



ESTABLISHED, 1863.
VOL. XXI, No. 20.

TOPEKA, KANSAS, MAY 16, 1883.

{SIXTEEN PAGES WEEKLY.
PRICE, \$1.50 A YEAR.

Sirup and Sugar from Sorgo.

The KANSAS FARMER has often urged its agricultural readers to plant and cultivate sorgo for sirup and sugar, promising that in due time it would publish instructions as to the best and most successful methods of manufacture.

Of course the first thing to do is secure good cane. That means fairly sized, well matured cane. Succors and green stuff, and very small stalks are fit only for fodder. In cultivation, the ground must be kept clean of weeds and everything but cane. Let the soil be worked shallow so as to interfere as little as possible with the cane roots. Pull off all succors; raise nothing but good, healthy plants.

When the seed is ripening, strip off the leaves. This is a tedious work, but the fodder will be worth the time required to gather it. Put the leaves, in handfuls, between stalks of corn, and close to the ground, to prevent their being blown away by wind. After the stripping is done, in the mornings when the blades are soft, tie them in small bundles and stack for winter feed, or throw them loose into a mow. The stripping may be done by using a three-tined fork. Placing the tines at or near the top of a bunch of cane-stalks, give the fork a quick downward motion to the ground, and one sweep will usually carry all the blades along with the stroke.

When the seed is hardening—that is, when they are ripe, cut off the heads down to where the stalks have a bright color, and immediately afterwards cut the stalks off close to the ground. If preferred, the stalks may be cut first and the heads removed afterwards. As fast as the cutting is done, let the stalks be hauled to the mill and crushed as soon as possible. For sirup, it does no harm to let the cut stalks lie a day or two, or more; but for sugar, it must be worked up quickly.

The writer of this made his own mill for his first sirup making. But he does not advise a home-made, wooden mill when good iron ones can be had for \$50. The better way now is, if one person does not care to bear alone the necessary expense of machinery, to join with one or more others, and then unite in working up the cane of all the joint owners of the mill and appurtenances. We would advise our readers to correspond with J. A. Field & Co., St. Louis, and with Blymyer Manufacturing Company, Cincinnati, and with Trumbull, Reynolds & Allen, Kansas City; ask for their catalogues, telling them that you read mention of them in the KANSAS FARMER, and ask, also, for their lowest prices for their best machinery. Do this all early so as to make selections and have the machinery on hand in time to begin work at the proper season.

When the mill is in place, and the furnace, pans, and all the necessary accompaniments are fixed, and the cane ready on the ground, then begins the most difficult work in the whole proceeding. The instruction books which are furnished with the machinery will tell you all about how to handle everything; but still, you will get on slowly until you have had some practical experience yourself. "Go slow" till you get your hand in, and in the meantime learn something about the nature of cane juice and methods of defecation. In our issue of February 28 last, we published proceedings of the State Cane Growers' Association, and we can do no better now than to quote what Prof. Swensen then said about cane juice, and their purifi-

cation. This is a synopsis of his answers to questions: "Lime is necessary in the manufacture of sorghum cane sugar, and its use improves sirup. The quantity to be used varies with the different conditions of cane. Acid, glucose and grape sugar exist in all the cane, but not in the same proportions always. Juices raised on different kinds of soil have different proportions of acid. Heat changes the acid into glucose. Lime neutralizes the acid, and when too much lime is used, sulphur fumes are applied, producing a sulphurous acid which is evaporated by heat. In applying lime it is better to fill the vat about two-thirds full of fresh juice, then pour in the lime water and stir well so as to thoroughly mix it with the juice. The lime water is made from fresh lime. It must be thoroughly strained so that there will be no lumps or solid matter of any kind in it. Use the water in its whitened, creamy form, not simply the clear water after all the color has gone to the bottom. There is no rule as to quantity. That must be ascertained by tests. Use litmus paper. Glucose is alkaline; acid is the opposite. Alkali will change red litmus paper to blue; acid will change blue to red. After mixing the juice and lime water, take a bit of the red or yellowish red litmus and draw it about through the liquid with the hand a few seconds so that it comes in contact with the juice in different places; then remove it and note the change of color. The degree of change will indicate the degree of glucose. Then try the blue paper the same way and its change of color will denote the acid. If the change in either case is great, the sirup is not in proper condition for sugar. If there is too much acid, put in more lime water and stir; if there is too much alkali, put in more juice. When the condition is perfect, there is no change in the color of the paper. This perfect standard may not be obtained absolutely, but it may be relatively. It is better to leave the juice slightly alkaline, rather than slightly acid, when sugar is the object. Success in making sugar depends upon proper defecation, and this neutralizing of the acid and alkali is defecation. It seems impossible to make sugar without it. If sirup contains half cane sugar and half glucose it will not produce sugar. Never add lime water when the juice is hot. Let the defecation be done when the juice is fresh and cool, then heat. Prefer the vacuum pan for sugar. If open pans only are used it is better not to attempt sugar making. After the heating (boiling) is completed, cool as rapidly as possible. If very hot sirup is confined it burns. Boiling sirup is hotter than boiling water, because evaporation cannot be so rapid. In the vacuum pan juice boils at lower temperature than it does in an open pan. Prof. Weber, at Champaign, Illinois, limed the raw juice, then ran it into a tight defecator. If old casks are used for fresh sirup, burn them out first with sulphur. Glucose is made of starch. Cane juice often contains a good deal of starch. Think cane ought to be used up as soon as possible after cutting to make sugar; for sirup it is not so important. Recommends that farmers generally make sirup only and let the refining establishments make the sugar. There is so much practical chemistry that none but experienced persons ought to go largely into sugar making. Central factories ought to be established at places convenient to the farmers, and these, in charge of skilled workmen, would make more profit for the farmers than they themselves can make as a

general thing. Let the farmer make the sirup and take it to the factory for refining."

A vacuum pan is a closed vessel. It is filled partly with juice and closed, then the juice is heated by steam running through flues on the same principle that water in locomotive boilers is heated by flame in flues which pass through the water.

Litmus paper may be obtained from any druggist. Clay is often successfully used in defecation, and it sometimes happens that juice is so well conditioned that no defecation seems necessary for good sirup, but this rarely happens. The acrid and unpalatable sirup so often made from sorgo is because of the acid in it. This may all be avoided by following the suggestions here given.

As to profits, we can only say that an acre of good cane ought to make from 150 to 200 gallons of good sirup, or from 900 to 1200 pounds of good sugar. In Wisconsin experiments, the first year gave 997 pounds of sugar to one acre of cane. The second season was not so good, and the yield was not so large. Mr. But, of Kansas, made 300 gallons from one acre of cane. A gallon of sirup yields about 6 pounds of sugar, besides the drippings. Mr. Stout, of Brown county, Kansas, raised an average of 125 gallons of sirup. That would be equal to about 750 pounds of sugar, and the drippings left. In Illinois, the most noted experiment, at Champaign, the returns per acre were about \$75. The net profit on 12½ acres was \$59.40 per acre.

The seed will average 10 to 25 bushels per acre, and is worth the entire cost of raising the cane and delivering it, topped, at the mill. The bagasse, or crushed cane, makes the best fuel for heating the juice. Five acres of good cane will make, at a very low estimate, 625 gallons of good sirup. That will sell for \$300 anywhere. The price ranges from 40 to 90 cents. An entire outfit, capable of running off 20 acres of cane in a season, can be purchased and put up for \$150; and if 3 acres of cane, at low estimates, will pay for it, there can be no question about the business paying. Take even 100 gallons to the acre, and at 50 cents a gallon, you have \$50 from your acre. The seed and blades will pay for all the labor. We believe there is no exaggeration in putting the net profits of sirup at \$40 to \$50 per acre when corn on same land would yield 35 to 40 bushels to the acre.

About D. M. Magie Co.

Editor Kansas Farmer:

I have a word to say in relation to your D. M. Magie Co. paragraph. I dislike to say anything not creditable to men engaged in the same business I am, but I think the time has come when Kansas farmers should know something of the truth of the operation of a firm who are draining Kansas of large sums of money almost every month in the year. The case of Mr. McColm is a sample of hundreds of others, and of some in my own vicinity. The contract is but rarely filled to the letter, especially in one particular, wherein they agree to furnish you a pedigree. If any man has ever received a pedigree from them worthy of the name, I would like to see it "just to look at." About one year ago I took a trip east, for the sole purpose of buying Poland China stock, my objective point being Butler county, Ohio. At Oxford I called upon Prof. L. N. Bonham, who is standard authority in all matters pertaining to the breed, and who kindly volunteered to drive me around amongst all the

breeders residing in the vicinity of the classic village of Oxford. I met men who had been breeding Poland Chinas for 40 years, others for a less period, but whose fathers had been breeding the same before them. D. M. Magie resides in this neighborhood, and joins farms to Prof. Bonham. I ascertained that Magie bred about 20 sows but claimed to have sold between 600 and 700 pigs the previous year. 20 sows are good for 200 pigs if bred twice a year; where did the other 450 or 500 come from?

I was informed that he kept two teams employed gathering up pigs promiscuously from the farms in the country, and ostensibly palming them off upon deluded Kansans and others, as his own breeding. The D. M. Magie Co. patronize no record, and are bitterly opposed to anything of the kind, for the simple reason that the record would show the proportion of pigs they breed themselves, and would virtually destroy their peddling business; for pigs eligible to record are not picked up for a song, and those breeding them rarely part with them at wholesale; at least I have no knowledge of any first-class breeder who has done so. When the Ohio Record was first started, Magie told an acquaintance of mine that it would ruin the business. The reply was that it might ruin his business, but that it would accrue to the benefit of every careful, conscientious breeder of Poland Chinas in the land who adopted it. Last winter I attended the annual meeting of the American P. C. Record Co., at Cedar Rapids, Iowa. The executive committee presented a case to the stockholders which they had declined to consider on the grounds of personal friendship. The case in question was that of an Iowa breeder who had purchased a number of hogs of D. M. Magie Co., supposing as a matter of course that the pedigree they were to furnish him along with the certificate of sale was a pedigree *de facto*. It consisted simply of the statement that Sam so and so was the sire, and Lucy so and so the dam, certified by D. M. Magie Co. to be of pure stock on both sides. The matter was referred to a select committee who reported unanimously in favor of rejecting the application, and the report was accepted and sustained without a dissenting voice.

In conclusion let me say that Kansas today has just as good Poland China stock on an average as can be found in Ohio or elsewhere. She has breeders as skilled and conscientious as can be found in any other State. The express charges alone saved would aggregate a large sum, were home breeders more extensively patronized.

M. STEWART.

Wichita, Kas., May 12, 1883.

HARVEYVILLE, May 8.—The outlook for the farmers is very encouraging now after the hard winter. Stock have gone on the range looking well, with an abundance of feed left. Wheat and oats are looking well; farmers are well along planting, and corn is coming up nicely; the prospect was never more promising for a large crop of all kinds of fruit than at present with the exception of blackberries and raspberries which were winter killed. The country is settling up very fast. New houses may be seen going up in every direction. Every one seems to be trying to improve their stock of cattle and horses as they will soon have to be run in pastures.

SEPHUS.

One who knows about farming, says that the best way to raise strawberries is with a spoon.

The Stock Interest.

Sheep Husbandry in South-Central Kansas.

By Robert Loy, Eureka, Greenwood county, in last Quarterly Report of the State Board of Agriculture.

In this western country, where range is abundant and land cheap, I would recommend a new beginner to commence with high-grade Merinos, and 300 or 400 ewes would be sufficient, for the reason that they are harder than the thoroughbred; have not been pampered; will congregate in much larger flocks; will shear just as much with the same care and feed; the wool will sell for as much, and the sheep in the first place will not cost one-fourth as much. Breed the ewes to a registered Merino ram of large size, with as long wool and as dense as can be found, not too full of yolk, neither too light. Another reason why I prefer the Merino is, they are, I think, more suitable to this climate and location than the long-wools, or Downs, who require richer pasture, where they have not so far to travel to get filled. Two or three thousand Merinos can be run together profitably in summer time, while 500 or 600 long-wools would be plenty. And again, one Cotswold, weighing 200 pounds, would cost as much to keep as two Merinos weighing 100 pounds each. And allowing the long-wools to shear twelve pounds of wool, worth at this place twenty cents per pound we have \$2.40. Now take the two Merinos, giving the same weight of fleece, (which a Merino of good grade and weighing 100 pounds will shear,) and we find we have twenty-four pounds of fine wool, which at the price here, twenty-two and one-half cents per pound, is worth \$5.40—a difference in favor of the Merino of \$3.

In regard to handling and taking care of sheep, very much depends upon circumstances and where you are located. Corn in the shock, fourteen hills square, and cut when the fodder is green, makes an excellent feed for sheep. Feed an average of two bushels per day to 100 head of grown sheep, and smaller ones in proportion. Millet is an excellent feed for sheep; is easily grown, and keeps well in stack. I feed my lambs millet all winter, all they will eat, in addition to their corn. From and after the 1st of February, I feed my breeding ewes, in addition to their corn, all the millet they want up to grass. I know it is the general belief that millet fed to ewes will cause abortion. I have fed it for seventeen years in Kansas, yet have never seen any bad effects from it; but on the contrary, I think it is one of the very best things to feed to ewes to produce milk, and if the ewe has plenty of milk, half the battle is fought.

Sheep should be salted at least once a week, about three pounds per hundred head. Lambs, yearlings and ewes should be in separate lots from the main flock during breeding time. Yearling ewes should not be bred at all, as it stunts their growth. And in addition, there should be a lot for hospital, where sick sheep and all that are not doing well can be fed, and feed them anything and everything that they will eat.

One good shepherd will take care of 2,000 to 3,000 sheep during the summer months, and in the heat of the day they ought to be protected from the rays of the sun, either by timber or a shed built, and accessible to their range, with plenty of pure water close by.

The greatest obstacle in the way of making a success in sheep husbandry, is imperfect knowledge, and I would advise any one going into the business, who has no knowledge of it, to get a good practical shepherd, or hire out to some good sheep man who has been in the business most of his life, and if you

don't like that, better work for nothing, or pay some one a good price for learning, for you will have to one time or another.

The most common disease among the sheep here is scab, when we have any, though that is easily cured by attending to it at once, by any one of the common tobacco dips. As a precaution to this disease, I think our Legislature ought to pass a law something similar to the one they have in Texas. Each county ought to be provided with an inspector, whose duty it is to inspect all sheep coming into or driving through the county, and if found to be diseased, to be sent to quarantine, and there kept until the disease is thoroughly eradicated, the owner paying all expenses and damages.

The best time, I think, for selling wool is as soon as you have it ready for market, unless you think it will be higher, and then it is very risky to hold. Wethers should be sold at three years old, after shearing. If no local market is near, ship them. And now, to sum up the whole, after deducting for shepherd, feed, salt, shearing and losses, you ought to have at least a profit of from twenty-five to thirty-five cents on the dollar from your investment.

