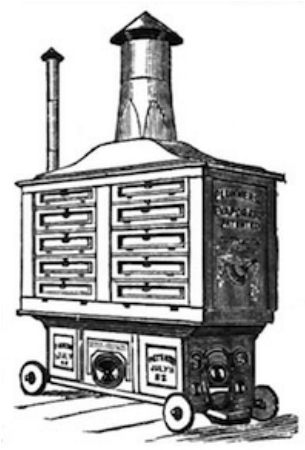
200 bush. Onion sets, 20,000 Asparagus roots, Raspberry and Strawberry roots, and Champion Potatoes. Italian Bees a specialty. Send for price list for 1884.
SEND EARLY TO A. J. NORRIS, Cedar Falls, Iowa.

SEEDS Our new catalogue, best published. **Free** *to all*. **1,500** *varieties*, **300** *illustrations*. You ought to have it. BENSON, MAULE & Co., Philadelphia, Pa.

A Descriptive, Illustrated Nursery Catalogue and Guide to the Fruit and Ornamental Planter. Sent free to all applicants.

WM. H. MOON,
Morrisville, Bucks Co., Pa.

SEED CORN NORTHERN GROWN, VERY EARLY. Also Flower Vegetable and Field Seeds 44 New Varieties[w] of Potatoes Order early. Catalogue Free.
FRED. N. LANG, Baraboo, Wis.



CULLS AND
WINDFALL
APPLES

Worth 50 Cents
Per Bushel Net.

SAVE

THEM

BY THE

"PLUMMER PATENT PROCESS."

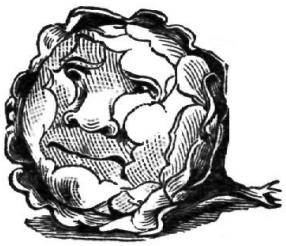
Illustrated and Descriptive Catalogue and full Particulars mailed free.

PLUMMER FRUIT EVAPORATOR CO.,
No. 118 Delaware St.,
Leavenworth, Kan.

When you write mention the Prairie Farmer.

Will be mailed **FREE to all** applicants and to customers of last year without ordering it. It contains illustrations, prices, descriptions and directions for planting all Vegetable and Flower Seeds, Plants, etc. **Invaluable to all.**

D.M. FERRY & CO.
DETROIT, Mich.



J. B. ROOT & CO.'S

Illustr'd Garden Manual of VEGETABLE and FLOWER SEEDS, ready for all applicants. **Market Gardeners**

SEEDS

a Specialty. Write for Wholesale Price List.

☞ SENT FREE
ROCKFORD, ILLINOIS.

FLORAL GIFTS!

50 CARDS SOUVENIRS OF FRIENDSHIP Beautiful designs, name neatly printed, 10c. 11 PACKS, this Elegant Ring, Microscopic Charm and Fancy Card Case, **$1**. Get ten of your friends to send with you, and you will obtain these THREE PREMIUMS and your pack FREE. Agent's Album of Samples, 25cts.

NORTHFORD CARD CO., Northford, Conn.

Magnifies 1,000 times

ONION SEED FOR SALE.

Early Red Globe, Raised In 1883.

JAMES BAKER, Davenport, Iowa.

NEW CHOICE VARIETIES OF

SEED POTATOES

A Specialty. Twenty-five kinds. Will not be under-sold. Satisfaction guaranteed.
Send postal, with full address, for prices.
BEN F. HOOVER, Galesburg, Illinois.

FOR SALE **One Hundred Bushels of Native Yellow Illinois Seed Corn**, grown on my farm, gathered early and kept since in a dry room. Warranted to grow. Price $2 per bu. H.P. HUMPHREYS & SON, Sheffield, Ill.

Onion Sets **Wholesale & Retail**
J. C. VAUGHN,
Seedsman, **42 LaSalle St., CHICAGO, Ill.**

MARYLAND FARMS.—Book and Map *free*, by C. E. SHANAHAN, Attorney, Easton, Md.

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

How He Ventilated the Cellar.

The effect of foul air upon milk, cream, and butter was often alluded to at the Dairymen's meeting at DeKalb. A great bane to the dairyman is carbonic acid gas. In ill ventilated cellars it not only has a pernicious effect upon milk and its products, but it often renders the living apartments unhealthful, and brings disease and death to the family. In the course of the discussion Mr. W. D. Hoard, President of the Northwestern Dairymen's Association, related the following incident showing how easily cellars may be ventilated and rendered fit receptacles for articles of food:

"In the city of Fort Atkinson, where I do reside, Mr. Clapp, the president of the bank told me that for twenty years he had been unable to keep any milk or butter or common food of the family in the cellar. I went and looked at it, and saw gathered on the sleepers above large beads of moisture, and then knew what was the matter. The cellar was full of foul air. I said to him, 'Prof. Wilkins is here and will tell you in a few moments how to remedy this difficulty, and make your cellar a clean and wholesome apartment of your house.' I went down and got the professor, and he went up and looked at the cellar, and he says, 'for ten dollars I will put you in possession of a cellar that will be clean and wholesome.' He went to work and took a four-inch pipe, made of galvanized iron, soldered tightly at the joints, passing it down the side of the cellar wall until it came within two inches of the bottom of the cellar, turned a square elbow at the top of the wall, carried it under the house, under the kitchen, up through the kitchen floor and into the kitchen chimney, about four feet above where the kitchen stovepipe entered. You know the kitchen stove in all families is in operation about three times a day. The heat from this kitchen stove acting on the column of air in that little pipe caused a vacuum, and nature abhors a vacuum, and the result was that in twenty-four hours that little pipe had drawn the entire foul air out of the cellar, and he has now a perfect cellar. I drop this hint to show you that it is within easy reach of every one, for the sum of only about ten dollars, to have a perfectly ventilated cellar. This carbonic acid gas is very heavy. It collects in the cellar and you can not get it out unless you dip it out like water, or pump it out; and it becomes necessary to apply something to it that shall operate in this way."

This is a matter of such importance, and yet so little thought about, that we had designed having an illustration made to accompany this article, but conclude the arrangement[x] is so simple that any one can go to work and adapt it to the peculiar construction of his own house, and we hope thousands will make use of Mr. Hoard's suggestion.

An Old Roman Wedding.

As far as the nuptial ceremony itself was concerned, the Romans were in the habit of celebrating it with many imposing rites and customs, some of which are still in use in this country. As soon, therefore, as the sooth-sayer had taken the necessary omens, the ceremony was commenced by a sheep being sacrificed to Juno, under whose special guardianship marriage was supposed to rest. The fleece was next laid upon two chairs, on which the bride and bridegroom sat, over whom prayers were then said. At the conclusion of the service the bride was led by three young men to the home of her husband. She generally took with her a distaff and spindle filled with wool, indicative of the first work in her new married life—spinning fresh garments for her husband. Five torches were carried to light her.

The threshold of the house was gaily decorated with flowers and garlands; and in order to keep out infection it was anointed with certain unctuous perfumes[y]. As a preservative, moreover, against sorcery and evil influences, it was disenchanted by various charms. After being thus prepared, the bride was lifted over the threshold, it being considered unlucky for her to tread across it on first entering her husband's house. The musicians then struck up their music, and the company sang their "Epithalamium." The keys of the house were then placed in the young wife's hands, symbolic of her now being mistress. A cake, too, baked by the vestal virgins, which had been carried before her in the procession from the place of the marriage ceremony to the husband's home, was now divided among the guests. To enhance the merriment of the festive occasion, the bridegroom threw nuts among the boys, who then, as nowadays enjoyed heartily a grand scramble.

Mr. Smith's Stovepipe.

Once upon a time there lived a certain man and wife, and their name—well, I think it must have been Smith, Mr. and Mrs. John Smith. One chilly day in October Mrs. Smith said to her husband: "John, I really think we must have the stove up in the sitting-room." And Mr. Smith from behind his newspaper answered "Well." Three hundred and forty-six times did Mr. and Mrs. Smith repeat this conversation, and the three hundred and forty-seventh time Mr. Smith added: "I'll get Brown to help me about it some day."

It is uncertain how long the matter would have rested thus, had not Mrs. Smith crossed the street and asked neighbor Brown to come over and help her husband set up a stove, and as she was not his wife he politely consented and came at once.

With a great deal of grunting, puffing, and banging, accompanied by some words not usually mentioned in polite society, the two men at last got the stove down from the attic. Mrs. Smith had placed the zinc in its proper position, and they put the stove way to one side of it, but of course that didn't matter.

Then they proceeded to put up the stovepipe. Mr. Smith pushed the knee into the chimney, and Mr. Brown fitted the upright part to the stove. The next thing was to get the two pieces to come together. They pushed and pulled, they yanked and wrenched, they rubbed off the blacking onto their hands, they uttered remarks, wise and otherwise.

Presently it occurred to Mr. Smith that a hammer was just the thing that was needed, and he went for one. Mr. Brown improved the opportunity to wipe the perspiration from his noble brow, totally oblivious of the fact that he thereby ornamented his severe countenance with several landscapes done in stove blacking. The hammer didn't seem to be just the thing that was needed, after all. Mr. Smith pounded until he had spoiled the shape of the stovepipe, and still the pesky thing wouldn't go in, so he became exasperated and threw away the hammer. It fell on Mr. Brown's toe, and that worthy man ejaculated—well, it's no matter what he ejaculated. Mr. Smith replied to his ejaculation, and then Mr. Brown went home.

Why continue the tale? Everybody knows that Mr. Smith, after making a great deal of commotion, finally succeeded in getting the pipe into place, that he was perfectly savage to everybody for the rest of the day, and that the next time he and Brown met on the street both were looking intently the other way.

But there is more to tell. It came to pass in the course of the winter that the pipe needed cleaning out. Mrs. Smith dreaded the ordeal, both for her own sake and her husband's. It happened that the kitchen was presided over by that rarest of treasures, a good-natured, competent hired girl. This divinity proposed that they dispense with Mr. Smith's help in cleaning out the pipe, and Mrs. Smith, with a sigh of relief, consented. They carefully pulled the pipe apart, and, holding the pieces in a horizontal position that no soot might fall on the carpet, carried it into the yard.

After they had swept out the pipe and carried it back they attempted to put it up. That must have been an unusually obstinate pipe, for it steadily refused to go together. The minds of Mrs. Smith and her housemaid were sufficiently broad to grasp this fact after a few trials; therefore they did not waste their strength in vain attempts, but rested, and in an exceedingly un-masculine way held a consultation. The girl went for a hammer, and brought also a bit of board. She placed this on the top of the pipe, raised her hammer, Mrs. Smith held the pipe in place below, two slight raps, and, lo, it was done.

See what a woman can do. This story is true, with the exception of the names and a few other unimportant items. I say, and will maintain it, that as a general thing a woman has more brains and patience and less stupidity than a man. I challenge any one to prove the contrary.—*N. E. Homestead.*

Progress.

In the course of a lecture on the resources of New Brunswick, Professor Brown, of the Ontario Agricultural College, told the following story by an Arabian writer:

"I passed one day by a very rude and beautifully situated hamlet in a vast forest, and asked a savage whom I saw how long it had been there. 'It is indeed an old place,' replied he. 'We know it has stood there for 100 years as the hunting home of the great St. John, but how long previous to that we do not know.'

"One century afterward, as I passed by the same place, I found a busy little city reaching down to the sea, where ships were loading timber for distant lands. On asking one of the inhabitants how long this had flourished, he replied: 'I am looking to the future years, and not to what has gone past, and have no time to answer such questions.'