Sheep Husbandry in Southwestern Kansas.

By G. A. Wadsworth, Larned, Pawnee county, in last Quarterly Report of State Board of Agriculture.

In starting into the business of sheep and wool raising in this section of country, I would buy good young, well graded Merino ewes, that would shear at least six pounds of unwashed wool; much preferring those bred and raised in the West, where they are used to being herded together in large bands, and where they are grazed both in summer and winter. I would also buy for use of such sheep, rams well calculated to build up a herd of sheep that would be large in size and heavy shearers. I think the best time to start a herd is about the first of September, as those having sheep to sell can wean their lambs, giving one a chance to make a selection.

The question of handling and caring for sheep is the all-important one of the whole business, for without proper care in every way, the business will to a large extent prove a disastrous failure. I know of no better way of giving you my views as to how they should be managed, than to tell you how I manage my own.

I put out some fifty acres of millet and sorghum (the more the better) for each 1,000 head of sheep, that I may have plenty of rough feed to do them through bad weather in the winter. I also provide 300 to 500 bushels of corn for the same sheep, which, in my judgment, is ample for 1,000 sheep; to keep them in fine condition until grass grows in spring. In addition to this, I aim to sow at least 100 acres of rye by the middle of August, so I can have green feed to wean my lambs upon about the first of October. I put them upon the rye a short time at first, gradually, until I can leave them for about one-half of the day, and on range the rest of the time—commencing to feed corn to my lambs while feed is good, so they will learn to eat by the time cold weather sets in; commence with grain very light at first. I also watch my old sheep, and at the first indication of their dropping flesh, I commence to give grain enough to keep them up; and as the feed begins to get poor, I increase their grain, always watching closely for any sheep that may not be well. If there are such, I take them out of the herd and put them in a place where I can take proper care of them.

I let my lambs run upon my rye a short time each day, as long as they can get anything from it, until about the

first of March, when I would take them off and leave the rye to start, so that I can have it to put my brood ewes upon—starting a good flow of milk for my early lambs, which I can have dropped three to four weeks earlier than if I have no rye.

About one week previous to the time my lambs begin to drop, I put all my brood ewes in a corral, and number each and every one of them by taking a bit of a shingle, say five inches long by two inches wide, bore a hole in each end with three-eighth bit, paint the number on this strip, take a twine needle and sew it fast to the wool just back and well up on the left shoulder of each sheep, taking two stitches in each end tag, getting hold of all the wool possible, so it will stay. This done, when my lambs come, as soon as they are dry, I have figures cut out of blocks of wood, which I dip in a paint made of two parts of rosin, three parts of linseed oil, and about one part of lampblack, boiled together, and stamp upon the side (well up) of the lamb; these numbers to correspond with the numbers upon the lamb's mother. I do this so that in case anything happens to the ewes and lambs that they get separated, (which is often the case,) I can find them and get them together, which I could not do if they were not numbered. I think this quite important.

There is no prevailing disease among the sheep except scab, which prevails in all countries to a more or less extent where there are large herds of sheep; but it is a disease that is easily eradicated if properly dealt with at the right time. My remedy is: One pound of sulphur, one-half pound of lime, and one gallon of water; boil one hour, then add three gallons of water to one of the above; dip at 120 degrees heat; soak one minute. Repeat the operation in fifteen days, move to a new range and new corals, and the trouble is ended. The great trouble is, there is not enough caution used in dipping. They are hurried through, many of them hardly getting wet, and it does no good.

There is another very important thing about sheep raising that is not rightly understood, and that is water. I have had men argue with me that sheep could get along without much water; but I believe that thousands of sheep die every year for want of water; especially is it the case in winter, when feed is dry. Many a brute, both sheep and cattle, die from diseases brought on by a lack of sufficient water. I would rather be short of feed than short of water for any kind of stock.

Shelter is another essential thing to be looked after. Good, clean, well-ventilated sheds should always be provided for sheep, that they may be sheltered from wet storms. A dry snow does not injure sheep, but let sheep get wet in a cold rain, and then have to stand out in the wind, it will injure them permanently—many times to such an extent that they are worth but little afterwards.

The business, well conducted, is very profitable, realizing thirty-five to sixty per cent. with good sheep, and sometimes even more than that. It is a business also that much pleasure may be derived from, as it is susceptible of being carried to almost any extent of improvement, always insuring a good per cent. of net profit for the time and talent employed.

Kansas as a State is, in my estimation, equal if not better than any other State I have been in, and I expect to see great improvement in the next few years, both as to numbers and quality of sheep, in Kansas.

If your horses have sore shoulders, scratches, cuts or open sores of any kind, use Stewart's Healing Powder.

That Sheep Dip.

MR. EDITOR:—In your last issue (May 2nd) I notice an article headed "Is Sheep Husbandry Profitable," purported to be written by a correspondent of the Ellinwood (Kas.) Express, in which he refers to the scab, and says it is a shame, and no man that has any pride will allow it in his flock, &c. The most of us were once amateurs in the sheep business and not fully educated in that line, and if the scab got in our flock, it takes a little time to prepare to and to learn how to cure it, though our pride may be oozing from every pore in the shape of large drops of cold sweat. He says this pest can be got rid of in twelve days and a permanent cure effected with two dippings, and advises not to use any of the nostrums sold by jobbers, but make your own dip and know what you have, what you can do, and the strength of it, &c., and there he ends upon that part of the subject. Now, if this correspondent would be so kind as to enlighten me (and I dare say many others) through the FARMER how to make and to use our own dip, &c., he will confer a great favor to me at least in the future perhaps, though my flock are healthy at present; but I have no guarantee that they will always be so, with all the pride I may have in them, which is considerable. Now, Mr. Editor, this is my first effort, and if not worthy of notice you will of course consign it to the waste basket; if worthy, it may encourage me in the far future to make another effort.

A SUBSCRIBER.

Cottonwood Falls, Chase Co., Kas., May 5, 1883.

Kansas Herefords.

For grazers and crossing with our native cows or Short-horn grades, no new breed has given such satisfaction as the Herefords. They are especially notorious as a beef producing breed, and those breeders who have been handling them are their most enthusiastic advocates. A representative of the FARMER visited the noted herd of Walter M. Morgan & Son's, at Irving, Marshall county, Kas., and found the Herefords and their grades doing well on the bluff range. The senior Morgan is a native himself of Herefordshire, England, and he and his son have been handling this breed all their lives with the best of success, and have so favorably impressed his Kansas neighbors with their value that most of them have availed themselves of a male to use on their herds; in fact, the neighboring farmers have been his best customers. Much credit is due them for making that part of Marshall county a Hereford strong-hold. The ranch of W. M. Morgan & Son contains over 1,000 acres, mostly upland range, where cattle must indeed be hardy and good rustlers to do well. Their breeding herd now numbers 125 thoroughbred and grades. Imported Belmont stands at the head of the herd. They have just purchased a fine imported heifer from Gudgeon & Simpson, Independence, Mo. She is from Rogers' prize winning herd in Scotland, and cost them \$600. They propose enlarging their herd very much on account of the business they are now commanding. During the past season they sold a draft of 125 Herefords from their herd.

Parties interested in this hardy and early maturing breed will do well to consult them, or what is better, visit that Herefordshire of Kansas and see for themselves, and learn the reason for the faith that is within the heart of Hereford breeders. HEATH.

"Buchu-Paiba."

Quick, complete cure, all annoying Kidney, Bladder and Urinary Diseases. \$1. Druggists.

The eucalyptus, or blue-gum tree, grows so fast that a forest may be formed in twenty years. It is sometimes 300 feet high, and has a trunk 100 feet in circumference.

A Chapter on Hog Raising.

Mr. John M. Stahl, Glenwood Farm, Camp Point, Ill., in a late number of the Indiana Farmer says:

I have raised hogs ever since I have been on an Illinois farm. Coming to the "prairie State" when the capabilities of corn and pork were just beginning to be understood I engaged at once and extensively in swine raising only to meet with loss and disappointment on account of inexperience. But slowly I gathered knowledge in that bitter school where fools must learn and sensible people often gain their most precious learning. For the last twenty years I have made hog raising pay, not a large profit at all times, but all in all a reasonable profit. I am convinced that hog raising was never more profitable than now. More money was to be realized in *post bellum* days, but not more value, founded on a gold basis. Then hogs were ten to twelve cents per pound gross, but when from this you subtract the greater cost of production and reduce the margin to a gold standard, you will find the real profit no greater then than now.

When I consider the food, drink and treatment we gave our hogs as late as fifteen and twenty years ago I am surprised that we made the business at all profitable. Corn was the only and unvarying article of food, water composed of equal proportions of miasma, mud and tadpoles was "good enough for a hog," and the only shelters from summer heat or winter cold, from burning sun, drenching rain or chilling storm, were the boughs of the "forest primeval" or the kindly protection of some sheltered bank. The introduction and practice of better methods of feeding, of sheltering, and of treatment in general, have conspired to make the profits of stock raising as large now as in the past.

The improvement of breeds has aided in keeping the profits at a reasonably gratifying figure, notwithstanding the sharper competition of later days. A hog raiser of to-day would hardly recognize the hog of forty years ago as belonging to the same species as his Berkshires or Poland Chinas. The deer-legged, claw-hammer snouted hazel splitters of that day would now be massacred as worse than useless encumbrances of the hog pen. The improved breeds put on more fat from the same amount of food; and this increased fat production more than balances the extra care which they require.

The improved facilities for marketing have also tended to increase the profits of the business. In the days before railroads the inconveniences and obstacles of marketing were almost unendurable and insurmountable. At that time, too, pork packing was not the business it now is. The swine raiser very frequently dressed his hogs at home and hauled the pork to the city to be sold. And for many years after the business of packing pork assumed respectable dimensions it was confined to the winter season. But now packing is carried on throughout the year and the hog raiser can find a ready market for his product at any season, generally realizing a better figure in the summer or autumn than in the winter.

I might produce other reason to show that swine raising has not lost, nor will it lose, its profitability. But I believe I have already produced sufficient to show that no young farmer need fear to engage in this branch of farming on account of ruinous diminution of profit, or fear to learn what he can of its modes and methods, because his knowledge may become valueless or obsolete.

As for myself I can say that I have found hogs profitable. In handling them you are more liable to suffer loss from disease than in handling cattle or horses

(but not sheep,) while the losses from casualties will be greater in raising horses and cattle than in raising hogs. During the first years that I was engaged in hog raising, I suffered severely from cholera, but have almost escaped it for the last ten years. I believe this to be owing to the fact that I have substituted clover and other foods for corn and paid more attention to the health of my hogs. And I believe that hogs can be kept so healthy and vigorous that cholera will not develop in their bodies, or that they will not contract the disease when exposed to its contagion.

One mistake I made for many years: I made my hogs too large and old before I marketed them. I have now been living on Glenwood Farm for seventeen years. For the first ten years of my stay here I did not market a single lot of hogs that averaged less than four hundred pounds in weight, and some lots came near five hundred pounds average weight. It took me many years to learn that a big hog is not the most profitable one.

With these general and rambling observations I shall take up the particulars of hog raising in future articles and hope to make my short lessons practical and not altogether valueless.

A Word for Mutton.

The flesh of the sheep, as food for man, has always stood in the first place among meats on the score of healthfulness. There are, perhaps, only two reasons why it has not been more generally used—size and weight of carcass, and peculiarity of taste. This latter is easily avoided, so far as everything offensive is concerned, by proper care in slaughtering. There is no good reason why mutton should have any odor except that arising only from the flesh. Mutton carefully dressed has no unpleasant smell.

A hopeful change in public taste concerning mutton is growing into notice, and it seems to us that every farmer ought to aid in cultivating and extending this change. We have a good suggestion from the Thoroughbred Stock Journal on this subject. It says that the mutton of a well fed sheep of every breed, from the Downs and Shires down to the little woolled Saxony, is palatable and healthful. None of the objections urged against the use of pork can be brought against that of mutton. It never has been known to impart scrofula, trichinae or tape-worms to its consumers. The sheep does not thrive in the mire, nor does it consume garbage or vermin, or decaying meats or vegetables. It does not wallow in the trough it feeds from, but it is a dainty and a careful feeder, and as cleanly as needs be in its habits. Mutton is more easily and cheaply produced than beef, is just as nutritious and may be served in as great a variety of forms. As a steady food it is far superior to poultry, and costs no more. We mean good, fat, juicy mutton, not that from the half-starved, scabby or loot-ordered specimens that have outlived their breeding age and been shorn of fleeces enough to furnish the shoddy blankets for a tribe of Indians. People in cities seldom know how really good mutton tastes, and the remark may also apply to most families upon the farm. The latter too often fail to try it. We know of many well-to-do farmers, men who have well stocked farms, who do not slaughter a sheep during a twelve-month, yet who kill a pig every month in the summer season, and in the fall "put down" pork enough to last every other month during the year. This is a nation of meat-eaters, but it confines itself too exclusively to pork and beef. It is better to sandwich in a little more mutton. A few sheep for family consumption, even when they are not kept for sale or for wool, will be found a most excellent investment on all farms.

BREEDERS' DIRECTORY.

Cards of three lines or less, will be inserted in the Breeder's Directory for \$10.00 per year, or \$5.00 for six months; each additional line, \$2.00 per year. A copy of the paper will be sent the advertiser during the continuance of the card.

Cattle.

W. H. EMBRY, Anthony, Harper county, Kansas, having sold his farm will now sell at a bargain forty SHORT-HORN BULLS. Four miles east of Anthony.

ALTAHAM HERD, W. H. Cundiff, Pleasant Hill, Mo. Fashionable-bred Short-horn cattle. Straight Rose of Sharon bull at head of herd. Young cattle for sale; bulls suitable to head any show herd.

A. HAMILTON, Butler, Mo. Thoroughbred Galloway cattle, and calves out of Short-horn cows by Galloway bulls, for sale.

GUDGELL & SIMPSON, Independence, Mo., Importers and Breeders of Hereford and Aberdeen Angus cattle, invite correspondence and an inspection of their herds.

PLUMWOOD STOCK FARM, Wakarusa, Kansas. T. M. Marcy & Son, Breeders of Short-horns. Young stock for sale. Correspondence or inspection invited.

H. L. LACKEY, Peabody, Kansas, breeder of Short-horn cattle. Herd numbers 100 head of breeding cows. Choice stock for sale cheap. Good milking families. Invites correspondence and inspection of herd. Satisfaction guaranteed.

PICKETT & HENSHAW, Plattsburg, Mo., breeders of the Oxford, Princess, Renick, Rose of Sharon, Wiley, Young Mary, Phyllis, and other popular strains of Short-horns. Stock for sale. Plattsburg is near Leavenworth.

BUCKEYE HERD, S. T. Bennett & Co., Safford, Kansas, Breeder of Short-horn Cattle. YOUNG BULLS FOR SALE.

Cattle and Swine.