"On my return there 100 years afterward, I found a very smoky and wonderfully-populous city, with many tall chimneys, and asked one of the inhabitants how long it had been founded. 'It is indeed a mighty city,' replied he. 'We know not how long it has existed, and our ancestors there on this subject are as ignorant as ourselves.'

"Another century after that as I passed by the same place, I found a much greater city than before, but could not see the tall chimneys, and the air was pure as crystal; the country to the north and the east and the west, was covered with noble mansions and great farms, full of many cattle and sheep. I demanded of a peasant, who was reaping grain on the sands of the sea-shore, how long ago this change took place? 'In sooth, a strange question!' replied he. 'This ground and city have never been different from what you now behold them.' 'Were there not of old,' said I, 'many great manufacturers in this city?' 'Never,' answered he, 'so far as we have seen, and never did our fathers speak to us of any such.'

"On my return there, 100 years afterward, I found the city was built across the sea eastward into the opposite country; there were no horses, and no smoke of any kind came from the dwellings.

"The inhabitants were traveling through the air on wires which stretched far into the country on every side, and the whole land was covered with many mighty trees and great vineyards, so that the noble mansions could not be seen for the magnitude of the fruit thereof.

"Lastly, on coming back again, after an equal lapse of time, I could not perceive the slightest vestige of the city. I inquired of a very old and saintly man, who appeared to be under deep emotion, and who stood alone upon the spot, how long it had been destroyed. 'Is this a question,' said he, 'from a man like you? Know ye not that cities are not now part of the human economy? Every one travels through the air on wings of electricity, and lives in separate dwellings scattered all over the land; the ships of the sea are driven by the same power, and go above or below as found to be best for them. In the cultivation of the soil,' said he, 'neither horse nor steam-power are employed; the plow is not known, nor are fertilizers of any more value in growing the crops of the field. Electricity is carried under the surface of every farm and all over-head like a net; when the inhabitants require rain for any particular purpose, it is drawn down from the heavens by similar means. The influence of electricity has destroyed all evil things, and removed all diseases from among men and beasts, and every living thing upon the earth. All things have changed, and what was once the noble city of my name is to become the great meeting place of all the leaders of science throughout the whole world.'"

A Family Jar.

"Yes," said Mrs. Gunkettle, as she spanked the baby in her calm, motherly way, "it's a perfect shame, Mr. G., that you never bring me home anything to read! I might as well be shut up in a lunatic asylum."

"I think so, too," responded the unfeeling man.

"Other people," continued Mrs.[z] Gunkettle, as she gave the baby a marble to swallow, to stop its noise, "have magazines till they can't rest."

"There's one," said Mr. G., throwing a pamphlet on the table.

"Oh, yes; a horrid old report of the fruit interests of Michigan; lots of news in that!" and she sat down on the baby with renewed vigor.

"I'm sure it's plum full of currant news of the latest dates," said the miserable man. Mrs. Gunkettle retorted that she wouldn't give a fig for a whole library of such reading, when 'apple-ly the baby shrieked loud enough to drown all other sounds, and peace was at once restored.

Mouce Traps and Other Sweetemetes.

The following advertisement is copied from the Fairfield Gazette of September 21, 1786, or ninety-seven years ago, which paper was "printed in Fairfield by W. Miller and F. Fogrue, at their printing office near the meeting house."

Beards taken, taken of, and Registurd
by
ISSAC FAC-TOTUM
Barber, Peri-wig maker, Surgeon,
Parish Clerk, School Master,
Blacksmith and Man-midwife.

SHAVES for a penne, cuts hair for two pense, and oyld and powdird into the bargain. Young ladys genteeely Edicated; Lamps lited by the year or quarter. Young gentlemen also taut their Grammer langwage in the neatest manner, and great care takin of morels and spelin. Also Salme singing and horse Shewing by the real maker! Likewice makes and Mends, All Sorts of Butes and Shoes, teches the Ho! boy and Jewsharp, cuts corns, bleeds. On the lowes Term—Glisters and Pur is, at a peny a piece. Cow-tillions and other dances taut at hoam and abrode. Also deals holesale and retale—Pirfumerry in all its branchis. Sells all sorts of stationary wair, together with blacking balls, red herrins, ginger bread and coles, scrubbing brushes, trycle, Mouce traps, and other sweetemetes, Likewise. Red nuts, Tatoes, sassages and other gardin stuff.

P. T. I teches Joggrefy, and them outlandish kind of things——A bawl on Wednesday and Friday. All pirformed by Me.

ISAAC FAC-TOTUM.

A SONNET ON A BONNET.

A film of lace and a droop of feather,

With sky-blue ribbons to knot them together;
A facing (at times) of bronze-brown tresses,
Into whose splendor each furbelow presses;
Two strings of blue to fall in a tangle,
And chain of pink chin In decorous angle;
The tip of the plume right artfully twining
Where a firm neck steals under the lining;
And the curls and braids, the plume and the laces.
Circle about the shyest of faces,
Bonnet there is not frames dimples sweeter!
Bonnet there is not that shades eyes completer!
Fated is he that but glances upon it,
Sighing to dream of that face in the bonnet.

—*Winnifred Wise Jenks.*

Little Pleasantries.

A Sweet thing in bonnets: A honey bee.

It will get so in Illinois, by and by, that the marriage ceremony will run thus: "Until death—or divorce—do us part."

He had been ridiculing her big feet, and to get even with him she replied that he might have her old sealskin sacque made over into a pair of ear-muffs.

A Toronto man waited until he was 85 years old before he got married. He waited until he was sure that if he didn't like it he wouldn't have long to repent.

How a woman always does up a newspaper she sends to a friend, so that it looks like a well stuffed pillow, is something that no man is woman enough to understand.

"Yes, my dear," said Mrs. Ramsbothom, speaking of her invalid uncle, "the poor old gentleman has had a stroke of parenthesis, and when I last saw him he was in a state of comma."

"Uncle, when sis sings in the choir Sunday nights, why does she go behind the organ and taste the tenor's mustache?" "Oh, don't bother me, sonny; I suppose they have to do it to find out if they are in tune."

A couple of Vassar girls were found by a professor fencing with broomsticks in a gymnasium. He reminded the young girls that such an accomplishment would not aid them in securing husbands. "It will help us keep them in," replied one of the girls.

A clergyman's daughter, looking over the MSS. left by her father in his study, chanced upon the following sentence: "I love to look upon a young man. There is a hidden potency concealed within his breast which charms and pains me." She sat down, and blushingly added: "Them's my sentiments exactly, papa—all but the pains."

"My dear," said a sensible Dutchman to his wife, who for the last hour had been shaking her baby up and down on her knee: "I don't think so much butter is good for the child." "Butter? I never give my Artie any butter; what an idea!" "I mean to say you have been giving him a good feed of milk out of the bottle, and now you have been an hour churning it!"

LITTLE DILLY-DALLY.

I don't believe you ever
  Knew any one so silly
As the girl I'm going to tell about—

A little girl named Dilly,
Dilly-dally Dilly,
Oh, she is very slow,
She drags her feet
Along the street,
And dilly-dallies so!

She's always late to breakfast
Without a bit of reason,
For Bridget rings and rings the bell
And wakes her up in season.
Dilly-dally Dilly,
How can you be so slow?
Why don't you try
To be more spry,
And not dilly-dally so?

'Tis just the same at evening;
And it's really quite distressing
To see the time that Dilly wastes
In dreaming and undressing.
Dilly-dally Dilly
Is always in a huff;
If you hurry her
Or worry her
She says, "There's time enough."

Since she's neither sick nor helpless,
It is quite a serious matter
That she should be so lazy that
We still keep scolding at her.
Dilly-dally Dilly,
It's very wrong you know,
To do no work
That you can shirk,
And dilly-dally so.

Uncle Jim's Yarn.

Old "Uncle Jim," of Stonington, Conn., ought to have a whole drawer to himself, for nothing short of it could express the easy-going enlargement of his mind in narratives. Uncle Jim was a retired sea captain, sealer, and whaler, universally beloved and respected for his lovely disposition and genuine good-heartedness, not less than for the moderation of his statements and the truthful candor of his narrations. It happened that one of the Yale Professors, who devoted himself to ethnological studies, was interested in the Patagonians, and very much desired information as to the alleged gigantic stature of the race. A scientific friend, who knew the Stonington romancer, told the Professor that he could no doubt get valuable information from Uncle Jim, a Captain who was familiar with all the region about Cape Horn. And the Professor, without any hint about Uncle Jim's real ability, eagerly accompanied his friend to make the visit. Uncle Jim was found in one of his usual haunts, and something like the following ethnological conversation ensued:

Professor—They tell me, Capt. Pennington, that you have been a good deal in Patagonia.

Uncle Jim—Made thirty or forty voyages there, sir.

Professor—And I suppose you know something about the Patagonians and their habits?

Uncle Jim—Know all about 'em, sir. Know the Patagonians, sir, all, all of 'em, as well as I know the Stonington folks.

Professor—I wanted to ask you, Captain, about the size of the Patagonians—whether they are giants, as travelers have reported?

Uncle Jim—No, sir—shaking his head slowly, and speaking with the modest tone of indifference—no, sir, they are not. (It was quite probable that the Captain never had heard the suggestion before). The height of the Patagonian, sir, is just five feet nine inches and a half.

Professor—How did you ascertain this fact, Captain?

Uncle Jim—Measured 'em, sir—measured 'em. One day when the mate and I were ashore down there, I called up a lot of the Patagonians, and the mate and I measured about 500 of them, and every one of them measured five feet nine inches and a half—that's their exact height.

Professor—That's very interesting. But, Captain, don't you suppose there were giants there

long ago, in the former generations? All the travelers say so.

Uncle Jim—Not a word of truth in it, sir—not a word. I'd heard that story and I thought I'd settle it. I satisfied myself there was nothing in it.

Professor—But how could you know that they used not to be giants? What evidence could you get? Mightn't the former race have been giants?

Uncle Jim—Impossible, sir, impossible.

Professor—But how did you satisfy yourself?

Uncle Jim—Dug 'em up, sir—dug 'em up speaking with more than usual moderation. I'd heard that yarn. The next voyage, I took the bo'sen and went ashore; we dug up 275 old Patagonians and measured 'em. They all measured exactly five feet nine inches and a half; no difference in 'em—men, women, and all ages just the same. Five feet nine inches and a half is the natural height of a Patagonian. They've always been just that. Not a word of truth in the stories about giants, sir.—*Harper's Magazine*.

Puddin' Tame's Fun.

"Nice child, very nice child," observed an old gentleman, crossing the aisle and addressing the mother of the boy who had just hit him in the eye with a wad of paper. "How old are you, my son?"

"None of your business," replied the youngster, taking aim at another passenger.

"Fine boy," smiled the old man, as the parent regarded her offspring with pride. "A remarkably fine boy. What is your name, my son?"

"Puddin' Tame!" shouted the youngster, with a giggle at his own wit.

"I thought so," continued the old man, pleasantly. "If you had given me three guesses at it, that would have been the first one I would have struck on. Now, Puddin', you can blow those things pretty straight, can't you?"

"You bet!" squealed the boy, delighted at the compliment. "See me take that old fellow over there!"

"No, no!" exclaimed the old gentleman, hastily. "Try it on the old woman I was sitting with. She has boys of her own, and she won't mind."

"Can you hit the lady for the gentleman, Johnny?" asked the fond parent.