WOODSIDE STOCK FARM, F. M. Neal, Pleasant Run, Pottawatomie Co., Kas., breeder of Thoroughbred and high-grade Short-horn cattle, Cotswold sheep, Poland-China and Berkshire hogs. Young stock for sale.

H. B. SCOTT, Sedalia, Mo., breeder of SHORT-HORN cattle and POLAND-CHINA swine. The very best. Write.

W. W. WALTIRE, Side Hill View Farm, Carbon-dale, Osage county, Kansas, breeder of Thoroughbred Short-horn cattle and Chester-White pigs. Stock for sale.

GUILD & PRATT, Capital View Stock Farm, Silver Lake, Kas., breeders of THOROUGH-BRED SHORT-HORN CATTLE, and JERSEY RED SWINE, Spring Pigs for sale in season. Jersey Red Swine a Specialty. Correspondence solicited.

D. R. A. M. EIDSON, Reading, Lyon Co., Kas., makes a specialty of the breeding and sale of Pure-bred Jersey Red Hogs and Short-horn Cattle. Send for circular.

CHAS. E. LEONARD, Proprietor of "Kavenwood" herd of Short-horn Cattle, Merino Sheep, Jacks and Jennets. P. O., Bell Air, Cooper county, Mo., R. R. station, Bunceton.

M. WALTIRE, Carbon-dale, Kas., breeder of thoroughbred and high-grade Short-horn cattle; Chester White hogs; Light Brahmas and Black Spanish chickens. Correspondence solicited.

Hereford Cattle.

J. S. HAWES, Mt. PLEASANT STOCK FARM, Colony, Anderson Co., Kas., Importer and Breeder of HEREFORD CATTLE. 125 head of Bulls, Cows, and Heifers for sale. Write or come.

WALTER MORGAN & SON, Irving, Marshall county, Kansas, Breeders of HEREFORD CATTLE. Stock for sale and correspondence invited.

Swine.

C. W. JONES, Richland, Mich., breeder of pure-bred Poland-China. My breeding stock all recorded in both the Ohio and American P. C. Records.

S. V. WALTON & SON, shippers and breeders of pure blood Poland-China hogs for twenty years. Pigs constantly on hand. Residence, 7 miles west of Wellington, on K. C. & S. K. R. R. Postoffice, Wellington, Kansas.

FOR SALE on Lone Spring Ranch, Blue Rapids, Kansas, fine thoroughbred Scotch Collie Shepherd dogs, for driving cattle or sheep. Jersey Red Swine from prize winning animals. All spring pigs of the famous Victoria Swine, and thoroughbred registered Merino sheep. Write for circulars.

Address H. P. GILCHRIST, Blue Rapids, Marshall Co., Kansas.

J. BAKER SAPP, Columbia, Mo., breeds LARGE ENGLISH BERKSHIRE SWINE. Catalogue free.

C. O. BLANKENBAKER, OTTAWA, KAS., breeder and shipper of recorded POLAND-CHINAS and Yorkshire swine. Also Plymouth Rocks. Special rates by express. Write.

ROBERT COOK, Iola, Allen county, Kansas, Importer and Breeder of Poland China Hogs. Pigs warranted first-class. Write.

Sheep.

GOLDEN BELT SHEEP RANCH, Henry & Brunson, Abilene, Kansas, breeders of Improved American Sheep, 150 rams for sale. Dickinson (505) at head of herd, clipped 33½ lbs.

G. B. BOTHWELL, Breckenridge, Mo., breeder of Spanish or Improved American Merino sheep; noted for size, hardiness and heavy fleece; 400 rams for sale.

HARRY MCCULLOUGH, Fayette, Howard Co., Missouri, breeder of Merino Sheep, Berkshire Hogs and high-class poultry. 400 rams for sale on reasonable terms.

H. V. PUGSLEY, Plattsburg, Clinton Co., Missouri, breeder of Vermont Registered Merino Sheep. Examination of flocks and correspondence invited. About 150 Merino ewes for sale.

E. COPELAND & SON, Douglass, Kansas, breeder of Spanish or Improved American Merino Sheep; noted for size, hardiness and heavy fleece.

Poultry.

W. M. WIGHTMAN, Ottawa, Kansas, breeder of high-class poultry—White, Brown and Dominique Leghorns and Buff Cochins. Eggs, \$2.00 for thirteen.

Wichita Poultry Yards.

I. HAWKINS, Proprietor, and Breeder of Pure bred BUFF COCHINS, PLYMOUTH ROCKS, PARTRIDGE COCHINS, BROWN LEGHORNS, and PEKIN DUCKS. Eggs now for sale. Send for price list.

I. HAWKINS, Box 476, Wichita, Kansas.

PLYMOUTH ROCKS a specialty. I have no more Plymouth Rock fowls for sale. Eggs in season at \$2.00 for 13. Mrs. J. P. WALTERS, Emporia, Kas.

JAC WEIDLEIN, Peabody, Kas., breeder and shipper of pure bred high class poultry of 13 varieties. Send for circulars and price list.

DUTCHER, No. 90 Madison St., South Topeka, Kas., Breeder of Fancy Chickens, has for sale Light and Dark Brahma Cockerels, and Light Brahma Pullets; also Black Cochins Cockerels. Cheap; from \$2 to \$3. Eggs in season from above at \$2 for 13. Stock warranted pure.

MOUND CITY POULTRY YARDS, breeder of high class thoroughbred poultry. Plymouth Rocks, Light Brahmas, Buff Cochins, and American Seabrights—all of the finest strains in the country. Eggs from my yards for sale; shipped with perfect safety to any part of the U. S. Price \$2.00 for 13. Send for illustrated circular and price list.

A. drs S. L. IVES, P. M., Mound City, Kansas.

NEOSHO VALLEY POULTRY YARDS, Wm. Hammond, P. O. box 190, Emporia, Kas., breeder of pure bred Light Brahmas, Partridge Cochins, Plymouth Rocks. Eggs in season; stock in fall. Send for circular.

GOLDEN BELT POULTRY YARDS, Manhattan, Kas., still at the head. If you want fowls or eggs of Light or Dark Brahmas, Plymouth Rocks or Bantams write. F. E. MARSH.

BLACK COCHINS EXCLUSIVELY. At K. S. P. Show my blacks took \$185 in premiums winning for highest scoring birds over all classes. Eggs and stock for sale. C. H. RHODES, North Topeka, Kansas.

WAVELAND POULTRY YARDS, Waveland, Shawnee county, Kansas. W. J. McColm, breeder of Light Brahmas, Plymouth Rocks, Bronze Turkey and Pekin Ducks. Stock for sale now. Eggs for hatching in season; also Buff Cochins eggs.

MARK S. SALISBURY, box 931, Kansas City, Mo., offers eggs of pure-bred Plymouth Rock fowls and Pekin Ducks for \$1.00 per setting; also Hong Kong geese eggs, \$2.50 per dozen.

NURSERYMEN'S DIRECTORY.

THE YORK NURSERY COMPANY, Home Nursery at Fort Scott, Kansas. Southern Branch, Lone Star Nursery, Denton, Texas. Parsons Branch, Wholesale Nursery, Parsons, Kansas. A full line of all kinds of Nursery stock, embracing everything adapted to the New West, from Nebraska to Texas. Reference First National Bank, Fort Scott.

THE MIAMI NURSERIES, Louisburg, Kas., Apple Cherry, Peach, Pear and Plum trees, small fruit plants, Osage Hedge. Address CADWALLADER BROS., Louisburg, Kas.

S. A. SAWYER, Manhattan, Kansas, Live Stock Auctioneer. Sales made anywhere in the West. Good references.

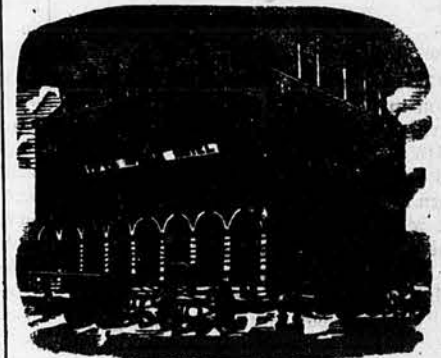
Topeka Business Cards.

WELCH & WELCH, Attorneys at law, 173 Kansas Avenue, Topeka, Kansas.

D. HOLMES, DRUGGIST, 247 Kas. Ave. I have the agency for Semple's Scotch Sheep Dip, which I sell at manufacturers price.

E. HARRIS. C. M'ARTHUR.

Fifth Avenue Hotel, TOPEKA : KANSAS.



Centrally Located. Good Sample Rooms \$2.00 PER DAY.

HARRIS & McARTHUR, Proprietors.

TOPEKA SEED HOUSE

ALL KINDS OF

Garden and Field Seeds

All Seeds fresh and true to name. I have Seeds from all the responsible Seed growers and Importers and a fine selection of Seeds adapted to Kansas soil and climate, GROWN FOR ME IN CALIFORNIA. All Seeds are put up by me on order received. No paper Seeds sold. All kinds of

Seed Corn and Seed Potatoes

in their season. Orders by mail or express promptly filled. Address S. H. DOWNS, 78 Kansas Ave., Topeka, Kas.

Wanted Agents both Male and Female for our new "Daughters of America." It takes wonderfully. Price, \$2.00; worth \$3.00. Address FORSHEE & McMAKIN, Cincinnati, Ohio.

Correspondence.

From Mitchell County.

Editor Kansas Farmer:

We have had another fine rain which is making grass and crops come finely on. Wheat looks splendid and corn is coming up fast and very regular; some of the farmers are in with their cultivators to keep ahead of the weeds. A great many are listing their ground, and I think I am in favor of that mode of preparing ground when properly done; but I notice a good many are doing the work in a very slippery manner; and if they get more corn than weeds I shall be surprised. The season bids fair for a prosperous one for the farmers, and we hope it will prove so. There will be very little broom corn raised in this section this year on account of the failure of last year. Sorghum is coming more in favor here for feed crop, and the stock interest is also gaining ground fast. This is a good stock section, and most of the farmers are good feeders and industrious.

Times seem to be good with every one, as I hear no complaining. Most of the sheep men are through with the lambing trouble, and most of them have raised a fair per cent. of lambs. Old corn is plenty at 30 cents; oats at 26, and hay at \$1.50 at the stack. Horses and mules are high and scarce.

W. CALVIN.

From Pottawatomie County.

Editor Kansas Farmer:

Vegetation of every kind has been very backward this spring, but the farmers generally are hopeful of a good crop. Grain of every kind looks promising, and with sufficient rain will be a good crop. The acreage of wheat and oats is much larger than usual, especially winter wheat. Corn is up and looks splendid; no better stand has ever been had.

Farmers are holding considerable old corn, in case the new crop should fall short. This is indeed a wise idea, and if more generally adopted would insure to the farmer something to live on, despite a poor crop. One very noticeable and satisfactory fact is that there has been more trees planted this spring, especially on the prairie than has been for the past five years.

Stock looks better than usual at this time of year and we have heard of but few dying from any cause. Farmers have gone about their work with seemingly more confidence in the prospect of their labor being rewarded than ever before, and as a result of their confidence, many of them have erected fine houses and barns. In fact the lumber merchants have been unusually well patronized. Fruits of all kinds, except peaches, will be a large crop from present appearances.

Onaga, May 8, 1883. G. W. SHEDDEN.

Listing Corn.

Editor Kansas Farmer:

As listing corn has been a subject of discussion in the columns of your paper, and believing as I do in the old proverb—"Never too late to do good"—I venture an opinion based upon observation and reason. I planted corn in 1882 in the way our fathers taught—"plow deep while sluggards sleep,"—while my neighbors, a few at least, planted with lister and drill; and while the corn was growing in each field side by side, and especially after it had matured it took no extra keen observing eye to decide at a glance which was the most profitable field of corn. And when a gallon of shelled corn was taken from each field separately and weighed, I found from 1 to 1 1/4 pounds more to the gallon in favor of the old way, which would be about 8 pounds to the bushel. Any one can figure what it would be in his whole crop of corn. Now I will speak as to the reason. You may take most any of the cereals—for instance, wheat—and I will appeal to any man who has been in the habit of raising it, what he would expect the results to be in crop of wheat if he undertook to raise it on ground treated in such a manner—that it was not thoroughly stirred and pulverized through and through, leaving hard unloosened banks as is the case in listing, for the small fibrous roots to come in contact with. I am not writing against improvements, understand me, but only against innovations that won't wear; for nearly all farmers know that there are such things. I am open to conviction when I see the point. I hope to hear from many when the present crop of corn is made. AN OLD FARMER.

School Books.

Editor Kansas Farmer:

SIR.—Some time since in the FARMER, I expressed the opinion that our excellent law under which the State will hereafter make its own school books, would come nearer to perfection if it gave the use of them free to all scholars. In your issue of the 25th ult., Mr. Myron L. Stephens favors you with his objections to my idea and with your permission I will occupy a little space in their consideration. His chief objection is that these books, if not purchased by the scholars, would be used recklessly and quickly destroyed, especially by the children of non-taxpayers. Now I, like Mr. Stephens, have been actively engaged in school work for many years, and I have specially noted the working of the idea in question. It has been a success in New York City for probably half a century. There, in all public schools, from the primary to the University, books, paper, and all the requirements of the pupils are furnished free and they are certainly better cared for than if owned by the scholars. The teacher is responsible for their care and parents are liable for damage or loss. When pupils leave school they return their books, which are used by other scholars. This book system is economical, as every book is used till worn out and not discarded when but little used as is often the case in changing classes when the books are private property. It is as broad as it is long whether the books are paid for directly by the parent or by way of the tax collector.

School books, pens, ink, slates, etc., are certainly an essential part of our educational system. Why compel parents to pay directly for them more than for fuel for the school house or teacher hire? I can see no reason for dividing them. I suggested also that it would be wisdom on the part of the State to enable such western school districts as have enough scholars but not sufficient taxes for the purpose, to hold school for at least six months in the year. Mr. Stephens objects to this because the expense would fall on the tax payers, who, of course, are chiefly in Eastern Kansas and says "if he puts himself in our place he will think differently about the matter." If this refers to paying taxes I believe I am there already as my taxes (in two counties) are certainly as heavy as those of the average tax-payer; if, otherwise, I prefer to view the matter as it affects the whole State, not a section. The spirit and intent of our school laws is to give every child in the State an education free. My proposition if adopted would more perfectly carry out that purpose.