Johnny drew a bead and landed the pellet on the end of the old woman's nose. But she did mind it, and, rising in her wrath, soared down on the small boy like a blizzard. She put him over the line, reversed him, ran him backward till he didn't know which end of him was front, and finally dropped him into the lap of the scared mother, with a benediction whereof the purport was that she'd be back in a moment and skin him alive.

"She didn't seem to like it, Puddin'," smiled the gentleman, softly. "She's a perfect stranger to me, but I understand she is a matron of truants' home, and I thought she would like a little fun; but I was mistaken."

And the old gentleman sighed sweetly as he went back to his seat.

The Alphabet.

The discovery of the alphabet is at once the triumph, the instrument and the register of the progress of our race. The oldest abecedarium in existence is a child's alphabet on a little ink-bottle of black ware found on the site of Cere, one of the oldest of the Greek settlements in Central Italy, certainly older than the end of the sixth century B. C. The Phœnician alphabet has been reconstructed from several hundred inscriptions. The "Moabite Stone" has yielded the honor of being the most ancient of alphabetic records to the bronze plates found in Lebanon in 1872, fixed as of the tenth or eleventh century, and therefore the earliest extant monuments of the Semitic alphabet. The lions of Nineveh and an inscribed scarab found at Khorsabad have furnished other early alphabets; while scarabs and cylinders, seals and gems, from Babylon and Nineveh, with some inscriptions, are the scanty records of the first epoch of the Phœnician alphabet. For the second period, a sarcophagus found in 1855, with an inscription of twenty-two lines, has tasked the skill of more than forty of the most eminent Semitic scholars of the day, and the literature connected with it is overwhelming. An unbroken series of coins extending over seven centuries from 522 B. C. to 153 A. D., Hebrew engraved gems, the Siloam inscription discovered in Jerusalem in 1880, early Jewish coins, have each and all found special students whose successive progress is fully detailed by Taylor. The Aramæan alphabet lived only for seven or eight centuries; but from it sprang the scripts of five great faiths of Asia and the three great literary alphabets of the East. Nineveh and its public records supply most curious revelations of the social life and

commercial transactions of those primitive times. Loans, leases, notes, sales of houses, slaves, etc., all dated, show the development of the alphabet. The early Egyptian inscriptions show which alphabet was there in the reign of Xerxes. Fragments on stone preserved in old Roman walls in Great Britain, Spain, France, and Jerusalem, all supply early alphabets.

Alphabets have been affected by religious controversies, spread by missionaries, and preserved in distant regions by holy faith, in spite of persecution and perversion. The Arabic alphabet, next in importance after the great Latin alphabet, followed in eighty years the widespread religion of Mohammed; and now the few Englishmen who can read and speak it are astonished to learn that it is collaterally related to our own alphabet, and that both can be traced back to the primitive Phœnician source.

Greece alone had forty local alphabets, reduced by careful study to about half a dozen generic groups, characterized by certain common local features, and also by political connection.

Of the oldest "a, b, c's" found in Italy, several were scribbled by school-boys on Pompeian walls, six in Greek, four in Oscan, four in Latin; others were scratched on children's cups, buried with them in their graves, or cut or painted for practice on unused portions of mortuary slabs. The earliest was found as late as 1882, a plain vase of black ware with an Etruscan inscription and a syllabary or spelling exercise, and the Greek alphabet twice repeated.

What a Child Can Do.

"Pa, I have signed the pledge," said a little boy to his father, on coming home one evening; "will you help me keep it?"

"Certainly," said the father.

"Well, I have brought a copy of the pledge; will you sign it, papa?"

"Nonsense, nonsense, my child! What could I do when my brother-officers called—the father had been in the army—if I was a teetotaler?"

"But do try, papa."

"Tut, tut! why you are quite a little radical."

"Well, you won't ask me to pass the bottle, papa?"

"You are quite a fanatic, my child; but I promise not to ask you to touch it."

Some weeks after that two officers called in to spend the evening.

"What have you to drink?" said they.

"Have you any more of that prime Scotch ale?"

"No," said he; "I have not, but I shall get some. Here, Willie, run to the store, and tell them to send some bottles up."

The boy stood before his father respectfully, but did not go.

"Come, Willie; why, what's the matter? Come, run along." He went, but came back presently without any bottles.

"Where's the ale, Willie?"

"I asked them for it at the store, and they put it upon the counter, but I could not touch it. O pa, pa! don't be angry; I told them to send it up, but I could not touch it myself!"

The father was deeply moved, and turning to his brother-officers, he said:

"Gentlemen, do you hear that? You can do as you please. When the ale comes you may drink it, but not another drop shall be drank in my house, and not another drop shall pass my lips. Willie, have you your temperance pledge?"

"O pa! I have."

"Bring it, then."

And the boy was back with it in a moment. The father signed it and the little fellow clung round his father's neck with delight. The ale came, but not one drank, and the bottles stood on the table untouched.

Children, sign the pledge, and ask your parents to help you keep it. Don't touch the bottle, and try to keep others from touching it.

MISCELLANEOUS.

Stock Farms FOR SALE; one of the very best in Central Illinois, the finest agricultural region in the world; 1,100 acres, highly improved; unusual facilities for handling stock; also a smaller farm; also one of the finest

Stock Ranches In Central Texas, 9,136 acres. Each has never-failing water, and near railroads; must be sold; terms easy; price low. For further particulars address,
J. B. or F. C. TURNER, Jacksonville, Ill.

Cut This Out & Return to us with **TEN CTS.** & you'll get by mail **A GOLDEN BOX OF GOODS** that will bring you in **MORE MONEY**, in One Month than anything else in America. Absolute Certainty Need no capital.
M. Young, 173 Greenwich St. N. York

Self Cure Free

Nervous Debility
Lost Manhood
Weakness and Decay

A favorite prescription of a noted specialist (now retired). Druggists can fill it. Address
DR. WARD & CO., LOUISIANA, MO.

MAP Of the United States and Canada, Printed in Colors, size 4 x 2½ feet, also a copy of THE PRAIRIE FARMER for one year. Sent to any address for $2.00.

BREEDERS DIRECTORY.

The following list embraces the names of responsible and reliable Breeders in their line, and parties wishing to purchase or obtain information can feel assured that they will be honorably dealt with:

SWINE.
Chester Whites.
W. A. Gilbert ..... Wauwatosa, Wis.

LIVE STOCK, Etc.

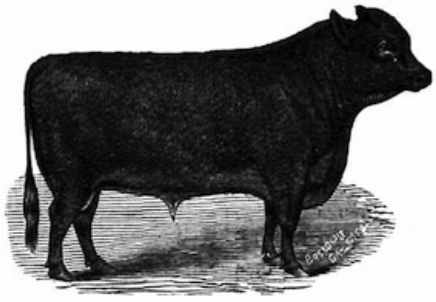
PUBLIC SALE

OF

POLLED ABERDEEN-ANGUS

AND

Short-Horn Cattle.



We will, on March 27 and 28, at Dexter Park, Stock Yards, Chicago, offer at public sale 64 head of Polled Aberdeen-Angus, and 21 head of Short-horns, mostly Imported and all highly bred cattle, representing the best strains of their respective breeds. Sale each day will begin at 1 P. M., sharp. Catalogues now ready. Address as below.

NOTE.—ENGLISH SHIRE HORSES,—Three stallions and four mares of this breed (all imported) will be offered at the close of the second day's sale of cattle.

Geo. Whitfield,
Model Farm,
Rougemont, P. O., Can.

Geary Bros.,
Bli Bro. Stock Farm,
London, Canada.

At Kansas City, Mo., on April 15, 16, and 17, the same parties will offer at public sale a choice lot of Aberdeen-Angus and Short-horn cattle.

When you write mention The Prairie Farmer.

HOLSTEINS

AT

LIVING RATES.

DR. W. A. PRATT,

ELGIN, ILL.,

Now has a herd of more than one hundred head of full-blooded

HOLSTEINS

mostly imported direct from Holland. These choice dairy animals are for sale at moderate prices. Correspondence solicited or, better, call and examine the cattle, and select your own stock.

SCOTCH COLLIE

SHEPHERD PUPS,

—FROM—

IMPORTED AND TRAINED STOCK

—ALSO—

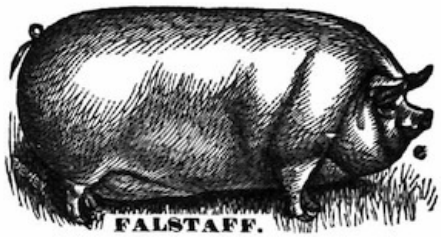
Newfoundland Pups and Rat Terrier Pups.

Concise and practical printed instruction in Training young Shepherd Dogs is given to buyers of Shepherd Puppies; or will be sent on receipt of 25 cents in postage stamps.

For Printed Circular, giving full particulars about Shepherd Dogs, enclose a 3-cent stamp, and address

N. H. PAAREN,
P. O. Box 326.—CHICAGO, ILL.

VICTORIA SWINE.



Winner of First Prize Chicago Fat Stock Show 1878. Originators of this famous breed. Also breeders of Pekin Ducks and Light Brahma Fowls. Stock for sale. Send for circular A.

SCHIEDT & DAVIS,
Dyer, Lake Co. Ind

STEWART'S HEALING POWDER.

SOLD BY HARNESS AND DRUG STORES. Warranted to cure all open **Sores** on ANIMALS from any cause.

Chester White Pigs.

Good as the best at prices to suit the times. Also, Short-horn cattle. Send for price list. S. H. OLMSTEAD, Freedom, La Salle Co., Ill. Reduced rates by express.

THE GENTLEMAN FARMER.

He owned the farm—at least 'twas thought
  He owned, since he lived upon it,—
And when he came there, with him brought
  The men whom he had hired to run it.

He had been bred to city life
  And had acquired a little money;
But, strange conceit, himself and wife
  Thought farming must be something funny.

He did not work himself at all,
  But spent his time in recreation—
In pitching quoits and playing ball,
  And such mild forms of dissipation.

He kept his "rods" and trolling spoons,
  His guns and dogs of various habits,—
While in the fall he hunted coons,
  And in the winter skunks and rabbits.

His hired help were quick to learn
  The liberties that might be taken,
And through the season scarce would earn
  The salt it took to save their bacon.

He knew no more than child unborn,
  One-half the time, what they were doing,—
Whether they stuck to hoeing corn,
  Or had on hand some mischief brewing.

His crops, although they were but few,
  With proper food were seldom nourished,
While cockle instead of barley grew,
  And noxious weeds and thistles flourished.

His cows in spring looked more like rails
  Set up on legs, than living cattle;
And when they switched their dried-up tails
  The very bones in them would rattle.

At length the sheriff came along,
  Who soon relieved him of his labors.
While he became the jest and song
  Of his more enterprising neighbors.

Back to the place where life began,
  Back to the home from whence he wandered,
A sadder, if not a wiser man,
  He went with all his money squandered.

MORAL.

On any soil, be it loam or clay,
  Mellow and light, or rough and stony,
Those men who best make farming pay
  Find use for brains as well as money.
—Tribune and Farmer.

FRANK DOBB'S WIVES.

"The great trouble with my son," old Dobb observed to me once, "is that he is a genius."