Mr. Stephens says "are we so dependent and shiftless that we cannot educate our children? If we cannot do it in Western Kansas, better come to Eastern Kansas." If our Western farmers have but little taxable property, will an eastward journey of two hundred miles convert them at once into substantial tax-payers? If the State is compelled for its own future welfare to educate all its children whether their parents pay taxes or not, then it is plainly its interest to see that none fail to receive that benefit through lack of proper legislation, and it would be much better for us to educate them here where their parents are doing grand service to the State with little profit to themselves, by pushing the limits of profitable agriculture each year further to the West, than to move them East and have to pay the cost of their tuition there. Let us take a similar case. Congress at its last session was asked to appropriate several million dollars towards educating the negroes of the South. This Mr. Stephens and other taxpayers would have to pay. It unfortunately however failed to pass. To view it simply in a pecuniary light, I believe it would have been a very profitable investment, and that the United States in another generation would have its money returned a hundred fold from the wealth resulting from the educated labor and broad intelligence of the negroes. Mr. Stephens, if consistent, would say no! If these five million blacks of the South cannot educate themselves let them move. Let them come to Eastern Kansas. Mr. Stephens makes some humorous remarks about our desert and our self-conceit in thinking that we can "raise crops where nothing grows or has flourished but buffalo grass, jack rabbits and coyotes." This being another subject, I will speak of it in another letter.

Allison, Kansas.

JOHN J. CASS.

Cultivating Corn too Much.

Editor Kansas Farmer:

"I'm plumb discouraged trying to raise corn on my place," said one of my neighbors while spending an evening at our house some years ago. "I can't get a decent crop to save my life, and no man tends his corn more than I do."

"That's just the trouble," spoke up his wife, who was the gray mare of the team, "you work your corn to death."

"How is that, Mrs. Green?" said I. "I didn't suppose corn could be worked too much."

"Well it can," she answered; "for I've taken notice for a good many years that if anything happens so that John can't get through the corn the usual number of times, he has a better crop than if he had plowed as long as the horses could get between the rows."

The men-folks smiled at this assertion in the aggravatingly indulgent and superior way which men-folks have of smiling at women when they try to talk business, and nothing more was said on the subject. But knowing Mrs. Green to be a person of unusually correct observations, I resolved to investigate for myself, find out if she was right, and if so, why?

By carefully noting the field operations on our own farm and those of our near neighbors and comparing results for several seasons, I became satisfied that, although corn could not be injured by frequent plowing, it could be plowed too long. The reason is simple enough, just as all Nature's secrets are when once she reveals them. It is, that when the corn begins to joint, it also begins to weave, just beneath the surface of the ground, a net-work of fine roots which seem to be essential to the nutrition of the future ear of grain. Up to this time it has been chiefly engaged in sending a set of stronger roots deep into the earth to gain a firm foothold for the substance of leaf and stalk; but it is near the surface when the sweet influences of the sun and air have enriched and mellowed the soil, that it must find the finer pabulum that is required to perfect its golden grains. So it follows that if these little feeders of the plant are torn away by the plow it must stop and repair damages; that is, send out new roots before the ear can shoot. This is a heavy drain upon the vitality of the plant and is just so much subtracted from its grain producing stores. If the season be very favorable, and the corn has had the advantage of a first rate start in life, it will out-grow the violence it has suffered; but in an average season the crop will be diminished by plowing after it has begun to joint; at least such is the result of my observation.

M. L. S.

Notes and Queries.

Editor Kansas Farmer:

We have had plenty of rain since April 1st for crops, but nothing to affect the springs or deep wells. All kinds of grain are looking well, but rather backward, the weather has been cold for the time of year, (colder through April and May than for the past 5 years.) There is a good deal of corn to plant yet. I think there will be a large amount of sorghum planted—more than ever before. Stock of all kinds are in good condition; losses have been small for the past season. One reason I think is that stock men are taking more pains to shelter and care for their stock and provide feed for cold stormy weather even after grass comes. I would like to see a good creamery started in this section. There are plenty of cows, but no one with the experience and ability to start the thing. We have the stock, feed and water. I would like to ask if molasses can be manufactured with coal for fuel; or does it require some wood? Can any one of the correspondents tell me how to get rid of sand burrs—(not cockle burrs) and gophers—(not ground squirrels?) I notice in the FARMER of May 2d, a statement from an eastern paper that there was a time in June when the bark could be all taken off from an apple tree without killing it. I would not advise a new beginner to try the experiment on a nice thrifty tree, as I did once. The experiment did not fail, but the tree did. I would like to hear some one give their experience in raising honey locust trees from the seed in central or western Kansas; also how to take care of a cottonwood grove after the trees are from 2 to 4 inches through.

RUSSELL CO. FARMER.

SEEK

health and avoid sickness. Instead of feeling tired and worn out, instead of aches and pains, wouldn't you rather feel fresh and strong?

You can continue feeling miserable and good for nothing, and no one but yourself can find fault, but if you are tired of that kind of life, you can change it if you choose.

How? By getting one bottle of BROWN'S IRON BITTERS, and taking it regularly according to directions.

Mansfield, Ohio, Nov. 26, 1881.

Gentlemen:—I have suffered with pain in my side and back, and great soreness on my breast, with shooting pains all through my body, attended with great weakness, depression of spirits, and loss of appetite. I have taken several different medicines, and was treated by prominent physicians for my liver, kidneys, and spleen, but I got no relief. I thought I would try Brown's Iron Bitters; I have now taken one bottle and a half and am about well—pain in side and back all gone—soreness all out of my breast, and I have a good appetite, and am gaining in strength and flesh. It can justly be called the king of medicines.

JOHN K. ALLENDER.

BROWN'S IRON BITTERS is composed of Iron in soluble form; Cinchona the great tonic, together with other standard remedies, making a remarkable non-alcoholic tonic, which will cure Dyspepsia, Indigestion, Malaria, Weakness, and relieve all Lung and Kidney diseases.

HAZELWOOD

Poultry and Egg Farm

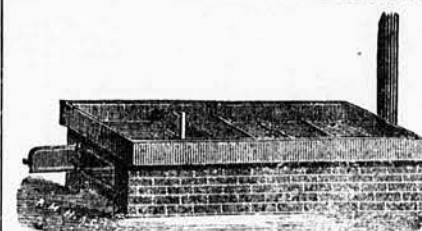
DAVIS & NYE, - - LEAVENWORTH, KAS.

Forty varieties of the leading Land and Water Fowls, including Brahmas, Cochins, French, American, Plymouth Rock, Hamburgs, Polish, Leghorns, Spanish, Dorkings, Langshans, Guineas, Bantams, Ducks, Geese and Turkeys.

Our stock exhibited by Wm Davis at St Jo, Bismark, Kansas City and the great State Fair at Topeka this fall (October, '82) won over 200 1st and special premiums.

Will issue fine catalogue and price-list in January, 1883.

HARPER'S MOLASSES EVAPORATOR.



Send for price list. HARPER, GREENE & CO., Leavenworth, Kansas.



R. T. McCULLY & BRO., Lee's Summit, Mo., breeders of thoroughbred American Merino sheep. 50 choice yearling ewes in lamb to Rams valued at \$1,000 each will be sold at bargain if taken in the next 30 days; will sell in lots to suit purchasers. Also a fine lot of Light Brahma cockerels of the

Duke of York and Autocrat strain. We solicit your patronage and guarantee a square deal.

Scratchings.

[These items are selected from many sources. We do not pretend to give the authority, because we are not certain about it.—EDITOR FARMER.]

A correspondent says: "I had a hog that was completely covered with lice. I was told to put black machine oil on, and I did so. I took a spring-bottom can, and I gave the hog a good greasing. One dose thoroughly eradicated both lice and nits. That was last summer, and the hog has not been troubled with lice since. Anybody having stock troubled with lice will find a sure cure in oil."

Production, transportation, consumption, are the three most forceful factors of progress, prosperity and civilization. When they go hand in hand contentment accompanies them. When they become severed, unrest, discontent, danger, are abroad in the land. To maintain the former condition and prevent the latter should be the purpose and study of every one interested in the order and well-being of society.

The one section of the Union marketing wool more freely than any other at this time is Texas. The immense clip of that state is moving steadily to market, and is unquestionably making money for the growers. Such quantities of the staple as the southwest is now furnishing have heretofore been unknown in that region. By the way, the cheapness and abundance of the Texas clip no doubt has some influence in the way of weakening the Eastern markets.

The feed for milk depends somewhat on the purpose for which you design your milk. If you were going to make butter you would find little profit in adding wheat bran to your ration, and if you were going to sell your milk Indian meal would be one of the least profitable articles that you could employ, because the quantity would be less increased by a dollar's worth of meal than it would be by a dollar's worth of bran or a dollar's worth of cotton seed meal.

So it is found that animals on the road to maturity take no more weight from a given quantity of food than after maturity. To feed an animal, then, after maturity, is a disadvantage, and to feed during winter, when the whole feed goes to sustain the animal heat, to restore the waste of the body, when no weight or growth is added, is an absolute loss of time and money. Hence early maturity, when meat stock is fat enough for market, is a prime necessity to stock raising.

Ammonia is very useful in the kitchen. A few drops mixed in the water will take off any grease from plates, dishes, &c., better than soda, and does not injure the skin of the washer as the constant use of soda does. Ladies will find this a useful hint when they find themselves in the capacity of impromptu maids-of-all-work. Sponges, hair brushes, &c., are best cleaned with diluted ammonia—in fact, it is a very useful thing for many purposes in the house.

Few cooks understand hanging game. Game is not like poultry; it must hang a long time before it has attained to its best flavor. The origin of the term "high," indeed, comes from this long period of hanging up. In larders made specially for game there are hooks ranged one above another right up to the top, and the birds go up a hook every day in succession. By this arrangement the topmost or "high" one is that which has hung longest and is the fittest for cooking.

Ground millet seed is excellent feed for hogs. It has a nutritive ratio of 1:5.4—that is, 1 of albuminoids to 5.4 carbo-hydrates. This is a good fattening ration, and it will depend upon the relative price of corn. Half millet and half corn, ground fine, will make a better ration than corn alone. The pork will have a better proportion of lean and the pigs will be healthier while fattening. Ground millet will be found a very appropriate food for growing young pigs, giving them a larger and more muscular frame.

A German agriculturist, after twenty-five years experience, contrary to the general belief that the larger varieties of merino are to be preferred on account of their yielding a better return both in flesh and wool for the fodder consumed, declares the reverse to be true, as the build of the sheep has a greater influence on the fattening properties than the absolute size, and larger quantities of wool are obtained from small sheep in relation to a given weight than in the larger kinds, the relative increase amounting to from 20 to 30 per cent.

Remember This.

If you are sick Hop Bitters will surely aid Nature in making you well when all else fails.

If you are costive or dyspeptic, or are suffering from any other of the numerous diseases of the stomach or bowels, it is your own fault if you remain ill, for Hop Bitters are a sovereign remedy in all such complaints.

If you are wasting away with any form of Kidney disease, stop tempting Death this moment, and turn for a cure to Hop Bitters.

If you are sick with that terrible sickness, Nervousness, you will find a "Balm in Gilead" in the use of Hop Bitters.

If you are a frequenter, or a resident of a miasmatic district, barricade your system against the scourge of all countries—malaria, epidemic, bilious and intermittent fevers—by the use of Hop Bitters.

If you have rough, pimply, or scaly skin, bad breath, pains and aches, and feel miserable generally, Hop Bitters will give you fair skin, rich blood, and sweetest breath, health and comfort.

In short they cure all Diseases of the Stomach, Bowels, Blood, Liver, Nerves, Kidneys, Brights Disease. \$500 will be paid for a case they will not cure or help.

That poor, bedridden, invalid wife, sister, mother or daughter, can be made the picture of health by a few bottles of Hop Bitters, costing but a trifle. Will you let them suffer?

As a rule, a beef animal that weighs 1,000 pounds is worth twice as much as one that weighs but 500 pounds; but this rule does not work with milch cows. That is, a cow that yields 100 pounds of butter a year is not worth one-half so much as a cow that yields 200 pounds a year, for the simple reason that while the first or 100 pound cow barely pays her keep, and, if highly fed, absolutely costs more than she makes, the latter, or 200-pound cow, makes a profit. Too much care cannot be taken in weeding out the unprofitable members of the herd.

DR. JOHN BULL'S Smith's Tonic Syrup FOR THE CURE OF FEVER and AGUE Or CHILLS and FEVER. AND ALL MALARIAL DISEASES.

The proprietor of this celebrated medicine justly claims for it a superiority over all remedies ever offered to the public for the SAFE, CERTAIN, SPEEDY and PERMANENT cure of Ague and Fever, or Chills and Fever, whether of short or long standing. He refers to the entire Western and Southern country to bear him testimony to the truth of the assertion that in no case whatever will it fail to cure if the directions are strictly followed and carried out. In a great many cases a single dose has been sufficient for a cure, and whole families have been cured by a single bottle, with a perfect restoration of the general health. It is, however, prudent, and in every case more certain to cure, if its use is continued in smaller doses for a week or two after the disease has been checked, more especially in difficult and long-standing cases. Usually this medicine will not require any aid to keep the bowels in good order. Should the patient, however, require a cathartic medicine, after having taken three or four doses of the Tonic, a single dose of BULL'S VEGETABLE FAMILY PILLS will be sufficient.

The genuine SMITH'S TONIC SYRUP must have DR. JOHN BULL'S private stamp on each bottle. DR. JOHN BULL only has the right to manufacture and sell the original JOHN J. SMITH'S TONIC SYRUP, of Louisville, Ky. Examine well the label on each bottle. If my private stamp is not on each bottle do not purchase, or you will be deceived.

DR. JOHN BULL,
Manufacturer and Vendor of
SMITH'S TONIC SYRUP,
BULL'S SARSAPARILLA,
BULL'S WORM DESTROYER,
The Popular Remedies of the Day.
Principal Office, 881 Main St., LOUISVILLE, KY.

SEEDS! FARMERS GARDENERS NURSERYMEN IMPLEMENTS

It pays to have good tools and seeds. It pays to buy of a reliable house. It will pay you to send for our Illustrated Catalogue.
Philadelphia Lawn Mower, Cahoon Broadcast Seed Sower, Matthews' Seed Drills, and other first-class goods. Everything for the Lawn, Garden, Greenhouse or Nursery.
WE ARE THE SOLE WESTERN AGENTS.
WE WARRANT everything as represented.
HIRAM SIBLEY & CO.
SEEDS AND IMPLEMENTS,
Fully Illustrated Catalogue sent free.
CHICAGO, ILL., Wholesale and Retail. ROCHESTER, N.Y.

CENTRAL ILLINOIS SERIES

—OF—

Short-Horn Sales.

TUESDAY, JUNE 5, 1883.

J. H. SPEARS, of TALLULA, ILL., and E. M. GOFF, of SWEETWATER, ILL., will sell at Springfield Fair Grounds, 60 head of Cows and Heifers, and 20 Bulls, of such families as Nelly Bly, Young Mary, Jubilee, Pomona, Multiflora, White and Red Rose, Mrs. Motte, etc. Such bulls as Baron Bright Eyes 37554 (he will be sold), Major Taylor 39816, and a Rose of Sharon, have been in use in the herds.

WEDNESDAY, JUNE 6, 1883.