And the old gentleman sighed and looked with melancholy eyes at the picture on the genius's easel. It was a clever picture, but everything Frank Dobb did was clever, from his painting to his banjo playing. Clever was the true name for it, for of substantial merit it possessed none. He had begun to paint without learning to draw, and he could pick a tune out of any musical instrument extant without ever having mastered the mysteries of notes. He talked the most graceful of airy nothings, and could not cover a page of note paper without his orthography going lame, and all the rest of his small acquirements and accomplishments were proportionately shallow and incomplete. Paternal partiality laid it to his being too gifted to study, but the cold logic, which no ties of consanguinity influenced, ascribed it to laziness.

Frank was, indeed, the idlest and best-natured fellow in the world. You never saw him busy, angry, or out of spirits. He painted a little, thrummed his guitar a little longer or rattled a tune off on his piano, smoked and read a great deal, and flirted still more, all in the same deliberate and easy-going way. Any excuse was sufficient to absolve him from serious work. So he lead a pleasant, useless life, with Dobb senior to pay the bills.

He had the handsomest studio in New York, a studio for one of Ouida's heroes to luxuriate in. If the encouragement of picturesque surroundings could have made a painter of him he would have been a master. The fame of his studio, and the fact that he did not need the money, made his pictures sell. He was quite a lion in society, and it was regarded as a favor to be asked to call on him. He was the beau ideal of the artist of romance, and was accorded a romantic eminence accordingly[aa]. So, with his pictures to provide him with pocket money, and his father to see to the rest, he lived the life of a young prince, feted and flattered and spoiled, artistically despised by all the serious workers who knew him, and hated by some who envied him the commercial success he had no necessity for, but esteemed by most of us as a good fellow and his own worst enemy.

Frank married his first wife while Dobb senior was still at the helm of his own affairs. She was a charming little woman whose acquaintance he had made when she visited his studio with a party of friends. She had not a penny, but he made a draft upon "the governor," as he called him, and the happy pair digested their honeymoon in Europe. They were absent six months, during which time he did not set brush to canvas. Then they returned, as he fancifully termed it, to go to work.

He commenced the old life as if he had never been married. The familiar sound of pipes and beer, and supper after the play, often with young ladies who had been assisting in the representation on the stage, was traveled as if there had been no Mrs. Dobb at home in the flat old Dobb provided. Frank's expenditures on himself were as lavish as they had been in his bachelor days. As little Brown said, it was lucky that Mrs. Dobb had a father-in-law to buy her dinner for her. She rarely came to her husband's studio, because he claimed that it interfered with the course of business. He had invented a fiction that she was too weak to endure the strain of society, and so he took her into it as little as possible. In brief, married

by the caprice of a selfish man, the poor little woman lived through a couple of neglected years, and then died of a malady as nearly akin to a broken heart as I can think of, while Frank was making a trip to the Bahamas on the yacht of his friend Munnybagge, of the Stock Exchange.

He had set out on the voyage ostensibly to make studies, for he was a marine painter, on the principle, probably, that marines are easiest to paint. When he came back and found his wife dead, he announced that he would move his studio to Havana for the purpose of improving his art. He did so, putting off his mourning suit the day after he left New York and not putting it on again, as the evidence of creditable witnesses on the steamer and in Havana has long since proved.

His son's callousness was a savage stab in old Dobb's heart. A little, mild-looking old gentleman, without a taint of selfishness or suspicion in his own nature, he had not seen the effect of his indulgence of him on his son till his brutal disregard for his first duty as a man had told him of it. The old man had appreciated and loved his daughter-in-law. In proportion as he had discovered her unhappiness and its just cause, he had lost his affection for his son. I hear that there was a terrible scene when Frank came home, a week after his wife had been buried. He claimed to have missed the telegram announcing her death to him at Nassau, but Munnybagge had already told some friends that he had got the dispatch in time for the steamer, but had remained over till the next one, because he had a flirtation on hand with little Gonzales, the Cuban heiress, and old Dobb had heard of it. Munnybagge never took him yachting again; and, speaking to me once about him, he designated him, not by name, but as "that infernal bloodless cad."

However, as I have said, there was a desperate row between father and son, and Frank is said to have slunk out of the house like a whipped cur, and been quite dull company at the supper which he took after the opera that night in Gillian Trussell's jolly Bohemian flat. When he emigrated, with his studio traps filling half a dozen packing cases, none of the boys bothered to see him off. They had learned to see through his good fellowship, and recalled a poor little phantom, to whose life and happiness he had been a wicked and bitter enemy.

About a year after his departure I read the announcement in the Herald of the marriage of Franklin D. Dobb, Sr., to a widow well-known and popular in society. I took the trouble to ascertain that it was Frank's father, and being among some of the boys that night, mentioned it to them.

"Well," remarked Smith, "that's really queer. You remember Frank left some things in my care when he went away? Yesterday I got a letter asking about them, and informing me that he had got married and was coming home."

He did come home, and he settled in his old studio. What sort of a meeting he had with his father this time I never heard. The old gentleman had been paying him his allowance regularly while he was away, and I believe he kept up the payment still. But otherwise he gave him no help, and if he ever needed help he did now.

His wife was a Cuban, as pretty and as helpless as a doll. She had been an heiress till her brother had turned rebel and had his property confiscated. Unfortunately for Frank, he had married her before the culmination of this catastrophe. In fact, he had been paying court to her with the dispatch announcing his wife's death in his pocket, and had married her long before the poor little clay was well settled in the grave he had sent it to. In marrying her he had evidently believed he was establishing his future. So he was, but it was a future of expiation for the sins and omissions of his past.

The new Mrs. Dobb was a tigress in her love and her jealousy. She was childish and ignorant, and adored her husband as a man and an artist. She measured his value by her estimation of him, and was on the watch perpetually for trespassers on her domain. The domestic outbreaks between the two were positively blood curdling. One afternoon, I remember, Gillian Trussell, who had heard of his return, called on him. Mrs. D. met her at the studio door, told her, "Frank," as she called him, was out; slammed the door in her face, and then flew at him with a palette scraper. We had to break the door in, and found him holding her off by both wrists, and she frothing in a mad fit of hysterics. From that day he was a changed man. She owned him body and soul.

The life the pair lived after that was simply ridiculously[bb] miserable. He had lost his old social popularity, and was forced to sell his pictures to the cheap dealers, when he was lucky enough to sell them at all. The paternal allowance would not support the flat they first occupied, and they went into a boarding house. Inside of a month they were in the papers, on account of outbreaks on Mrs. Dobb's part against one of the ladies of the house. A couple of days after he leased a little room opening into his studio, converted it into a bed-room, and they settled there for good.

Such a housekeeping as it was—like a scene in a farce. The studio had long since run to seed, and a perpetual odor of something to eat hung over it along with the sickening reek of the Florida water Mrs. D., like all other creoles, made more liberal use of than of the pure element it was half-named from. Crumbs and crusts and chop-bones, which the dog had left, littered the rugs; and I can not recall the occasion on which the caterer's tin box was not standing at the door, unless it was when the dirty plates were piled up, there waiting for him

to come for them. I dined there once. Frank had had a savage quarrel with her that day, and wanted me for a bender. But the scheme availed him nothing, for she broke out over the soup and I left them to fight it out, and finished my feast at a chop house.

All of his old flirtations came back to curse him now. His light loves of the playhouse and his innocent devotions of the ball room were alike the instruments fate had forged into those of punishment for him. The very names of his old fancies, which, with that subtle instinct all women possess, she had found out, were sufficient to send his wife into a frenzy. She was a chronic theatre-goer, and they never went to the theatre without bringing a quarrel home with them. If he was silent at the play she charged him with neglecting her; if he brisked up and tried to chat, her jealousy would soon pick out some casus belli in the small talk he strove to interest her with. A word to a passing friend, a glance at one of her own sex, was sufficient to set her going. I shall never question that jealousy is a form of actual madness, after what I saw of it in the lives of that miserable man and woman.

A year after his return he was the ghost of his old self. He was haggard and often unshaven; his attire was shabby and carelessly put on; he had lost his old, jaunty air, and went by you with a hurried pace, and his head and shoulders bent with an indescribable suggestion of humility. The fear of having her break out, regardless of any one who might be by, which hung over him at home, haunted him out of doors, too. The avenger of Mrs. Dobb the first had broken his spirit as effectually as he had broken Mrs. Dobb's heart. Smith occupied the next studio to him, and one evening I was smoking there, when an atrocious uproar commenced in the next room. We could distinguish Frank's voice and his wife's, and another strange one. Smith looked at me, grinned, and shrugged his shoulders. The disturbance ceased in a couple of minutes, and a door banged.

Then came a crash, a shrill and furious scream, and the sound of feet. We ran to the door, in time to see Mrs. Dobb, her hair in a tangle down her back, in a dirty wrapper and slipshod slippers, stumbling down stairs. We posted after her, Smith nearly breaking his neck by tripping over one of the slippers which she had shed as she ran. The theatres were just out and the streets full of people, among whom she jostled her way like the mad woman that she was. We came up with her as she overtook her husband, who was walking with McGilp, the dealer who handled his pictures. She seized him by the arm and screamed out:

"I told you I would come with you."

His face for a moment was the face of a devil, full of fury and despair. I saw his fist clench itself and the big vein in his forehead swell. But he slipped his hands into his pockets, looked appealingly at McGilp, and said, shrugging his shoulders, "You see how it is, Mac?"

McGilp nodded and walked abruptly away, with a look full of contempt and scorn. We mingled with the crowd and saw the poor wretches go off together, he grim and silent, she hysterically excited—with all the world staring at them. Smith slept on a lounge in my room that night. "I couldn't get a wink up there," he said, "and I don't want to be even the ear witness of a murder."

The night did not witness the tragedy he anticipated, though. Next day, Frank Dobb came to see me—a compliment he had not paid me for months. He was the incarnation of abject misery, and so nervous that he could scarcely speak intelligibly.

"I saw you in the crowd last night, old man," he said, looking at the floor and twisting and untwisting his fingers. "What do you think of it? A nice life for a fellow to lead, eh?"

What else could I reply than, "Why do you lead it then?"

"Why?" he repeated, breaking into a hollow, uneasy laugh. "Why, because I love her, damn me! and I deserve it all."

"Is this what you came to tell me?" I asked.

"No," he answered, "of course not. The fact is, I want you to help me out of a hole. That row last night has settled me with McGilp. He came to see me about a lot of pictures for a sale he is getting up out West, and the senora kept up such a nagging that he got sick and suggested that we should go to 'The Studio' for a chop and settle the business there. She swore I shouldn't go, and that she would follow us if I did. I thought she'd not go that far; but she did. So the McGilp affair is off for good, I know. He's disgusted, and I don't blame him. What I want of you is this. Buy that Hoguet you wanted last year."

The picture was one I had fancied and offered him a price for in his palmy days, one that he had picked up abroad. I was only too glad to take it and a couple more, for which I paid him at once; and next evening, at dinner, I heard that he had levanted. "Walked out this morning," said Smith, "and sent a messenger an hour after with word that he had already left the city. She came in to me with the letter in one hand and a dagger in the other. She swears he has run away with another woman, and says she's going to have her life, if she has to follow her around the world."

She did not carry out her sanguinary purpose, though. There were some consultations with old Dobb and then the studio was to let again. Some one told me she had returned to Cuba, where she proposed to live on the allowance her father-in-law had made her husband and which he now continued to her.

I had almost forgotten her when, several years later, in the lobby of the Academy of Music, she touched my arm with her fan. She was promenading on the arm of a handsome but beefy-looking Englishman, whom she introduced to me as her husband. I had not heard of a divorce, but I took the introduction as information that there had been one. The Englishman was a better fellow than he looked. We supped together after the opera, and I learned that he had met Mrs. Dobb in Havana, where he had spent some years in business. I found her a changed woman—a new woman, indeed, in whom I only now and then caught a glimpse of her old indolent, babyish and foolish self. She was not only prettier than ever, but she had become a sensible and clever woman. The influence of an intelligent man, who was strong enough to bend her to his ways, had developed her latent brightness and taught her to respect herself as well as him.