S. E. PRATHER, SPRINGFIELD, ILL., and D. W. SMITH, BATES, ILL., will sell at Springfield Fair Grounds, 55 Cows and Heifers and 25 Bulls, of such families as Rose of Sharons, Young Marys, Young Phyllis, Illustrious, Western Lady, Wild Eyes, Princess, Lady Elizabeth, Bride, Galatea, Pomona, Emelia, Multiflora, White and Red Roses etc., etc. Sires in use in the herds, Bruere's Booth 25795, Red Lord 30790, Major Booth 30240, a Rose of Sharon, 35th Duke of Oxford 26350, and Earl of Portland 46015.

THURSDAY, JUNE 7, 1883.

PICKRELL, THOMAS & SMITH, of HARRISTOWN, MACON CO., ILL., will sell (at home) 68 Cows and Heifers and 17 Bulls. In the lot will be found 16 Rose of Sharons (Renick sort), 42 Young Marys, 6 Young Phyllises, 3 Josephines, 2 Loudon Duchesses, 2 Wild Eyes, and 15 of other good families.

Waterloo Duke 2d 41247, Rose of Sharon and Young Mary bulls being in use in the herds.

For catalogues or any particulars address the parties as above.

J. W. & C. C. JUDY, Auctioneers.

WALNUT GROVE HERD.

SETH E. WARD & SON, Prop'r's

WILL SELL IN CONJUNCTION WITH THE

JACKSON COUNTY BREEDERS

At KANSAS CITY STOCK YARDS.

On Wednesday, Thursday and Friday, May 23, 24 and 25, 1883,

About Forty Head of

THOROUGHbred SHORT-HORN CATTLE,

Consisting of Fourteen Bulls and Twenty-three Females, nearly all of our own breeding, the get of Oxford and Duke Bulls, out of highly-bred cows. We will also offer, with a reserve bid, or sell at private sale, OXFORD BELL DUKE, 9047 S. H. R., five years old next August, and BELL DUKE OF GENEVA, 37671, A. H. B., two years old, by Grand Duke of Geneva, out of Bell Duchess, by 6th Duke of Geneva, (7983) and 1751 S. H. R., out of Lady Belle by 2d Duke of Airdrie (19600) and 173 S. H. R. Those wanting pure bred bulls to head their herds, or heifers to start a herd with, will do well to attend. The offerings will comprise animals of the following noted families: Roan Duchess, Craggs, Rose of Sharons, Mazurkas and Young Marys the get of Oxford of Vinewood 3d 9062, S. H. R. and 3427 A. H. B., and Oxford Belle Duke.

We have consented to make this sale and part with these cattle from the fact that our herd has increased beyond the capacity of our farm to properly care for and breed them, having been breeding and improving our herd since 1874, and having never made a sale of our own; only parting at times with a small portion of our females, and the small excess of bulls.

SETH E. WARD & SON, Westport, Jackson Co., Mo.

Also, at Same Time and Place,

W. T. HEARNE, of Lee's Summit, will sell some Fifty Odd Head of Choice

SHORT-HORN CATTLE

ABOUT ONE-THIRD BULLS, the rest COWS and HEIFERS, all in good shape and breeding condition. For individual excellence and purity of blood, this stock ranks with any herd in the country, and is well worthy the attention of intending purchasers. More full particulars given in Catalogues, which will be mailed to all applicants.

W. T. HEARNE, Lee's Summit, Mo.



PUBLIC SALE

—OF THE—



ELMENDARO HERD OF SHORT-HORN CATTLE,

At Lyon County Fair Grounds, Emporia, Kansas, Thursday, May 31, 1883, at 10 o'clock a. m.

I will sell at public sale, without reserve, my entire herd of Short-Horn Cattle, consisting of forty-five head of females and fourteen bulls, one and two years old. Among this herd will be found members of the leading Short-horn families, and all will be found to possess good individual merit. Catalogues will be furnished to visitors on day of sale. Free lunch will be served at the grand stand at noon.

TERMS OF SALE.—A credit of six months will be given, with ten per cent. interest on bankable paper.

COL. H. W. PEARSALL,
Auctioneer.

LEVI DUMBAULD,
EMPORIA, KANSAS.

Ladies' Department.

The Golden Year.

We sleep and wake and sleep, but all things move;

The sun flies forward to his brother sun,
The dark earth follows wheeled in her eclipse,

And human things returning on themselves,
Move onward, leading up the golden year.

Ah, though the times when some new thought can bud

Are but as poet's seasons when they flower,
Yet seas that daily gain upon the shore
Have ebb and flow conditioning their march.
And slow and sure comes up the golden year.

When wealth no more shall rest in mounded heaps,

But smit with freer flight shall slowly melt
In many streams to fatten lower lands,
And light shall spread, and man be liker man

Through all the seasons of the golden year.

Shall eagles not be eagles? wrens be wrens?
If all the world were falcons, what of that?
The wonder of the eagle were the less,
But he not less the eagle. Happy days
Roll onward, leading up the golden year.

Fly, happy, happy sails and bear the press;
Fly, happy with the mission of the cross;
Knit land to land, and blowing heavenward
With silks, and fruits, and spices free of toil,

Enrich the markets of the golden year.

"But we grow old." Ah, when shall all men's good

Be each man's rule? and universal peace
Lie like a shaft of light across the land,
And like a lane of beams athwart the sea
Through all the circle of the golden year?

—Alfred Tennyson.

Katie Darling.

Chapter 7 of this story is not yet ready for the printer. We will therefore discontinue its publication for the present, and will wait until we learn from our readers whether they wish it resumed. The author is a sensible woman, and she does not desire to be heard unless the people desire to hear.—ED. FARMER.

Chocolate Culture.

Delta asks through the FARMER of April 25th for more information about the cultivation of chocolate of which I wrote some time ago. I would say it is planted and cultivated like broom corn. And if she will send her address and postage stamp I will send her seed and tell her how to prepare for use. Address, SALINA GIRL, Salina, Kansas.

I have two friends that use Frank Siddell's soap; they are very much pleased with it. It is much easier than the usual way of washing and the clothes look as well. They both use cistern water; I do not know how it would do to use hard water. This is in reply to the inquiry made by Lily. Can any of the ladies tell me how to make the old fashioned potato soup? If Rachel will roll her mush in flour she will not have any trouble in turning it, and it browns so much quicker. I roll potato balls in flour before frying. WYBEL.

Watering Plants in Pots.

A German paper says: "Watering plants is one of the most important things in the culture of house plants, and very special care should be devoted to it. Plants ought not to be wet until they need it. It will be evident that they require wetting, if on taking the earth from the pot it crumbles to pieces like dust. A sure sign is to knock on the side of the pot, near the middle, with the finger knuckle. If it gives forth a hollow ring, the plant needs water; if there is a dull sound, there is still moisture enough to sustain the plant. Plants must not be wet more than once or twice a day; on dry, clear days they require more water than on damp, cloudy days. On the other hand the earth must not be allowed to dry out entirely, for that is also very injurious. In wetting them the water must be poured on in such a way that it will run out again through the hole in the bottom of the pot. If the earth gets too dry, it is best to place the pot in water so that the water will saturate the

dirt very gradually. They may be watered at any hour of the day, except when the sun is shining on the pot or has just left it; for the earth gets hot when the sun shines on it, and then if cold water is poured on it, it will cool off too rapidly. The best time for watering flowers in summer is the evening, and in winter noon is best. Well water should never be used, but always use either rain water or brook water."

The Wild Flowers of Montana.

The wild flowers of Montana are as abundant as those of the Alps, and more varied. Choicest of them all, because most delicate and fragrant, is a white, star-shaped, wax-like blossom, which grows very close to the ground, and the large golden stamens which give out an odor like mingled hyacinth and lily of the valley. The people call it the mountain lily. There is another lily, however, and a real one—yellow, with purple stamens—that grows on high slopes, in shaded places. The yellow flowering currant abounds on the lower levels, and the streams are often bordered with thickets of wild-rose bushes. Dandelions abound, but do not open in full, rounded perfection. The common blue larkspur, however, is as well developed as in our eastern gardens, and the little yellow violet, which in the States haunts the woods and copses, is at home in Montana alike in the moist valleys and upon the bleak, dry hillsides. Small sunflowers are plentiful; the bluebell is equally abundant in the valleys and on mountain ridges; and in early June there blooms a unique flower called the shooting star, shaped like a shuttlecock. There are a dozen other pretty flowers, but I could not learn their names—among them a low-growing mass, the clumps of which are starred over with delicate white or purple blossoms.—Century.

What I Know About Greens—Iron Pots.

Spring greens and asparagus being now in season, and peas, string beans and early cabbage soon to come, it is in order to offer recipes for cooking them. Methinks, though, I hear some Mrs. Pike say with elevated nose, "I don't want nobody to tell me how to cook that kind of truck. I've knowed that ever since I knowed anything; just put 'em into a pot o' water with a hunk of bacon and bile 'em, and that's all that is to it;" and her pert sister, from down east, will answer—"Yes, that's my way, too, only I use pickled pork instead of bacon. I don't think such things are very healthy though, they always kinder rise on my stomach."

Yes, I should think so. The wonder is that such greasy, disgusting messes could find their way to any but an Esquimaux stomach. Listen now, to the civilized way of cooking greens. Wash them clean and drop them into boiling water, just enough to cover them; put in a little pinch of soda, cover and boil till tender; then drain and press them in a colander; chop them coarsely with a sharp knife; season with butter, salt and pepper, and dish them up with slices of hard boiled eggs laid around them.

Spinach—Is prepared in the same way, only it requires less water to cook it. Put about half a teacupful in the pan at first and the spinach leaves will supply the rest.

Cabbage—I cook exactly like greens, slicing it coarsely before cooking, and omitting the eggs in dressing it. Cooked in this way, it is sweet, tender and digestible, almost equal to cauliflower in flavor. Try it.

Asparagus—Everybody likes, but nobody knows how delicious it really is till they have eaten it cooked in the following way: Let it grow one or even two feet high before gathering. Then snap the stalks as low as it is tender; break into suitable lengths for cooking; wash clean and lay in a tin or granite ware stew-pan; throw in a little pinch of baking soda; pour on barely enough boiling water to cook it; cover closely and boil fast twenty or thirty minutes. When done, pour off part of the water, leaving about half a teacupful in the pan. Add salt, half a teaspoonful of sugar, and a good lump of butter rolled in flour, and let it boil a moment longer. Have ready a large slice of buttered toast in the bottom of your tureen, and pour the asparagus over it. Cream is sometimes preferred to butter; in that case, pour off nearly all the water.

Green peas and string beans should be cooked in the same way, omitting the toast.

All the vegetables I have named, with the exception of spinach, possess an acrid principle which is neutralized by soda, making

them wholesome and tender, and giving them an attractive, green color. They should always be cooked in tin, porcelain, or granite ware. Iron pots blacken them and spoil their flavor; besides they are regular woman-killers and ought to be abolished by law. Think of the round shoulders, crippled backs, lame wrists, and distorted hands, caused by wrestling with those great heavy things. If I were a society to prevent women from being cruel to themselves, and had unlimited power, I would send every iron pot in the country to the foundries to be sold for scrap iron; and if any husband dared object, I'd have his kitchen pots made into big plantation hoes and compel him to swing them when the mercury was up in the hundreds. If that man didn't experience a change of heart in less than two hours, it's queer. Or, I might set him to getting dinner while his wife took a turn on the sulky plow or harvester; that would fetch him as sure as my name is GRISelda.

A True Lady.

Wildness is a thing which girls cannot afford. Delicacy is a thing which cannot be lost or found. No art can restore to the grape its blossom. Familiarity without confidence, without regard, is destructive to all that makes woman exalting and ennobling. It is the first duty of a woman to be a lady. Good breeding is good sense. Bad manners in a woman is immorality. Awkwardness may be incredible. Bashfulness is constitutional. Ignorance of etiquette is the result of circumstances. All can be condoned and not banish men or women from the amenities of their kind. But self-possessed, unshrinking and aggressive coarseness of demeanor may be reckoned as a state's-prison offence, and certainly merits that mild form of restraint called imprisonment for life. It is a shame for women to be lectured on their manners. It is a bitter shame that they need it. Do not be restrained. Do not have impulses that need restraint. Do not wish to dance with the prince unsought; feel differently. Be sure you confer honor. Carry yourself so loftily that men will look up to you for reward, not at you in rebuke. The natural sentiment of man toward woman is reverence. He loses a large means of grace when he is obliged to account her a being to be trained in propriety. A man's ideal is not wounded when a woman fails in worldly wisdom; but if in grace, in tact, in sentiment, in delicacy, in kindness, she would be found wanting, he receives an inward hurt.—Gail Hamilton.

Summer Flowering Bulbs.

The Gladiolus has become one of the most popular of summer flowers. It has many commendable qualities, and requires but little of what may be called skill in its management. The bulbs may be planted as soon as the frost leaves the ground in spring, and if a succession of flowers is desired, planting may be made weekly until the middle or end of June. The bulbs for late planting must be kept in a very cool cellar to prevent them from growing prematurely. Like most other bulbs, Gladiolus thrive best in sandy, or at least light soil, and if the finest flowers are to be obtained, the soil must be well enriched. In dry seasons the blooms will be short lived, but this can be materially counteracted by mulching around the stems. This is preferable to watering, which sometimes injures the bulbs. They ripen seed very freely, but it is at the expense of the young bulbs, and where it is not proposed to save seed, the future flowering bulbs will be greatly helped in growth by removing the flower stem as soon as the flowers fade. Each bulb will form two bulbs for future planting, and in addition to these, numerous small bulblets will be found clustering at the base of the larger bulbs. These small bulbs will vary in size from a marble to a pea. These should be carefully gathered and sown in rows like peas, when they will soon reach the size of flowering bulbs. The bulbs should be lifted in the fall, and after being well dried in the sun, stored in a dry place where no frost can enter. In dry soils even in the middle States they can be planted deep enough to escape injury from freezing, but it is the safer plan to lift the bulbs after the stems decay, and keep them dry during winter.

The *Trigridia*, or Tiger flower, is a Mexican bulb which produces tulip-shaped flowers of a scarlet color, spotted with yellow. The flowers are very beautiful, but of short

duration, lasting only one day; but it continues flowering some time, several flowers being produced from the same stalk. The bulbs are small and appear almost worthless, but if they are planted in a deep, light rich soil they will flower satisfactorily. They are very tender, and will not stand any frost, consequently they should be lifted and kept in a dry place where there is no frost. They should not be planted until the ground becomes warmed in spring, otherwise the bulbs will be apt to decay.—National Tribune.

So prevalent is the habit of talking small nonsense in company, that even thinking people mask their intelligence by its use. But let some one person bring a sensible topic of conversation forward, and it is wonderful how soon he will be surrounded by others, well-informed concerning it, and anxious to diffuse their knowledge. The trouble is, we do not understand each other. Men have become thoroughly impressed with the idea that in order to make themselves agreeable they must keep up a constant stream of nonsense and silly utterances, and the ladies seem to have formed the same idea in regard to the gentlemen, until out of this mutual misunderstanding has grown this empty, meaningless jargon of words at almost every social entertainment—a short shower of soap bubbles.

Extensive Arrangements

Have been completed by which we are enabled to supply the Compound Oxygen for home use to any extent, and to all parts of the country, giving at the same time the right of free consultation by letter during the time a patient may be using the Treatment. Every case submitted to us will be carefully considered. Our Treatise on Compound Oxygen, its nature, action, and results, with reports of cases and full information, sent free. Drs. Starkey & Palen, 1109 and 1111 Girard street, Philadelphia, Pa.

Mrs. Dunlap, of York county, S. C., though 86 years old, picked 1,500 pounds of cotton last fall.

Invalid mothers, weak children, nervous and fretful infants are benefited by using Brown's Iron Bitters. Harmless but efficacious.

Matrons are found to be useful in the police stations in Glasgow. Seven are employed there to take charge of female prisoners.

As a rule we prefer physician's prescriptions in preference to using patent medicines of whose composition we are ignorant. But we make an exception in favor of Lels' Dandelion Tonic. Its use in our family has been eminently satisfactory, and we heartily recommend it.—J. S. Boughton, Editor of Kansas Monthly.

Macrame lace-making is the latest agony. It does not pay very well as a business—an accomplished worker making the munificent sum of ten cents a day.

Waiting a Claimant.

A challenge is offered to any one who can produce a case of torpid liver that will not succumb to the influence of Simmons' Liver Regulator, regularly taken by direction. Genuine prepared only by J. H. Zeilin & Co.

It was a New Jersey woman who invented an attachment to the mowing machine, whereby the knives are thrown out of gear whenever the driver leaves his seat, thus lessening the liability to accident.

If your lungs are almost wasted by consumption Dr. Pierce's "Golden Medical Discovery" will not cure you, yet as a remedy for severe coughs, and all curable bronchial, throat, and lung affections, it is unsurpassed. Send two stamps for Dr. Pierce's large pamphlet treatise on Consumption and Kindred Affections. Address World's Dispensary Medical Association, Buffalo, N. Y.

Canning oranges is the latest Florida idea. It was started by two maiden ladies who, finding no market for their oranges, conceived the plan of canning them like other fruit. It was a perfect success.

Woman and Her Diseases

is the title of a large illustrated treatise, by Dr. R. V. Pierce, Buffalo, N. Y., sent to any address for three stamps. It teaches successful self-treatment.

A lady who lives in Central New York, near the lakes, and who has high family connections, and is known in the best society in Washington, employs her time in summer in preserving and picking small fruits and vegetables, at which she has great skill; and her sales reach \$2,000 a year.

PITTSFORD, MASS., Sept. 28, 1878.

Sirs: I have taken Hop Bitters and recommend them to others, as I found them very beneficial. MRS. J. W. TULLER, Sec'y Women's Christian Temperance Union.

The Young Folks.

By the Cow-Yard Bars.

While the kine looked on with reproachful eyes,
And waited outside of the cow-yard barn,
On the dewy grass, at the milking hour,
He lay as he gazed at the dawning stars.
And who knows what they were saying to him?
For his wondering eyes grew bright—grew dim,
While they danced in glee and seemed to keep time
To his quickened heart with its throbbing rhyme.
“Is the milking done?” said his father’s voice;
“What! here are the cattle outside the bars,
And that stupid boy lies there in the dew,
With his face upturned to the moon and stars!”
And the boy stood up and was scolded well;
For how could the father, impatient, tell,
Of the heights to which he would some day rise,
His stupid boy with the dreamy eyes.
How could the father, my children, know,
That the greatest astronomer earth can show,
Stood faltering there in his little son,
Who was late in getting the milking done?
But weary of honors in after years,
A man looked back through smiles and tears,
To the old home scene and the silver stars,
And the dreaming boy by the cow-yard bars.

Bank-Note Paper.

The fibered bank-note paper on which American legal tender, national bank-note currency and government bonds are printed is made at Dalton, Mass., in an old mill, whose existence dates back to colonial times. If you should stop at the old paper-mill, with proper credentials, you may perhaps be allowed to handle a sheet of the crisp paper, where, as the wet, grayish pulp is pressed between heavy iron cylinders, bits of blue and red silk are scattered over its face and silken ribs laid on its surface. You may go beyond, into the counting room, where each sheet, as it comes from the drying room, is carefully examined and counted and then returned to the paper-cutter to be divided into smaller sheets. If you trace this paper still further, you will find that from the cutter’s hands it passes again into the counting room, and is separated into little packages containing 1,000 sheets each, the amount recorded in a register, and then packed in bundles and stored in fire and burglar-proof vaults to await shipment to the United States treasury. From the pulp-room to the vault the precious paper is watched and guarded as carefully as though each sheet were an ounce of gold. Its manufacture is one of the greatest secrets connected with the government’s money making. From the vaults of the paper mill at Dalton to the guarded store-rooms of the treasury at Washington is a journey of several hundred miles. In the capacious vaults of the treasury building, among gold, silver, copper and nickel coins, bullion, paper currency and official records, you will find thousands of packages of the bank-note paper made at Dalton. It comes in little iron safes, such as are used by the Adams’ Express Company, and each package and every sheet is carefully counted before the manufacturer and express company are relieved of further responsibility. The paper that arrives to-day may lie in the treasury store-room for years, or it may be sent to the Bureau of Engraving and Printing to-morrow, to return, in the course of a month’s time, a legal-tender or bank note.

“Oh, aunty,” cried little Amy in the nursery yesterday, “make Freddy behave himself; every time I happen to hit him on the head with the mallet he bursts out crying!”

The dairy-maid pensively milked the goat, And pouting, she paused to mutter:
“I wish, you brute, you would turn to milk,”
And the animal turned to butt her.

“Why should you celebrate Washington’s birthday more than mine?” asked a teacher.
“Because he never told a lie!” shouted a little boy.

Writing.

The first method of presenting thoughts to the eyes was the pictorial system. This mode of writing is quite profusely given in the Egyptian hieroglyphics, which the priests employed in a symbolical and allegorical manner. The eye, for instance, became a symbol of Providence, the bird an emblem of swiftness, the scaling ladder a representative of siege. Champollion claims that the hieroglyphics are divisible into three distinct classes—the symbolic, the phonetic and the figurative signs. It is unknown when picture writing was invented. Some writers affirm that letters came into use when the abbreviations of pictorial signs became necessary as the system extended. For example, two hands and a bow took the place of an archer; an eye and sceptre signified a monarch. In time, even these curtailed signs were found to be inadequate to the wants of the people in giving signs to thoughts. Figures were employed to represent language and its separate organic elements. It is unknown when alphabetic or letter writing was first discovered. It is supposed that Moses was acquainted with the art of writing, which proves that its existence was known at a very early period. The Greeks and Romans asserted that the Phoenicians were the inventors of letters. Some attribute the invention of letters to Moses; others believe that Abraham knew the art of writing, and we are also told by some learned historians that Abel knew the use of letters. The Jewish Rabbis say, “God created letters on the evening of the first Sabbath.”

A very singular invention of a syllabic alphabet is related of a Cherokee Indian, who was ignorant of the English tongue and could not read a word in any language. This poor savage succeeded in producing, in 1824, an alphabet so complete that he was enabled to write a letter. The Cherokees were delighted; the youth of the band traveled a great distance to learn the new art of writing and reading, which, from the peculiarity of the alphabet and language, they could acquire in three days sufficiently to practice themselves and to teach others. Types for printing in this character have been cast. The appearance of the language thus printed is singularly uncouth and barbarous.

The invention of marks for punctuation is ascribed to Aristophanes, the famous Greek grammarian. Abbreviations of words were not made in ancient writing, except upon coins and inscriptions. There are extant some remains of an ancient system of writing, in which all the characters are formed by different combinations of one simple element. No satisfactory method of interpretation has ever been given of these writings. Of all books now in existence, the writings of Moses and the book of Job are considered the most ancient.

The Mexicans used the pictorial method of writing. It is related that “they apprised their King, Montezuma, of the landing of the Spaniards by means of a linen cloth, on which this event was represented by pictures of visible objects.” The manner of reading the Mexican picture-writing is different from all others. It is in columns, beginning at the bottom to read. The Japanese and Chinese also write in columns, but they read from the top, going from right to left. The Germans first wrote in the Latin characters; their alphabet was not in general use until the thirteenth century. The “monastic” alphabet was used in Germany as early as the eleventh century. About the time of the Roman conquest writing was first practiced in Britain. The several forms of French writings derive their names from the different races of kings who have ruled that country.

The Greeks have ever manifested great enthusiasm in promoting knowledge. The first library that is known was collected by Pisistratus, who lived at Athens. King Attalus had a library that is known was collected by Pisistratus, who lived at Athens. King Attalus had a library that contained 200,000 books on rolls. The celebrated library of Alexandria was founded by Ptolemy Philadelphus; it is said to have numbered 700,000 volumes. It was destroyed in 642 A. D. The first private library is supposed to be the one founded by P. Emilius, 167 B. C. The first public library was founded by Asinius Pallio, in the hall of the Temple of Liberty on Mount Aventine. Augustus founded the celebrated library in the Tem-

ple of Apollo on Mount Palantine. The Romans had several large private libraries. Tyrannius, a native of Pontus, who was taken prisoner by Lucullus and brought to Rome as a slave, and, receiving his freedom, taught grammar and rhetoric, invested much of his earnings in buying books, and is said to have collected a library of 30,000 volumes. Constantius established a public library at Constantinople. Its contents increased from time to time to 120,000 volumes. It was destroyed by fire in A. D. 477.

There are certain tropical trees in India, Africa, Guiana and Brazil called butter-trees, which yield concrete, fixed oils, having the appearance and used for the purpose of butter. One species of these trees, *Bassia Parkii*, is described by Mungo Park as growing in the interior of Africa, in the country of Bambarra. It produces *galam butter*, also called *shea butter* (i. e., tree butter), which is highly valued, and forms an important article of commerce in the interior of Africa. The seeds of the fruit, which resemble an olive, are dried in the sun in a peculiar kind of oven, and the kernels are boiled in order to obtain the butter from them, which not only keeps without salt for a whole year, but is also whiter, more solid, and more pleasant to the taste than the butter of cows’ milk. This butter is used both as an article of food and as a medicine.

A Home-made Telephone.

The American Farmer gives the following directions for making a cheap home-made telephone:

To make a good and serviceable telephone, good from one farm house to another, only requires enough wire and two cigar boxes. First select your boxes, and make a hole about a half an inch in diameter in the center of the bottom of each, and then place one in each of the houses you wish to connect; then get five pounds of common iron stove pipe wire, make a loop in one end and put it through the hole in your cigar box and fasten it with a nail; then draw it tight to the other box, supporting it when necessary with a stout cord. You can easily run your line into the house by boring a hole through the glass. Support your boxes with slats nailed across the window, and your telephone is complete. The writer has one that is 200 yards long and cost forty-five cents that will carry music when the organ is played thirty feet away in another room.

Letters From Little People.

ED. KANSAS FARMER: I am herding the ewes and lambs this spring for my papa. I like to help all I can. The loss in sheep has been very large in this part of the county the past winter. Farmers have got most of their corn planted. There has been many thousand cottonwood trees planted here this spring. This is a good county for every kind of stock. The wheat looks well, but rye looks better. I have a pet lamb 1 year old and call her Jennie; she will follow me every place and is as large as a full grown sheep. She went to school with me twice which is two miles away. I like your paper very much; this was our third year’s subscription to it. SHEPHERDESS.
Vosburgh, Stafford Co., Ks., April 30.

Enigmas, Charades, Questions, Etc.

Enigma No. 24.—I am composed of 23 letters in 6 words.

My 1, 5, 7, 12, means not wild.
My 23, 16, 20, 3, 6, is to go in.
My 9, 10, 5, 6, is a heavenly body.
My 7, 14, 21, 22, shines at night.
My 20, 11, 16, is equal to 2,000 pounds.
My 10, 8, 16, 23, is part of a fork.
My 1, 5, 6, is made from pitch pine.
My 21, 2, 8, 14, is the name of a river.
My 15, 21, 14, 20, is part of every plant.
My 7, 21, 14, 9, 3, is an animal.
My 11, 14, 6, 10, is what a muley cow never had.

My whole is what every farmer’s son and daughter should know and remember.

Question No. 39.—When is a President of the United States elected—when is he installed into office—what oath does he take—what qualifications does the constitution require him to have?

Question No. 40.—What are the different State officers in Kansas, and what are their salaries?

Answers to Questions.

Question 36.—Answer: Clouds are formed by vapors rising from the earth. Rain is caused by the condensing of these vapors. The condensation is caused by a cooling of the atmosphere, and the condensed vapor—water, falls off in drops—rain.

Question 37.—Answer: Climate is the result of atmospherical conditions, and is affected by water, wind, mountains, soil, vegetation and geographical position.

To M. E. R.—The poetry sent us is good for a 13-years old boy; but it would sound much better if stated plainly in prose. If the story had been sent to us in prose, carefully written, it might be published, but it is too long for our use—as a poem.

English gentlemen of Queen Elizabeth’s time were accustomed to wear handkerchiefs in their hats as favors from young ladies. These articles when wrought and edged with gold were worth from five pence to twelve pence each, their value was not great even in good Queen Bess time, when a penny was a penny.

The Diamond Dyes for family use have no equals. All popular colors easily dyed, fast and beautiful. 10 cents a package for any color.

Mrs. Loretta Brownlow, of Illinois, has patented a simple and convenient machine for crushing and straining fruit for making jellies.

Good health, rosy cheeks and beautiful skin, ladies can get by using Brown’s Iron Bitters.

Anna K. Hawley, of Louisiana, has patented a button that can be readily attached to garments without sewing and readily removed without injury.

Mr. E. F. Rogers, of Kansas City, Mo., writes that Lels’ Dandelion Tonic is the best liver medicine and tonic he ever used in his family, and Mr. Rogers’ opinion coincides with that of every one who has ever taken the Dandelion Tonic.

The invention of the cotton gin, which revolutionized the industries of the world, was due to a woman, though the patent was taken out by a man.

Vital Statistics.

It is shown by the report of Health Boards, and other authorized bodies, that diseases of the kidneys and bladder are largely on the increase; a sad fact, due perhaps to the foolish habit of drinking lager beer and other liquors, without knowing what they are made of. Is there a remedy? Decidedly yes. First, stop drinking. Second, use Hunt’s Remedy—a potent and unfailing specific for kidney, bladder, liver and urinary complaints. Hunt’s Remedy, the great kidney and liver medicine is endorsed by eminent physicians.

A daughter of the late President Johnson manages a farm near Albany, Texas, with such economy that a prosperous future is already assured the President’s two grandchildren.

“Threw Away Her Supporter.”