I met her several times after that, and at the last meeting but one she spoke of Frank for the first time. Her black eyes snapped when she uttered his name. The devil was alive in them, though love was dead.

I told her that I had heard nothing of him since his disappearance.

"But I have," she said, showing her white teeth in a curious smile.

"Indeed!" I replied, quite astounded.

"The coward!" she went on bitterly; "and to think I could ever have loved such a thing as he! Do you know, Mr. X., that I never knew he had been married till after he had fled? Then his father told me how he had courted my father's money, with his wife lying dead at home. Oh! Senor Francisco, Senor Francisco! Before I heard that, I wanted to kill the woman who had stolen you from me. The moment after I could have struck you dead at my feet."

She threw her arm up, holding her fan like a dagger. I believed her, and so would any one who had seen her then.

"I had hardly settled in Havana," she continued, "before I received a letter from him. Already [Pg 191] he wanted to come back to me. Had the other woman tired of him already? I asked myself, or was it really true, as his father had told me, that he had fled alone? I answered the letter, and he wrote again. Again I answered, and so it was kept up. For two years I played with the love I now knew was worthless. He was traveling round the world, and a dozen times wanted to come directly to me. I insisted that he should keep his journey up—as a probation, you see. He submitted. But oh! how he did love me!"

The exultation with which she told this was absolutely fiendish. I could see in it, plainer than any words could tell it to me, the scheme of vengeance she had carried out, the alternating hopes and torments to which she had raised, and into which she had plunged him. I could see him wandering around the globe, scourged by remorses, agonized by doubts, and maddened by despairs, accepting the lies she wrote him as inviolable pledges, and sustaining himself with the vision of a future never to be fulfilled. She read the expression of my face, and laughed.

"Was it not an idea?" she asked. "Was that not better than this?"

And again she stabbed the air with her fan.

"But—pardon me the question—but you have begun the confidence," I said. "How will it end?"

"It has ended," she answered.

"How?"

"I had been divorced while I was writing to him. A year ago he was to be in London, where I was to meet him. While he was sailing from the Cape of Good Hope I was being married to a man who loved me for myself, and to whom I had confided all. Instead of my address at the London post office he received a notification of my marriage, addressed to him in my own hand and mailed to him by myself. He wrote once or twice still, but my husband indorsed the letters with his own name and returned them unopened. He may be dead for all I know, but I hope and pray he is still alive, and will remain alive and love me for a thousand years."

She opened her arms, as if to hug her vengeance to her heart, and looked at me steadily with eyes that thrilled me with their lambent fire. No wonder the wretched vagabond loved her! What a doom his selfishness and his duplicity had invoked upon him! I believe if he could have seen her as I saw her then, so different from and better than he knew her to be, he would have gone mad on the spot. Poor Mrs. Dobb the first was indeed avenged.

We sipped our chocolate and talked of other things, as if such a being as Frank Dobb had never been. Her husband joined us and we made an evening of it at the theatre. I knew from the way he looked at me, and from the increased warmth of his manner, that he was conversant with his wife's having made a confidant of me. But I do not think he knew how far her confidence had gone. I have often wondered since if he knew how deep and fierce the hatred she carried for his predecessor was. There are things women will reveal to strangers which they will die rather than divulge to those they love.

I saw them off to Europe, for they were going to establish themselves in London, and I have

never seen or directly heard from them since. But some months after their departure I received a letter from Robinson, who has been painting there ever since his picture made that great hit in the Salon of '7—.

"I have odd news for you," he wrote. "You remember Frank Dobb, who belonged to our old Pen and Pencil Club, and who ran away from that Cuban wife of his just before I left home? Well, about a year ago I met him in Fleet street, the shabbiest beggar you ever saw. He was quite tight and smelled of gin across the street. He was taking a couple of drawings to a penny dreadful office which he was making pictures for at ten shillings a piece. I went to see him once, in the dismalest street back of Drury Lane. He was doing some painting for a dealer, when he was sober enough, and of all the holes you ever saw his was it. I soon had to sit down on him, for he got into the habit of coming to see me and loafing around, making the studio smell like a pub, till I would lend him five shillings to go away. I heard nothing of him till the other day I came across an event which this from the Telegraph will explain."

The following newspaper paragraph was appended:

"The man who shot himself on the door-step of Mr. Bennerley Green, the West India merchant, last Monday, has been discovered to be an American who for some time has been employed furnishing illustrations to the lower order of publications here. He was known as Allan, but this is said to have been an assumed name. He is stated to be the son of a wealthy New Yorker, who discarded him in consequence of his habits of dissipation, and to have once been an artist of considerable prominence in the United States. All that is known of the suicide is the story told by the servant, who a few minutes after admitting his master and mistress upon their return from the theatre, heard the report of a pistol in the street, and on opening the door found the wretched man dead upon the step. The body was buried after the inquest at the charge of the eminent American artist, Mr. J. J. Robinson, A. R. A., who had known him in his better days."

The second husband of Mrs. Frank Dobb is Mr. Bennerley Green, the West India merchant. —*The Continent.*

Many cures for snoring have been invented, but none have stood the test so well as the old reliable clothes-pin.

A Clergyman says that the baby that pulls whiskers, bites fingers, and grabs for everything it sees has in it the elements of a successful politician.

A Hartford man has a Bible bearing date 1599. It is very easy to preserve a Bible for a great many years, because—because—well, we don't know what the reason is, but it is so, nevertheless.

A Vermont man has a hen thirty years old. The other day a hawk stole it, but after an hour came back with a broken bill and three claws gone, put down the hen and took an old rubber boot in place of it.

Alexander Gumbleton Ruffleton Scufflton Oborda Whittleton Sothenhall Benjaman Franklin Squires is still a resident of North Carolina, aged ninety-two. The census taker always thinks at first that the old man is guying.

A little five-year-old friend, who was always allowed to choose the prettiest kitten for his pet

and playmate before the other nurslings were drowned, was taken to his mother's sick room the other morning to see the two tiny new twin babes. He looked reflectively from one to the other for a minute or two, then, poking his chubby finger into the plumpest baby, he said decidedly, "Save this one."

In promulgating your esoteric cogitation on articulating superficial sentimentalities and philosophical psychological observation, beware of platitudinous ponderosity. Let your conversation possess a clarified conciseness, compact comprehensiveness, coalescent consistency, and a concatenated cognancy; eschew all conglomerations of flatulent garrulity and jejune babblement. In other words, don't use such big words.

HOW HE WAS "SLEIGHED."

A boy once took it in his head
That he would exercise his sled.

He took the sled into the road
And, lord a massy! how he slode.

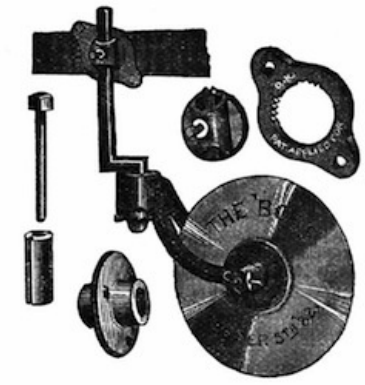
And as he slid, he laughing cried,
"What fun upon my sled to slide."

And as he laughed, before he knewed,
He from that sliding sled was slude.

Upon the slab where he was laid
They carved this line: "This boy was sleighed."

"A Farmer's Wife" wants to know if we can recommend anything to destroy the "common grub." We guess the next tramp that comes along could oblige you.

MISCELLANEOUS.



OUR "O.K." CLAMP

Attaches the Coulter to any size or kind of beam, either right or left hand plow. We know that after using it you will say it is **the Best Tool on the Market**. Ask your dealer for it.

Manufactured by the BOSS COULTER CO.,
Bunker Hill, Ill.

THE GOLDEN BELT"

KANSAS LANDS
STOCK RAISING
Buffalo Grass Pasture Summer and Winter.
CORN and WHEAT
200,000,000 Bus. Corn.
30,000,000 Wheat.

ALONG THE
KANSAS DIVISION U. P. R'WAY.
WOOL-GROWING
Unsurpassed for Climate, Grasses, Water.
FRUIT
The best In the Eastern Market.

Pamphlets and Maps free. **B. McALLASTER**, Land Commis'r, Kansas City, Mo.

THE STANDARD REMINGTON TYPE-WRITER is acknowledged to be the only rapid and reliable writing machine. It has no rival. These machines are used for transcribing and general correspondence in every part of the globe, doing their work in almost every language. Any young man or woman of ordinary ability, having a practical knowledge of the use of this machine may find constant and remunerative employment. All machines and supplies, furnished by us, warranted. Satisfaction guaranteed or money refunded. Send for circulars

WYCKOFF, SEAMANS & BENEDICT.
38 East Madison St. Chicago, Ill.

GRATEFUL—COMFORTING.

EPPS'S COCOA.

BREAKFAST.

"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected Cocoa, Mr. Epps has provided our breakfast tables with a delicately flavored beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—*Civil Service Gazette.*

Made simply with boiling water or milk. Sold only in half-pound tins by Grocers, labeled thus:

JAMES EPPS & CO., Homœopathic Chemists,
London, England.

When you write mention The Prairie Farmer.

Nebraska Seed Corn.

I have about 1,000 bushels of very choice selected yellow corn, which I have tested and know all will grow, which I will put into good sacks and ship by freight in not less than 5-bushel lots at $1 per bushel of 70 lbs., ears. It is very large yield and early maturing corn. This seed is well adapted to Ohio, Indiana, Michigan, Illinois, and the whole Northwest. Send money by P.O. order, registered letter, or draft. Address:

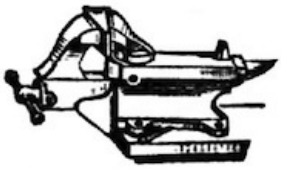
C. H. LEE, Silver Creek, Merrick Co., Neb.

NOTE—Mr. C. H. Lee is my brother-in-law, and I guarantee him in every way reliable and responsible.

M. J. LAWRENCE, Ed. Ohio Farmer.

We will send you a watch or a chain **BY MAIL OR EXPRESS**, C. O. D., to be examined, before paying any money and if not satisfactory, returned at our expense. We manufacture all our watches and save you 30 per cent. Catalogue of 250 styles free.

EVERY WATCH WARRANTED. ADDRESS:
STANDARD AMERICAN WATCH CO.,
PITTSBURGH PA.



Anvil, Vise, Out off Tool for Farm and Home use. 3 sizes, $4.50, $5.50, $6.50. Sold by hardware dealers. To introduce, one free to first person who gets up club of four. Agents wanted. Write for circulars.

CHENEY ANVIL & VISE CO.
DETROIT, MICH.

AGENTS WANTED EVERYWHERE to solicit Subscriptions for this paper. Write PRAIRIE FARMER PUBLISHING CO., Chicago, for particulars.

TO PRESERVE THE HEALTH
Use the Magneton Appliance Co.'s

MAGNETIC LUNG PROTECTOR!

PRICE ONLY $5.