Dr. Pierce: A neighbor of ours was suffering from “female weakness” which the doctors told her could not be cured without a supporter. After considerable persuasion my wife induced her to try your “Favorite Prescription.” After using one bottle she threw away the supporter and did a large washing, which she had not done in two years before. JAMES MILLER,
4246 Jacob street, Wheeling, W. Va.

When Mrs. Sarah Kerr’s husband died near St. Paul, Neb., he left her a raw farm, a house full of children and a stack of debts. By energy, industry and perseverance, she raised the family to be a help to her, the farm to a high state of cultivation, and made the debts disappear.

*Far more valuable than those golden apples of Hesperides are the life, health and beauty of Womanhood. Mrs. Pinkham’s Vegetable Compound restores and preserves all these.

SPLENDID! 50 Latest Style chromo cards, name, 10c. Premium with 8 packs.
R. H. Pardee, New Haven, Conn.

The Union Package Dyes

Have stood the test of twenty years’ trial and have not been found wanting in quantity, quality, brilliancy or durability. Are more popular than ever. For Silk, Wool or Cotton. Take no other. All Druggists. Price 10 and 15 cents.
UNION PACKAGE DYE CO.

EGGS FOR HATCHING.

American Seabright \$2.00 for thirteen.
Black Javas 2.50 for thirteen.
Houdans 1.50 for thirteen.
Plymouth Rocks 1.50 for thirteen.

Carefully packed in baskets and warranted to carry safely any distance. Illustrated descriptive circulars sent on application. Address V. B. MARTIN, Mentor, Saline Co., Kansas.
Money Order office, Salina, Kas.

THE KANSAS FARMER

Published Every Wednesday, by the
KANSAS FARMER CO.

H. C. DEMOTTE, President.
R. E. BROWN, Treasurer and Business Manager.
H. A. HEATH, General Business Agent.
W. A. PEPPER, Editor.

TERMS: CASH IN ADVANCE.

Single Subscriptions:
One copy, one year, \$1.50
One copy, six months, 1.00

Club Rates:
Five copies, one year, \$7.50
Ten copies, one year, 13.20
Fifteen copies, one year, 18.40

Any one wishing to secure a free copy for one year, may do so by sending in, at one time, the number of subscribers named in any one of the above three clubs, accompanied by the corresponding amount of cash.

REMEMBER:—The club must be full and the cash must accompany the order. If you wish the FREE COPY, so state in your order.

KANSAS FARMER COMPANY.

The Western Kansas Agricultural Fair association will hold a fair at Hayes City, Sept. 26, 27 and 28.

When our friends visit Topeka they will find no better place to obtain a good square meal and comfortable lodging than the Fifth Avenue Hotel, corner of Fifth and Quincy streets.

Trumbull, Reynolds & Allen, Kansas City, Mo., write us that if our readers will watch their advertisement in the FARMER they will find its contents always interesting. Let us all watch it.

Price, Marmaduke & Co., in their wool circular of the 10th inst., say: The new clip is coming forward freely, particularly from Missouri, and its condition is fully as good as last year. So far, but little Kansas wool has been received, though we anticipate very large receipts from that State in the near future. We have no reason to change our opinion, expressed in the beginning of the season, i. e., that early sales will be better than those made later. Our market remains steady; we look, however, for a slight decline soon, especially if eastern advices continue so discouraging.

We are in receipt of the current number of "Travel," a monthly magazine for the use of travelers, published at 162 Broadway, New York, by the American Exchange in Europe (Limited), of which Senator Joseph R. Hawley is President, and Henry F. Gillig General Manager. It is an elegant and most effective publication. The cover and the elaborate maps are the best work of the kind, and the text is of equal excellence. It contains all sorts of interesting and valuable notes for travelers; information about manners and customs, and a large number of skeleton routes in Great Britain, France, Germany, Switzerland, the Spanish and Italian Peninsulas, the Orient, and around the world. It is edited by C. A. Barattini, the experienced traveler and manager.

Potatoes Under Straw.

A writer in the Rural New Yorker gives his method of what he calls "Strawing Potatoes." "Plant the potatoes the same depth in the ground as though no straw was to be put over them, and when they are beginning to come through the ground run through with a big shovel plow and hill up, as flat culture will not do when one wants to 'straw' potatoes. Put the straw four or five inches deep on the ground. I have had some experience in raising potatoes and I do not think I could raise a good crop without straw. I exhibited 18 kinds at our county fair last fall, and took 17 first premiums over the man that swept everything at the Ohio State Fair. I had White Elephants that weighed 24 pounds and Queens of the Valley of the same weight. These two varieties I consider preeminent both as to yield and quality."

Kansas and Her Productions.

By way of showing what our neighbors east think of us, we copy an article from the Husbandman, published in New York. That paper says:

Kansas is a great State and we have greatly admired her from the time of her first settlement under the controversy precipitated by the application of the doctrine of "Squatter Sovereignty" down to the time when she passed a prohibitory amendment, and also proved herself capable of producing more wheat and corn to the acre than any other State in the Union. She has not only shown her great capacity for food production but also great liberality in providing means of ascertaining the amount of her products and publishing them to the world.

We have often thought that, were we a young man with too small capital to purchase a first-class farm in western New York, we would strike for Kansas' broad and fertile plains and locate in one of her most prosperous counties. To be sure her sturdy sons have had to contend with gales and drouths and insects, but there is a prospect of their eventually conquering these as the land is brought under thorough cultivation. The stirring of the soil, the growth of vegetation, the planting of orchards and forests and forests will probably modify the drouth, break the force of winds, and gradually expel or exterminate the insects.

Kansas has a State Board of Agriculture, of which William Sims, of Topeka, is Secretary, which is behind that of no other State in the Union in activity and efficiency in gathering and distributing information about the acreage and yields of crops, meteorological conditions and other conditions affecting results, which information is spread before the world in elaborate quarterly reports. Every other year this board reports its proceedings to the legislature. We have just received the third biennial report for the years 1881, 1882, a large, well-bound volume of over 700 pages, with a map of the whole State; separate colored maps of every county, with complete geographical descriptions, and tables of crops for 1881 and 1882. It also gives a geological description of the State with locations of coal measures; a botanical, an entomological, and a meteorological report, as well as an account of her educational provisions. We know of no other State in which such ample provision is made for informing the public of its condition.

From the full statistics given we learn that the population of Kansas in 1881 was 925,895; in 1882, 962,949, a gain in one year of 37,154. That her production of winter wheat in 1882, from 1,465,745 acres was 33,943,398 bushels, or an average to every acre of over 23 bushels, a higher average than any other State in the Union can show. That her entire yield of corn from 4,441,836 acres was 157,005,722 bushels, or an average yield per acre of over 35 bushels. That her production of sorghum syrup from 68,678 acres was 6,112,020 gallons, valued at \$2,781,459; a yield of over 98 gallons per acre, at a value of over \$40 per acre. Kansas also raised from 52,656 acres of castor beans, 498,790 bushels, worth \$498,790; about 9½ bushels, worth about \$9.50 per acre; rather small compensation we should say.

We learn further, that Kansas produced in 1882, \$2,552,256.78 worth of tobacco; 974,055 tons of millet and Hungarian grass, worth \$4,765,322, and that from prairie meadows were cut 2,095,799 tons of hay, worth \$7,500,536. The entire value of field products was \$108,177,520.93; increase in value of farm animals, \$14,060,168; products of live stock \$27,559,933.70; produce of market gar-

dens, \$478,644; apianian products, \$8,794.48; horticultural products, \$1,523,450; making a grand total of \$151,817,541.11, or an average product of nearly \$158 for every man woman and child in the State.

Inquiries Answered.

A subscriber writes that lice have made a raid on his cattle, great, big, blue fellows, he says—"as big as gray-backs—millions of them."

Tobacco, used as is done for dipping sheep is good. Lard is good, so is lime water and sulphur. Here is what an Ohio farmer says: The best thing I ever tried for lice is coal oil and lard. It will kill them every time. My horses were covered with lice last winter, and that was the only thing that would kill them. It will not hurt your horse if you keep him in the dry.

Another wants to know how to get rid of prairie dogs. He says he has "tried strychnine, spring traps, and the gun," but the dogs don't go.

The simplest, safest and most effective remedy we have heard of is water. In a dry time, fill the holes with water a few times, and they quit.

A Destructive Worm.

The last issue of the South Kansas (Montgomery county) Tribune contains the following which we hope our professional horticulturists will read and then tell the KANSAS FARMER family what they know, if anything, about it.

Capt. Mason has lost for this year a fine large orchard of 90 apple trees. They bloomed profusely and were large, vigorous trees, but a few weeks ago a black worm, one-fourth to an inch long, came upon the trees by the million and have eaten the buds out clean, leaving the trees as dead-looking as in winter. These will spin a spider-like web to a neighboring tree and cross over. If the tree is jarred they will drop on a web and hang until danger is over and then they climb back on their destructive mission. If knocked to the ground they start for the body of the tree and climb upwards. The same pest is attacking other orchards, and a remedy is desired.

Prizes for Berkshires.

At the meeting of the executive committee of the American Berkshire Association, on the 3d of May, 1883, the following resolution was adopted:

Resolved, That the American Berkshire Association offer as a special prize at the American Fat Stock show to be held in Chicago in Nov., 1883, a \$100 pure gold medal for the best pen of fat Berkshire barrows, upon the following conditions.

1. All competing animals to be one and under two years old; to be pure bred and eligible to record; to have been bred by and at the time of exhibition to be the property of the exhibitor.

2. The exhibitor is to furnish, at the time of entry, a written statement verified by affidavit, giving the pedigree, age, weight, date and manner of feeding, and other important facts connected with the management of each animal during the year.

3. Competition shall be open to all, but no award shall be made except there are two or more competitors.

4. The party securing the prize may hold it in trust until the opening day of the first succeeding Fat Stock show, when it shall be placed in the hands of the American Berkshire Association to be again competed for. When taken the second time, by the same exhibitor, the prize shall then become his actual property. PHIL. M. SPRINGER, Springfield, Ills. Secretary.

A good corn ground is one that is rich, warm, deep and mellow. The plant needs an abundance of the necessary food in the soil, and it must be in the most available form. The season of rapid growth is very short, and there is no time to lose in waiting for the plant food to be made soluble by any slow process of chemical action. With no other crop is it more important to have the soil properly prepared before the seed is sown.

Irrigation at Garden City.

[From our Special Correspondent.]

Always hungry and curious are marked characteristics of the Kansas newspaper man. This statement will be vouched for by the good and public spirited people of Garden City. The Kansas Editorial excursionists arrived at Garden City on Friday last, and were met with conveyances and treated to a ride over irrigating ditches and viewed with wonder this truly garden spot of the plains. After the drive the hungry editors were regaled with a banquet, "a feast fit for the gods." Then these champion blowers of the world fell to with a famine-producing zest that would have rivaled a grasshopper raid; but the bountiful supply of the generous caterers was equal to the emergency, and it seemed as though thousands of basketfuls were left. After the banquet, the happy excursionists, with warm hearts for the enterprising people, left for Chihuahua, Mexico, leaving the KANSAS FARMER man to further investigate this great western industry.

The Arkansas river was dry at the time of my visit, hence no water was running in the ditches; however, none was needed, for the rains had supplied water, so that there was no need to irrigate, nor will there be for a month. The cold, backward spring prevented the melting of the snow in the mountains; hence the dryness of the Arkansas at present. Three ditches, the Kansas, the Illinois, and the Great Western, are capable of irrigating 150,000 acres of land, which is admirably suited to irrigation, being level with sufficient slope for flow of the water. The soil is very rich and deep, and possesses a remarkable capacity for retaining moisture. The soil is easily subdued for garden products or grain the first season. The cost of water for irrigation is one dollar per inch, making the cost per acre from one to two dollars, either for gardening or grain raising.

The crops have been very satisfactory during the two years of irrigation. Corn has not been cultivated a great deal, but has averaged 40 bushels. Oats does well; considerable is sown and will average from 40 to 50 bushels, a number raising from 60 to 75 bushels. Very little wheat has been sown as yet; but the Great Eastern Irrigating Company has decided to put in several hundred acres this fall. There is no question but that it will succeed well. Garden products have been the principal crops grown, and onions will average from 350 to 450 bushels per acre; sweet potatoes 300 bushels per acre; Irish potatoes 200 bushels; turnips 400 bushels; cabbage will average 3,000 heads per acre; watermelons will produce from 5,000 to 8,000 melons. Alfalfa does very well and will produce from 5 to 10 tons of hay. These figures may be too low, but I think they will make a fair general average.

Thousands of trees are planted and are doing well. In three years there will be a beautiful grove at Garden City, which is 3,000 feet above sea level. The finest sugar cane can be grown, and in connection with alfalfa, it will afford abundant feed for the sheep and cattle in Finney county should they need any, although the buffalo grass, which is abundant, is about all the feed cattle and sheep need. There is a large number of herds in the county. In short, the prospect is all that could be desired for the best results for irrigation as well as for the stock interests in Finney county. Later the FARMER will give the results of this season's crops.

One of the marked characteristics of Garden City is its intelligent, industrious and enterprising people. Nowhere have I met a community so thoroughly made up of this character as Garden City. They are contented and have unlimited faith in irrigation.

HEATH.

Sunday's Rain and Storm.

Our advices are that the State quite generally had the benefit of last Sunday's rain. In some places there had been sufficient rain fall to keep vegetation growing nicely, while in some other portions the ground was getting very dry. But probably there was no part of the State that did not need rain. Its coming was timely and welcome all around. It will be of great benefit to the heading wheat, and the young corn and other tender plants will have a good start. One more good rain in three weeks will help the wheat out.

But the accompanying wind and electrical action did a great deal of damage in some places. In Kansas City more than fifty houses were more or less injured, and several persons were killed. The storm extended over a wide territory. Damage is reported from Indiana, Ohio, Illinois and Missouri.

Gossip about Stock.

C. O. Blankenbaker, Ottawa, Kansas, writes that his pigs and fowls are doing nicely and he will have a fine show this fall.

The second annual meeting of the American Southdown association will be held in the Leland hotel, Springfield, Illinois, on the 6th of June, 1888, at 7:30 p. m.

The champion premium herd of Kentucky Short-horn cattle will be sold by Pickrell, Thomas & Smith, at Harris-town, Ill., June 7. Send for their catalogue.

The Ottawa poultry breeders are coming out in force to the State Fair this fall. W. Wightman, whose card appears this week, proposes to contest closely for the Leghorn and Buff Cochins prizes. He has a fine yard.

From the Larned Chronoscope we learn that Jim Rider's big sheep ranch has been purchased by New York parties who are stocking it with Herefords and Galloways. They intend to raise only one thousand dollar animals. The company is said to have plenty of backing, which will probably be needed in their business.