They are priceless to LADIES, GENTLEMEN, and CHILDREN with WEAK LUNGS; no case of PNEUMONIA OR CROUP is ever known where these garments are worn. They also prevent and cure HEART DIFFICULTIES, COLDS, RHEUMATISM, NEURALGIA, THROAT TROUBLES, DIPHTHERIA, CATARRH, AND ALL KINDRED DISEASES. Will WEAR any service for THREE YEARS. Are worn over the under-clothing.

CATARRH It is needless to describe the symptoms of this nauseous disease that is sapping the life and strength of only too many of the fairest and best of both sexes. Labor, study, and research in America, Europe, and Eastern lands, have resulted in the Magnetic Lung Protector, affording cure for Catarrh, a remedy which contains NO DRUGGING OF THE SYSTEM, and with the continuous stream of Magnetism permeating through the afflicted organs, MUST RESTORE THEM TO A HEALTHY ACTION. WE PLACE OUR PRICE for this Appliance at less than one-twentieth of the price asked by others for remedies upon which you take all the chances, and WE ESPECIALLY INVITE the patronage of the MANY PERSONS who have tried DRUGGING THEIR STOMACHS WITHOUT EFFECT.

HOW TO OBTAIN This Appliance. Go to your druggist and ask for them. If they have not got them, write to the proprietors, enclosing the price, in letter at our risk, and they will be sent to you at once by mail, post-paid.

Send stamp for the "New Departure in Medical Treatment WITHOUT MEDICINE," with thousands of testimonials,

THE MAGNETON APPLIANCE CO.,
218 State Street, Chicago, Ill.

NOTE.—Send one dollar in postage stamps or currency (in letter at our risk) with size of shoe usually worn, and try a pair of our Magnetic Insoles, and be convinced of the power residing in our Magnetic Appliances. Positively *no cold feet where they are worn, or money refunded*.

Print Your Own Cards

Labels, Envelopes, etc. with our **#3 Printing Press**. Larger sizes for circulars, et., $8 to $75. For pleasure, money-making, young or old. Everything easy, printed instructions. Send 2 stamps for Catalogue of Presses Type, Cards, etc., to the factory.

KELSEY & CO., Meriden, Conn.

[Pg 192]

GENERAL NEWS.

St. Louis is to have a dog show about the middle of April.

South Chicago had a $75,000 fire on the night of the 17th.

New York is to have a new water supply to cost $30,000,000.

There are about 50,000 Northern tourists in Florida at this time.

Another conspiracy against the Government is brewing in Spain.

A sister of John Brown, of Osawatomie is a resident of Des Moines.

Dakota will spend nearly a million and a half for school purposes this year.

King's Opera House and several adjacent buildings at Knoxville, Tenn., were burned Monday night.

A child in Philadelphia has just been attacked by hydrophobia from the bite of a dog three years ago.

Captain Traynor, who once crossed the Atlantic in a dory, now proposes to make the trip in a rowboat.

During the present century 150,000,000 copies of the Bible have been printed in 226 different languages.

The Governor General at Trieste was surprised Tuesday by the explosion of a bomb in front of his residence.

The man who fired the first gun in the battle of Gettysburg lives in Malvern, Iowa. His name is Dick Gidley.

St. Patrick's Day was appropriately (as the custom goes) celebrated in Chicago, and the other large cities of the country.

Kansas has 420 newspapers, including dailies, weeklies, semi-weeklies, monthlies, semi-monthlies, tri-monthlies, and quarterlies.

A Dubuque watchmaker has invented a watch movement which has no dial-wheels, and is said will create a revolution in watch-making.

In the trial of Orrin A. Carpenter for the murder of Zura Burns, now in progress at Petersburg, Illinois, the prosecution has rested its case.

All the members of the United States Senate signed a telegram to Simon Cameron, now in Florida, congratulating him on his eighty-fifth birthday.

The inventor of a system of electric lighting announces that he is about to use the water-power at Niagara to furnish light to sixty-five cities.

The British leaders in Egypt have offered a reward of $5,000 for the capture of Osman Digma, the rebel leader, whom Gen. Graham has now defeated in two battles.

The Gulf, Colorado and Santa Fe road is at war with the Western Union Telegraph Company in Texas, and sends ten-word messages through that State for fifteen cents.

Thirty-four counties and twenty-one railroads between Pittsburg and Cairo report fifty-five bridges destroyed by the February flood. The estimated cost of replacing them is $210,000.

There is a movement on foot in Chicago which may result in the holding of both the National Conventions in Battery D Hall, which is said to have better acoustic properties than the Exposition Building.

It is reported that more than six thousand Indians are starving at Fort Peck Agency. Game has entirely disappeared, and those Indians who have been turning their attention to farming, raised scarcely anything last year.

The announcement is made at St. Louis that the Pacific Express Company lost $160,000 by Prentiss Tiller and his accomplices, and that $25,000 of the amount is still missing. Tiller, the thief, and a supposed accomplice, are under arrest.

The British House of Commons was in session all last Saturday night, considering war measures. It is rumored that Parliament will be dissolved, and a new election held to ascertain if the Ministry measures are pleasing to the majority of the people.

The crevasse at Carrollton, Louisiana, has been closed. A break occurred Monday morning in the Mulatto levee, near Baton Rouge, and at last advices was forty feet wide and six feet deep, threatening all the plantations down to Plaquemine.

The Egyptian rebels, as they are called, fight with great bravery. So far, however, they have been unable to cope with their better armed and disciplined enemy, but it is reported that they are not at all discouraged, but swear they will yet drink the blood of the Turks and their allies from England.

MARKETS.

FINANCIAL AND COMMERCIAL.

{Office of the Prairie Farmer,
Chicago. March 18, 1884.

There was a better feeling in banking circles on Monday but transactions were not heavy. Interest rates remain at 5@7 per cent.

Eastern exchange sold between banks at 25c per $1,000 premium.

Foreign exchange unchanged.

The failures in the United States during the past seven days are reported to have numbered 174, and in Canada and the Provinces 42, a total of 216, as compared with 272 for the previous week, a decrease of 56. The decrease is principally in the Western, Middle, and New England States. Canada had the same number of failures as for the preceding week.

GRAIN AND PROVISIONS.

The week opened with the bears on top and prices were forced downward. Speculation was heavy. Ocean freights are low, yet but little grain comparatively is going out. London and Liverpool advices were not encouraging and the New York markets were easy. Corn was unusually dull.

Wheat.—Red winter, in store No. 2, 98c; spring No. 2 92@93c; No. 3. 85@89c on track.

Corn.—Moderately active. Car lots No 2, 53@53½c; rejected, 46c; new mixed, 52½c.

Oats.—No. 2 on track closed 34¼@35c.

Rye.—No. 2 59@62c.

Barley.—No. 2, 66c; No. 3, f.o.b. 6l@62c; No. 5 50c.

Flax.—Closed at $1 60@1 61 on track.

Timothy.—$1 28@l 34 per bushel. Little doing.

Clover.—Quiet at $5 50@5 70 for prime.

Hungarian.—Prime 60@67½c.

Buckwheat.—70@75c.

Millet.—45@50c.

Provisions.—Mess pork. May $18 10@18 25. Green hams, 11¾c per lb. Short ribs, $9 55@9 60 per cwt.

Lard.—$9 60@9 75.

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 50@15 75 per ton on track.

Beans.—Hand picked mediums $2 10@2 15. Hand picked navies, $2 15@2 25.

Butter.—Choice to extra creamery, 33@35c ℔ lb.; fair to good do 25@30c; fair to choice dairy 24@28c; common to choice packing stock fresh and sweet, 9@10c; ladle packed 10@13c.

Broom-corn.—Good to choice hurl 7@8c ℔ lb; green self-working 6@6½c; red-tipped and pale do 4@5c; inside and covers 3@4c; common short corn 2½@3½c; crooked, and damaged, 2@4c, according to quality.

Cheese.—Choice full-cream cheddars 14@l5c ℔ lb; medium quality do 10@12c; good to prime full-cream flats 15@15½c; skimmed cheddars 9@10c; good skimmed flats 7@9c; hard-skimmed and common stock 5@7c.

Eggs.—The best brands are quotable at 20@21c per dozen, fresh.

Feathers.—Quotations: Prime live geese feathers 52@54c ℔ lb.; ducks 25@35c; duck and geese mixed 35@45c; dry picked chicken feathers body 6@6½c; turkey body feathers

4@4½c; do tail 55@60c; do wing 25@35c; do wing and tail mixed 35@40c.

HAY.—No 1 timothy $10@10 75 ℔ ton; No 2 do $850@9 50; mixed do $7@8; upland prairie $7@8 50; No 1 prairie $6@7; No 2 do $4 50@5 50. Small bales sell at 25@50c ℔ ton more than large bales.

HIDES AND PELTS.—Green-cured light hides 8½c ℔ lb; do heavy cows 8c; No 2 damaged green-salted hides 6½c; green-salted calf 12@12½ cents; green-salted bull 6 c; dry-salted hides 11 cents; No. 2 two-thirds price; No. 1 dry flint 14@14½c, Sheep pelts salable at 25@28c 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 27@28c ℔ lb; Pacific coast of 23@25c; fair to good Wisconsin 15@20c.

HONEY AND BEESWAX.—Good to choice white comb honey in small boxes 15@17c ℔ lb; common and dark-colored, or when in large packages 12@14c; beeswax ranged at 25@30c ℔ lb, according to quality, the outside for prime yellow.

POULTRY.—Prices for good to choice dry picked and unfrozen lots are: Turkeys 16@l7c ℔ lb; chickens 12@13c; ducks 14@15c; geese 10@11c. Thin, undesirable, and frozen stock 2@3c ℔ lb less than these figures; live offerings nominal.

POTATOES.—Good to choice 38@42c per bu. on track; common to fair 30@36c. Illinois sweet potatoes range at $4@5 per bbl for yellow.

TALLOW AND GREASE.—No 1 country tallow 7@7¼c ℔ lb; No 2 do 6¼@6½c. Prime white grease 6@6½c; yellow 5¼@5¾; brown 4½@5.

VEGETABLES.—Cabbage, $10@15 ℔ 100; celery, 35@45c ℔ per doz bunches; onions, $1 50@1 75 ℔ bbl for yellow, and $1 for red; turnips, $1 35@1 50 per bbl for rutabagas, and $1 00 for white flat. Pie plant, 10c ℔ lb. Spinach, $1@2 ℔ bbl. Cucumbers, $1 50@2 00 per doz; radishes, 40c per doz; lettuce, 40c per doz.

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 ℔ 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	30,963	15,498
Calves	375	82
Hogs	62,988	34,361
Sheep	18,787	10,416

CATTLE.—Diseased cattle of all kinds, especially those having lump-jaws, cancers, and

running sore, are condemned and killed by the health officers. Shippers will save freight by keeping such stock in the country.

Receipts were fair on Sunday and Monday and the demand not being very brisk prices dropped a little. The supply of choice beeves was light. We quote

Choice to prime steers	$6 00@ 6 85
Good to choice steers	6 20@ 6 50
Fair to good shipping steers	5 55@ 6 15
Common to medium dressed beef steers	4 85@ 5 50
Very common steers	5 00@ 5 50
Cows, choice to prime	5 00@ 5 50
Cows, common to choice	3 30@ 4 95
Cows, inferior	2 50@ 3 25
Common to prime bulls	3 25@ 5 50
Stockers, common to choice	3 70@ 4 75
Feeders, fair to choice	4 80@ 5 25
Milch cows, ✾ head	25 00@65 00
Veal calves, ✾ 100lbs	4 00@ 7 75

Hogs.—All sales of hogs in this market are made subject to a shrinkage of 40 lbs for piggy sows and 80 lbs for each stag. Dead hogs sell at 1½c ✾ lb for weight[dd] of 200 lbs and over, and 1c for weights of less than 200 lbs. With the exception of cripples and milch cows, all stock is sold ✾ 100 lbs live weight.

There were about 3,000 head more on Sunday and Monday than for same days last week, the receipts reaching 11,000 head. All but the poorest lots were readily taken at steady prices. Common to choice light bacon hogs were sold from $5 80 to $6 70, their weights averaging 150@206 lbs. Rough packing lots sold at $6 20@6 75. and heavy packing and shipping hogs averaging 240@309 lbs brought $6 80@7 40. Skips were sold at $4 75@$5 75.

Sheep.—This class of stock seems to be on the increase at the yards. Sunday and Monday brought hither 5,500 head, an increase of 2,500 over receipts a week ago. Prices weakened a little. Sales ranged at $3 37½@5 65 for common to choice, the great bulk of the offerings consisting of Nebraska sheep.

MARKETS BY TELEGRAPH.

New York, March 17.—Cattle—Steers sold at $6@7 25 ✾ cwt, live weight; fat bulls $4 60@5 70; exporters used 60 car-loads, and paid $6 70@7 25 ✾ cwt, live weight, for good to choice selections; shipments for the week, 672 head live cattle; 7,300 qrs beef; 1,000 carcasses mutton. Sheep and lambs—Receipts[ee] 7,700 head; making 24,300 head for the week; strictly prime sheep and choice lambs sold at about the former prices, but the market was uncommonly dull for common and even fair stock, and a clearance was not made; sales included ordinary to prime sheep at $5@6 37½ ✾ cwt, but a few picked sheep reached $6 75; ordinary to choice yearlings $6@8; spring lambs $3@8 ✾ head. Hogs—Receipts 7,900 head, making 20,100 for the week; live dull and nearly nominal; 2 car-loads sold at $6 50@6 75 ✾ 100 pounds.

St. Louis, March 17.—Cattle—Receipts 3,400 head; shipments 1,600 head; wet weather and liberal receipts caused weak and irregular prices, and some sales made lower; export steers $6 40@6 90; good to choice $5 75@6 30; common to medium $4 85@5 60; stockers and feeders $4@5 25; corn-fed Texans $5@5 75. Sheep—Receipts 900 head; shipments 800 head; steady; common to medium $3@4 25; good to choice $4 50@5 50; extra $5 75@6; Texans $3@5.

Kansas City, March 17—Cattle—Receipts 1,500 head; weak and slow; prices unsettled; native steers, 1,092 to 1,503 lbs, $5 05@5 85; stockers and feeders $4 60@5; cows $3 70@4 50. Hogs—Receipts 5,500 head; good steady; mixed lower; lots 200 to 500 lbs, $6 25 to 7; mainly $6 40@6 60. Sheep—Receipts 3,200 head; steady; natives, 81 lbs, $4 35.

East Liberty, March 17.—Cattle—Dull and unchanged; receipts 1,938 head; shipments 1,463 head. Hogs—Firm; receipts 7,130 head; shipments 4,485 head; Philadelphias $7 50@7 75; Yorkers $6 50@6 90. Sheep—Dull and unchanged; receipts 6,600 head; shipments 600 head.

Cincinnati, O., March 17.—Hogs—Steady; common and light, $5@6 75; packing and butchers', $6 25@7 25; receipts, 1,800 head; shipments, 920 head.

MISCELLANEOUS.

AGRICULTURAL
STEAMER.

The Safest and Best Steam Generator for cooking feed for stock, heating water, etc.; will heat a barrel of cold water to boiling in 30 minutes.

D. R. SPERRY & CO, Mfgs. of the Profit Farm Boiler. Caldrons, etc., Batavia, Ill.

F. RETTIG, De Kalb, Ill., breeder of Light Brahmas, Plymouth Rocks, Black and Partridge Cochin fowls, White and Brown Leghorns, W. C. Bl. Polish fowls and Pekin Ducks. Send for illustrated catalogue.

MUSICAL.

KNABE
PIANOFORTES.
UNEQUALLED IN
Tone, Touch, Workmanship and Durability.
WILLIAM KNABE & CO.

Nos. 204 and 206 West Baltimore Street, Baltimore. No. 112 Fifth Avenue, N. Y.

MISCELLANEOUS.

FARMERS
Read what a wheat-grower says of his experience with the
Saskatchawan
FIFE WHEAT

It is the best wheat I ever raised or saw. I sowed one quart and got from it three bushels of beautiful wheat weighing 63 pounds to the bushel, which took the first premium at our county fair. I have been offered $15 a bushel for my seed, but would not part with a handful of it. If I could not get more like it, I would not sell the three bushels I raised from the quart for $100. Wm. Steabner, Sorlien's Mill, Yellow Medicine Co., Minn.

Farmers, if you want to know more of this wheat, write to
W. J. ABERNETHY & CO,
Minneapolis, Minn.,

for their 16-page circular describing it.

When you write mention The Prairie Farmer.

THE SUGAR HAND BOOK

A NEW AND VALUABLE TREATISE ON SUGAR CANES, (including the Minnesota Early Amber) and their manufacture into Syrup and Sugar. Although comprised in small compass and *furnished free to applicants*, it is the **BEST PRACTICAL MANUAL ON SUGAR CANES** that has yet been published.

BLYMER MANUFACTURING CO
Cincinnati O.

Manufacturers of Steam Sugar Machinery, Steam Engines, Victor Cane Mill, Cook Sugar Evaporator, etc.

FARMS. MINNESOTA.
DAKOTA.

LESS THAN RAILROAD PRICES,
on **LONG TIME**. Send for lists and prices.

GRAVES & VINTON, ST. PAUL, MINN.

BY MAIL POST-PAID: Choice 1 year **APPLE**, $5 per 100; 500, $20 **ROOT-GRAFTS**, 100, $1.25; 1,000, $7. **STRAWBERRIES**, doz., 25c.; 100, $1. **BLACKBERRIES**, **RASPBERRIES**, **RED AND BLACK**, 50c. dozen; 100, $3. Two year **CONCORD** and other choice **GRAPES**, doz $1.65. **EARLY TELEPHONE**, our best early potato, 4 lbs. $1. This and other choice sorts by express or freight customer paying charges, pk. 50c., bu. $1.25. Price list free.

F. K. PHOENIX & SON, Delavan, Wis.

Lang's Pig Forceps.

To aid animals in giving Birth. $1.20

post-paid. Agents Wanted. For particulars address

G. J. LANG. Malcom, Iowa.

GOSSAMER GARMENTS FREE.

To any reader of this paper who will agree to show our goods and try to influence sales among friends we will send post-paid two full size Ladies' Gossamer Rubber Waterproof Garments as samples, provided you cut this out and return with 25 cts,. to pay cost, postage, etc.

EMPIRE MFG. CO. Williamsburg. N. Y.

Valuable Farm of 340 acres in Wisconsin *to exchange for city property*. Beautiful situation on bank of lake. Fine hunting and fishing, suitable for Summer resort. 100 rods from village and railway station. 100 acres under cultivation. Good buildings. Milwaukee or Chicago property preferred.

K., care of **LORD & THOMAS**.

STRAWBERRIES

And other Small fruit plants a specialty. Catalogues free on application. Address,

PHIL. STRUBLER, Naperville, Du Page County, Ill.

ROOT GRAFTS **100,000 Best Varieties** for the Northwest. In lots from 1,000 upward to suit planter, at $10 to $15 per thousand. Now ready. Send for list.

J. C. PLUMB & SON, Milton, Wis.

Silver Globe Onion Seed.

Send in your order for a supply of **GENUINE SILVER GLOBE ONION SEED**. Guaranteed pure, at $2.50 per lb. We have a sample of the Onion at our store!

WATTS & WAGNER 128 S. Water St., Chicago.

FREE 40 Extra Large Cards, Imported designs, name on 10 cts, 10 pks. and 1 Lady's Velvet Purse or Gent's Pen Knife 2 blades, for $1.

ACME CARD FACTORY, Clintonville, Ct.

SILKS

Plushes and Brocade Velvets for

Transcriber's Notes

Punctuation and hyphenation were standardized. Missing letters within words were added, e.g. 'wi h' and 't e' changed to 'with' and 'the,' respectively. Footnote was moved to the end of the section to which it pertains. Duplicate words, e.g. 'in in,' were removed.

Corrections:

[a] 'Pagn' to 'Page'
[b] 'Frauk' to 'Frank'
[c] 'Dolly' to 'Dally'
[d] '101' to '191'
[e] 'pollenation' to 'pollination' twice in the sentence
[f] 'whcih' to 'which'
[g] 'some' to 'same'
[h] 'two' to 'to'
[i] 'gurantee' to 'guarantee'
[j] 'Farmr' to 'Farmer'
[k] 'or' to 'of'
[l] '1667' to '1867'
[m] 'earthern' to 'earthen'
[n] 'of' added
[o] 'factorymen' to 'factory men'
[p] 'hear.' missing in the original.
[q] 'heigth' to 'height'
[r] 'Holstien' to 'Holstein'
[s] 'us' to 'up'
[t] 'postcript' to 'postscript'
[u] 'whlie' to 'while'
[v] 'sutble' to 'subtle'
[w] 'Varities' to 'Varieties'
[x] 'arrangment' to 'arrangement'
[y] 'purfumes' to 'perfumes'
[z] 'Mr.' to 'Mrs.'
[aa] 'accordi?gly' to 'accordingly'
[bb] 'ridicuously' to 'ridiculously'
[cc] 'wabbling' to 'wobbling'
[dd] 'weightt' to 'weight'
[ee] 'Recipts' to 'Receipts'

complying with the trademark license is very easy. You may use this eBook for nearly any purpose such as creation of derivative works, reports, performances and research. Project Gutenberg eBooks may be modified and printed and given away—you may do practically ANYTHING in the United States with eBooks not protected by U.S. copyright law. Redistribution is subject to the trademark license, especially commercial redistribution.

Section 1. General Terms of Use and Redistributing Project Gutenberg™ electronic works

1.A. By reading or using any part of this Project Gutenberg™ electronic work, you indicate that you have read, understand, agree to and accept all the terms of this license and intellectual property (trademark/copyright) agreement. If you do not agree to abide by all the terms of this agreement, you must cease using and return or destroy all copies of Project Gutenberg™ electronic works in your possession. If you paid a fee for obtaining a copy of or access to a Project Gutenberg™ electronic work and you do not agree to be bound by the terms of this agreement, you may obtain a refund from the person or entity to whom you paid the fee as set forth in paragraph 1.E.8.

1.B. “Project Gutenberg” is a registered trademark. It may only be used on or associated in any way with an electronic work by people who agree to be bound by the terms of this agreement. There are a few things that you can do with most Project Gutenberg™ electronic works even without complying with the full terms of this agreement. See paragraph 1.C below. There are a lot of things you can do with Project Gutenberg™ electronic works if you follow the terms of this agreement and help preserve free future access to Project Gutenberg™ electronic works. See paragraph 1.E below.

1.C. The Project Gutenberg Literary Archive Foundation (“the Foundation” or PGLAF), owns a compilation copyright in the collection of Project Gutenberg™ electronic works. Nearly all the individual works in the collection are in the public domain in the United States. If an individual work is unprotected by copyright law in the United States and you are located in the United States, we do not claim a right to prevent you from copying, distributing, performing, displaying or creating derivative works based on the work as long as all references to Project Gutenberg are removed. Of course, we hope that you will support the Project Gutenberg™ mission of promoting free access to electronic works by freely sharing Project Gutenberg™ works in compliance with the terms of this agreement for keeping the Project Gutenberg™ name associated with the work. You can easily comply with the terms of this agreement by keeping this work in the same format with its attached full Project Gutenberg™ License when you share it without charge with others.

1.D. The copyright laws of the place where you are located also govern what you can do with this work. Copyright laws in most countries are in a constant state of change. If you are outside the United States, check the laws of your country in addition to the terms of this agreement before downloading, copying, displaying, performing, distributing or creating derivative works based on this work or any other Project Gutenberg™ work. The Foundation makes no representations concerning the copyright status of any work in any country other than the United States.

1.E. Unless you have removed all references to Project Gutenberg:

1.E.1. The following sentence, with active links to, or other immediate access to, the full Project Gutenberg™ License must appear prominently whenever any copy of a Project Gutenberg™ work (any work on which the phrase “Project Gutenberg” appears, or with which the phrase “Project Gutenberg” is associated) is accessed, displayed, performed, viewed, copied or distributed:

> This eBook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this eBook or online at www.gutenberg.org. If you are not located in the United States, you will have to check the laws of the country where you are located before using this eBook.

1.E.2. If an individual Project Gutenberg™ electronic work is derived from texts not protected by U.S. copyright law (does not contain a notice indicating that it is posted

with permission of the copyright holder), the work can be copied and distributed to anyone in the United States without paying any fees or charges. If you are redistributing or providing access to a work with the phrase “Project Gutenberg” associated with or appearing on the work, you must comply either with the requirements of paragraphs 1.E.1 through 1.E.7 or obtain permission for the use of the work and the Project Gutenberg™ trademark as set forth in paragraphs 1.E.8 or 1.E.9.

1.E.3. If an individual Project Gutenberg™ electronic work is posted with the permission of the copyright holder, your use and distribution must comply with both paragraphs 1.E.1 through 1.E.7 and any additional terms imposed by the copyright holder. Additional terms will be linked to the Project Gutenberg™ License for all works posted with the permission of the copyright holder found at the beginning of this work.

1.E.4. Do not unlink or detach or remove the full Project Gutenberg™ License terms from this work, or any files containing a part of this work or any other work associated with Project Gutenberg™.

1.E.5. Do not copy, display, perform, distribute or redistribute this electronic work, or any part of this electronic work, without prominently displaying the sentence set forth in paragraph 1.E.1 with active links or immediate access to the full terms of the Project Gutenberg™ License.

1.E.6. You may convert to and distribute this work in any binary, compressed, marked up, nonproprietary or proprietary form, including any word processing or hypertext form. However, if you provide access to or distribute copies of a Project Gutenberg™ work in a format other than “Plain Vanilla ASCII” or other format used in the official version posted on the official Project Gutenberg™ website (www.gutenberg.org), you must, at no additional cost, fee or expense to the user, provide a copy, a means of exporting a copy, or a means of obtaining a copy upon request, of the work in its original “Plain Vanilla ASCII” or other form. Any alternate format must include the full Project Gutenberg™ License as specified in paragraph 1.E.1.

1.E.7. Do not charge a fee for access to, viewing, displaying, performing, copying or distributing any Project Gutenberg™ works unless you comply with paragraph 1.E.8 or 1.E.9.

1.E.8. You may charge a reasonable fee for copies of or providing access to or distributing Project Gutenberg™ electronic works provided that:

- You pay a royalty fee of 20% of the gross profits you derive from the use of Project Gutenberg™ works calculated using the method you already use to calculate your applicable taxes. The fee is owed to the owner of the Project Gutenberg™ trademark, but he has agreed to donate royalties under this paragraph to the Project Gutenberg Literary Archive Foundation. Royalty payments must be paid within 60 days following each date on which you prepare (or are legally required to prepare) your periodic tax returns. Royalty payments should be clearly marked as such and sent to the Project Gutenberg Literary Archive Foundation at the address specified in Section 4, “Information about donations to the Project Gutenberg Literary Archive Foundation.”

- You provide a full refund of any money paid by a user who notifies you in writing (or by e-mail) within 30 days of receipt that s/he does not agree to the terms of the full Project Gutenberg™ License. You must require such a user to return or destroy all copies of the works possessed in a physical medium and discontinue all use of and all access to other copies of Project Gutenberg™ works.

- You provide, in accordance with paragraph 1.F.3, a full refund of any money paid for a work or a replacement copy, if a defect in the electronic work is discovered and reported to you within 90 days of receipt of the work.

- You comply with all other terms of this agreement for free distribution of Project Gutenberg™ works.

1.E.9. If you wish to charge a fee or distribute a Project Gutenberg™ electronic work or group of works on different terms than are set forth in this agreement, you must obtain permission in writing from the Project Gutenberg Literary Archive Foundation, the manager of the Project Gutenberg™ trademark. Contact the Foundation as set forth in Section 3 below.

1.F.

1.F.1. Project Gutenberg volunteers and employees expend considerable effort to identify, do copyright research on, transcribe and proofread works not protected by U.S. copyright law in creating the Project Gutenberg™ collection. Despite these efforts, Project Gutenberg™ electronic works, and the medium on which they may be stored, may contain “Defects,” such as, but not limited to, incomplete, inaccurate or corrupt data, transcription errors, a copyright or other intellectual property infringement, a defective or damaged disk or other medium, a computer virus, or computer codes that

damage or cannot be read by your equipment.

1.F.2. LIMITED WARRANTY, DISCLAIMER OF DAMAGES - Except for the “Right of Replacement or Refund” described in paragraph 1.F.3, the Project Gutenberg Literary Archive Foundation, the owner of the Project Gutenberg™ trademark, and any other party distributing a Project Gutenberg™ electronic work under this agreement, disclaim all liability to you for damages, costs and expenses, including legal fees. YOU AGREE THAT YOU HAVE NO REMEDIES FOR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY OR BREACH OF CONTRACT EXCEPT THOSE PROVIDED IN PARAGRAPH 1.F.3. YOU AGREE THAT THE FOUNDATION, THE TRADEMARK OWNER, AND ANY DISTRIBUTOR UNDER THIS AGREEMENT WILL NOT BE LIABLE TO YOU FOR ACTUAL, DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE OR INCIDENTAL DAMAGES EVEN IF YOU GIVE NOTICE OF THE POSSIBILITY OF SUCH DAMAGE.

1.F.3. LIMITED RIGHT OF REPLACEMENT OR REFUND - If you discover a defect in this electronic work within 90 days of receiving it, you can receive a refund of the money (if any) you paid for it by sending a written explanation to the person you received the work from. If you received the work on a physical medium, you must return the medium with your written explanation. The person or entity that provided you with the defective work may elect to provide a replacement copy in lieu of a refund. If you received the work electronically, the person or entity providing it to you may choose to give you a second opportunity to receive the work electronically in lieu of a refund. If the second copy is also defective, you may demand a refund in writing without further opportunities to fix the problem.

1.F.4. Except for the limited right of replacement or refund set forth in paragraph 1.F.3, this work is provided to you ‘AS-IS’, WITH NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.

1.F.5. Some states do not allow disclaimers of certain implied warranties or the exclusion or limitation of certain types of damages. If any disclaimer or limitation set forth in this agreement violates the law of the state applicable to this agreement, the agreement shall be interpreted to make the maximum disclaimer or limitation permitted by the applicable state law. The invalidity or unenforceability of any provision of this agreement shall not void the remaining provisions.

1.F.6. INDEMNITY - You agree to indemnify and hold the Foundation, the trademark owner, any agent or employee of the Foundation, anyone providing copies of Project Gutenberg™ electronic works in accordance with this agreement, and any volunteers associated with the production, promotion and distribution of Project Gutenberg™ electronic works, harmless from all liability, costs and expenses, including legal fees, that arise directly or indirectly from any of the following which you do or cause to occur: (a) distribution of this or any Project Gutenberg™ work, (b) alteration, modification, or additions or deletions to any Project Gutenberg™ work, and (c) any Defect you cause.

Section 2. Information about the Mission of Project Gutenberg™

Project Gutenberg™ is synonymous with the free distribution of electronic works in formats readable by the widest variety of computers including obsolete, old, middle-aged and new computers. It exists because of the efforts of hundreds of volunteers and donations from people in all walks of life.

Volunteers and financial support to provide volunteers with the assistance they need are critical to reaching Project Gutenberg™’s goals and ensuring that the Project Gutenberg™ collection will remain freely available for generations to come. In 2001, the Project Gutenberg Literary Archive Foundation was created to provide a secure and permanent future for Project Gutenberg™ and future generations. To learn more about the Project Gutenberg Literary Archive Foundation and how your efforts and donations can help, see Sections 3 and 4 and the Foundation information page at www.gutenberg.org.

Section 3. Information about the Project Gutenberg Literary Archive Foundation

The Project Gutenberg Literary Archive Foundation is a non-profit 501(c)(3) educational corporation organized under the laws of the state of Mississippi and granted tax exempt status by the Internal Revenue Service. The Foundation’s EIN or federal tax identification number is 64-6221541. Contributions to the Project Gutenberg Literary Archive Foundation are tax deductible to the full extent permitted by U.S. federal laws and your state’s laws.

The Foundation’s business office is located at 809 North 1500 West, Salt Lake City, UT 84116, (801) 596-1887. Email contact links and up to date contact information can be found at the Foundation’s website and official page at www.gutenberg.org/contact

Section 4. Information about Donations to the Project Gutenberg Literary Archive Foundation

Project Gutenberg™ depends upon and cannot survive without widespread public support and donations to carry out its mission of increasing the number of public domain and licensed works that can be freely distributed in machine-readable form accessible by the widest array of equipment including outdated equipment. Many small donations ($1 to $5,000) are particularly important to maintaining tax exempt status with the IRS.

The Foundation is committed to complying with the laws regulating charities and charitable donations in all 50 states of the United States. Compliance requirements are not uniform and it takes a considerable effort, much paperwork and many fees to meet and keep up with these requirements. We do not solicit donations in locations where we have not received written confirmation of compliance. To SEND DONATIONS or determine the status of compliance for any particular state visit www.gutenberg.org/donate.

While we cannot and do not solicit contributions from states where we have not met the solicitation requirements, we know of no prohibition against accepting unsolicited donations from donors in such states who approach us with offers to donate.

International donations are gratefully accepted, but we cannot make any statements concerning tax treatment of donations received from outside the United States. U.S. laws alone swamp our small staff.

Please check the Project Gutenberg web pages for current donation methods and addresses. Donations are accepted in a number of other ways including checks, online payments and credit card donations. To donate, please visit: www.gutenberg.org/donate

Section 5. General Information About Project Gutenberg™ electronic works

Professor Michael S. Hart was the originator of the Project Gutenberg™ concept of a library of electronic works that could be freely shared with anyone. For forty years, he produced and distributed Project Gutenberg™ eBooks with only a loose network of volunteer support.

Project Gutenberg™ eBooks are often created from several printed editions, all of which are confirmed as not protected by copyright in the U.S. unless a copyright notice is included. Thus, we do not necessarily keep eBooks in compliance with any particular paper edition.

Most people start at our website which has the main PG search facility: www.gutenberg.org.

This website includes information about Project Gutenberg™, including how to make donations to the Project Gutenberg Literary Archive Foundation, how to help produce our new eBooks, and how to subscribe to our email newsletter to hear about new eBooks.