Volume 6 of the Holstein Herd Book is on our table. The book contains over 400 pages, 50 of which are occupied with an index to the stock recorded and names and residences of owners. The book will be useful to all persons interested in Holsteins. It was prepared under care of Thomas B. Wales, Jr., Secretary, and is therefore well done.

In one of our exchanges it is said that a fatal disease prevails among horses and mules in the northern part of Greenwood county. Several animals have died within the past few weeks, within a radius of a few miles. They are suddenly attacked with intense spasms and die in a short time. The name and nature of the disease is unknown, and no remedy has been discovered to save the life of animals when once the disease is noticed to be upon them.

The Dodge City Times says the stockmen of that region are bringing in large numbers of fine bulls. The improved breeds are displacing the poorer ones. The protection of the native stock is a question that will largely enter the business in the future. Stock diseases will be guarded against. The driving of cattle from Texas, and the disease incident to these cattle, will be the serious problem of another year. The ranch business, so called, furnishes the bulk of trade to Dodge City. The business from the cattle drive diminishes every year. The business of paramount importance will be the ranch trade. To cultivate that trade, will be the object of the business men of this city.

The Wellington Press of last Friday says: Yesterday just after dinner there were fifteen wagon loads of hogs on one half block of this city. They came from different portions of the county, arrived in town at the same time and stopped together. In a few moments all were sold at prices ranging from \$6.50 to \$6.79 per cwt. Mr. Scott, of Bluff township, sold 24 head, weight 191 pounds at \$6.50. R. Kelley, Chikaskia township, sold seven head and Michael Hannon, of Downs township, eleven head, each lot averaging 225 pounds at \$6.75. James Holliday, of Rolling Green, sold 42 head, averaging 303 pounds, at \$6.79; also, 26 head for his neighbor, J. R. Duncan, at the same price. Besides these sales, there were fully one hundred hogs sold on this market, the particulars of which we did not learn.

The Vermilye Brothers, according to the Winfield Courier, are bound to take front rank in the breeding of fine stock. They recently purchased twenty-five head of thoroughbred Short-horn cows, one of which, Mary, by name, number 2,432, dropped a red roan bull calf, which was sold immediately for \$75, to be delivered at weaning time. They have also some fifty head of brood mares, many of them fine stock. The Brothers are

gradually reaching out and expanding. Friday last Bob Vermilye came in by freight, bringing with him two fine animals. One was a thoroughbred yearling Galloway bull, imported stock, for which they paid \$405 in Kansas City, and he is simply a daisy. This breed is said to be superior to the Durham stock. The other was a magnificent Clydesdale horse, which attracted much attention Saturday. This horse, King of the Valley, was raised in the famous valley of the Clyde, Scotland, which place is renowned for a peculiar race of draught horses.

Volume 2, of the National Register of Norman Horses is now published. It contains the names and pedigrees of more than 500 horses and 200 mares. Of Kansas owners named in the book, we notice Henry Avery, Wakefield, mare Nyanza; Cone & Smith, Wellsville, horse Tena; Wm. Dengel, Ackley, horse Vidon; Wm. Farmer, horses Danton and Theirs; M. P. Hays, Black Jack, horse Condon; G. T. Kennison, Prescott, horse Rutland's Glory; James Ridde, Chase, horse Pantagraph; Wright & Allard, Holton, horse Waddie. The book contains the constitution and by-laws of the Norman association; also the proceedings of the last meeting and the list of officers and members. The price of the first volume of the Norman Register \$2, which includes 150 pages of the history of the Norman horse. The second volume is \$1.50, or both volumes sent by express pre-paid for \$3. T. Butterworth, Quincy, Ill., is Secretary of the National Norman Horse association, and inquiries addressed to him will be promptly answered. Entries for the third volume close January 1st, 1884.

From a statement in the Rural World we see that the shearing of G. B. Bothwell's sheep, Breckenridge, Mo., showed up well. Of 23 rams, the lowest weight of fleece was 18 pounds, 3 ounces, and the highest 33 pounds, 1 ounce. In speaking of this flock Mr. Bothwell says that he located in Caldwell county in 1867, when he brought with him 600 as fine woolled and pure bred Merinos as were to be found anywhere, and that by breeding to the best rams of New York and Vermont stock, he has for some years had a flock of 7,000 head of No. 1 sheep of extra large size and style. His ram, Bonanza, weight 178 pounds, sheared at the public shearing 334 pounds of No. 1 wool. The Messrs. Capps, of Jacksonville, Illinois, have purchased the most of this wool for the last seven years and it is from it they make their best cassimere and doeskin cloths.

This week S. McCullough, Ottawa, Kansas, presents a card of the Pleasant Valley Farm. He is a Kansas breeder of fifteen years experience and has built up one of the most extensive herds of pure bred Berkshire swine in the west. He has purchased his breeding stock of N. H. Gentry, Sedalia, Mo., and John Snell's Son's, Canada, and has spared no expense in securing the best. A representative of the FARMER visited his farm and found the place admirably suited to the business, and Mr. McCullough attending strictly to the management which he so well understands. Young Carlisle, 6810, Plantagenet, 2919, and Royal Duke 3601, are his finely bred boars; and the sows, Belle Clermont, 2498, Sallie Liverpool, 6992, and Liverpool's Belle, 6994, are rare and meritorious females. He will show at the State Fair, also at the Kansas City Pat Stock Show. He is a reliable breeder and refers our readers to H. I. Smith, Pres. First National Bank, J. P. Harris, of the People's National Bank, and to Hon. P. P. Elder and Hon. A. W. Benson.

"All Wool."

The Solomon Valley Wool Growers' Association will hold its annual festival and public shearing at Simpson, May 24, 1888, and have adopted the following program:

From 9 to 10 a. m.—Entering and weighing show sheep. From 10 to 11—Music and address of welcome by the officer of the day, Sam'l. Gaster. 11 to 12—Shearing show sheep. 12 to 1—Dinner. 1 to 2—Speaking. 2 to 3—Shearing race. 3 to 4—Report of committee.

Superintendent of class A, thoroughbreds, J. S. Graw.

Superintendent of class R, grades, Rus. Darrow.

Superintendent of shearing race, P. G. Brown.

Superintendent of weighing, H. Darrow.

Committee on statistics, Owen Day.

Music will be furnished by the Glasco cornet band.

The Association extends a cordial invitation to the public and all wool growers to come and bring their best sheep and baskets well filled.

By ORDER OF COM.

"Paths to Wealth."

Rev. John D. Knox, banker, of Topeka, Kansas, is the author of a book having the title at the head of this notice. The object of the work is two-fold, as we understand it—1, to show that wealth is not only a good thing, but that it is consistent with christian morality; 2, that the sure, safe and proper way to wealth lies in channels of an upright, energetic, earnest, vigorous, manly, honest, religious life.

In our cursory examination of the book we are very favorably impressed with the matter and with its arrangement. It is very clean. The style is vigorous, forcible, and terse. It is more emphatic than argumentative. The pages glisten often with gems of best thought.

It will do good. Young men and women, especially, will be benefited by reading it. It is worth, as a Sunday school book, a thousand volumes of much of the stale husks we find in use for Sunday reading. We quote a few of many passages that bear pencil marks in our hasty glance.

Page 14.—"A full purse makes the mouth to speak. An empty purse fills the face with wrinkles. The world has wants; work and wealth alone can supply them. * * He that lives on hope will die fasting. The idle and the savage are twin brothers."

Page 15.—"Ready money is a remedy for many ills, and keeps far away many ills, and not among the least is the 'nightmare' on the land out of which our living should come."

Page 24.—"Man's first duty is to keep himself from becoming a nuisance; to take care of himself; to sweep his own front and back yard; to keep out of the poor house, off his friends and relatives, and to make a charm of himself and home."

Page 32.—"Keep your business and conscience well, and they will be sure to keep you well."

Page 35.—"Temporal affairs are best expedited when they are made the subjects of secret prayer. Generally speaking, he who prays fervently in his closet will speed well in his shop, at the plow, or whatsoever he may turn his hand to."

Page 41.—"Conformity of heart and life to the divine law secures safety and success, peace and plenty."

Page 49.—"To build up a character requires time, labor and thought."

Page 63.—"Wealth is hardly to be accounted riches if it comes without honest toil. Every man should have a broom for his own front door; and if all yards are kept clean, every man must be at work for himself; and he that looks for others to do his work may find himself wanting in the day of examination."

Page 69.—"Many a man is rich without money."

Page 75.—"Some things we must be able to know for ourselves."

Page 93.—"Use the right thing.—A hand-saw may be a good thing, but not to shave with."

Page 104.—"Farmers are notoriously careless of their health."

Page 107.—"The health of the whole body, of all parts and organs, is the object to be kept in view."

Page 116.—"Select a vocation—trade or profession—and be master of your business."

Page 130.—"Those who live for pleasure soon dissipate wealth, and groan in poverty."

Page 144.—"Marriage is the natural condition of man—one woman for one man, and one man for one woman."

Page 165.—"Idleness is the greatest prodigality in the world. Industry is fortune's right hand, frugality her left. There is no sweet without some sweat; no gains without some pains."

Page 189.—"Honesty means to be fair, equitable, reasonable, sincere, true, plain, right."

Page 211.—"Should you get into trouble of mind, work it off."

Page 226.—"Fortune often follows in the footsteps of pleasant deportment."

These must suffice. We have many more markings, but have not room for them. Get the book and read it. We don't know the price, but it is for sale by the author, John D. Knox, Topeka, Kansas.

A typographical error appeared in Katie Darling last week. Where it reads that Dick, in a "dazed" sort of way, it ought to be dogged instead of dazed.

TYPE FOR SALE.

This office has several hundred pounds of Brevier and Nonpareil type for sale at sixteen cents a pound.

THE MARKETS.

By Telegraph, May 14, 1888.

Kansas City Live Stock Market.

The Live Stock Indicator Reports:

CATTLE Receipts 1,406. Market slow and weak and 10c lower for shipping grades; butchers steady; native steers averaging 1,410 to 1,412 lbs, sold at \$5 65a5 90; cows and heifers at \$3 50a4 90; little irregular for stockers and feeders and unchanged.

HOGS Receipts, 5,521. Market steady for heavy and weak for light and mixed lots. Lots averaging 258 to 347 lbs sold at 7 00a7 37½. The bulk of sales were made at 7 00a7 20.

SHEEP Receipts 170, no shipments. Market nominal and unchanged.

Kansas City Produce Market.

Price Current Reports:

WHEAT No. 3 cash 91¼c bid 92¼c asked; May no bids 92c asked; June no bids 94c asked.

No. 2 cash, 2 cars at 97¼c. May 97¼c bid 97¼c asked; June 98c bid 99¼c asked.

No. 1 cash \$1 07 bid \$1 09 asked.

CORN Received into elevators the past 48 hours, 9,867 bus; withdrawn 7,547 bus; in store 258,844. A stronger market was notable to day. Values advanced ¼a¾c.

No. 2 mixed cash, 43¼c; 2 cars at 43¼c; May no bids, 43¼c asked; last half, 43c bid 43¼c asked. June, 41¼c bid 44¼c asked. July, 5,000 bus at 46¼c; 5,000 bus at 46¼c.

No. 2 white mixed, cash, 43¼c bid 43¼c asked.

OATS Quiet. No. 3 cash, no bids nor offerings. May, 38c bid 42c asked.

RYE No. 2 cash, no bids, 58c asked.

BUTTER. Receipts up to hour of writing today are small, but supply continues very heavy, and anticipations are for heavy receipts. The market is reported dull throughout, with very little trading. We quote packed:

Creamery, fancy..... 21a23

Creamery, choice..... 18a20

Choice dairy..... 13a15

Good to choice Western store packed..... 10a11

EGGS Scarce; improved demand, and selling

¼c better. We quote at 13a13½c.

STRAWBERRIES. Larger receipts and lower figures. Stale, damaged, inferior, sandy and greenish nominal at \$1 25a2 25; fresh, sound, well ripened and well colored at \$3 00a3 75 per 24 qt. crate.

CABBAGE We quote New Southern \$3 00a4 00 per crate for common, choice \$4 50a5 75.

GREEN ONIONS 10a12¼c per dozen bunches from growers.

PIE PLANT Fresh from growers 12¼a15c.

RADISHES From growers 35a50c per dozen bunches; southern consignments unsalable.

NEW POTATOES Market weaker. Selling at \$5 00a5 50 per bbl.

BROOM CORN. Common, 2a2¼c per lb.; Missouri evergreen, 3a4c. Hurl, 4a5c.

SORGHUM We quote at 30a31c per gal. for dark and 35c for best.

WOOL—We quote: Missouri and Kansas tub-washed 30a32c; unwashed, choice medium, 20a 21c; fair do at 17a19; coarse, 16a18c; New Mexico, 14a18c.

Chicago.

The Drovers' Journal reports:

CATTLE. Receipts 5,000. Market 5c off. Export steers, \$6 20a6 65; good to choice shipping, 6 00a6 30; common to fair, \$5 25a5 75; butchers and canners, cows, \$2 50a5 75; fair to good steers, \$5 00a5 60; stockers and feeders \$3 75a5 25.

HOGS Receipts 14,000. Market weaker. Mixed packing, \$7 00a7 40; heavy, \$7 50a7 75; light, \$7 00 a7 40.

SHEEP. Receipts 1000. Market stronger. Common to fair, \$4 00a5 00; good to choice, \$5 40a6 25.

Chicago Produce Market.

WHEAT. June opened at \$1 14¼c; noon \$1 14¼c. July opened at \$1 17¼c; noon \$1 16¼c.

CORN. June opened at 57¼c; noon, 57¼c. July opened at 59¼c; noon, 59¼c.

St. Louis.

The Western Live Stock Journal reports:

CATTLE Receipts, 2,300; shipments, none. Good light shipping and butchers' steers in demand at full prices, but heavy grades slow and not stronger. Exports \$6 25a6 50; good heavy \$6 00a6 25; good light \$4 50a5 90; common to medium \$4 75a5 25; good cows and heifers \$3 75a5 25; grass fed Texans \$4 50a5 25.

SHEEP Receipts 400; shipments 850. Market steady with a good demand. Common to choice \$4 00a5 00; Texans \$3 50a4 50; spring lambs \$2 25a 3 50 per head.

St. Louis Grain Market.

Noon. Wheat Red winter, June, \$1 15¼c. Corn June, 58¼c; July, 55¼c.

New York.

CATTLE Beeves, receipts 1500. Closed fairly steady at \$1 per head lower; extremes \$6 00a7 41; general \$5 58a6 68.

SHEEP Receipts 10,200. Market firm and active with dull prices; clipped sheep \$5 25a6 25; unshorn sheep \$6 00a7 50; spring lambs 7¼a10¼c.

HOGS Receipts 6,900; good demand at \$7 50a 7 75.

New York Produce Market.

WHEAT Receipts, 28,000; exports 47,000. No. 2 spring \$1 21 to arrive; ungraded red, \$1 07a1 26; No. 3 red do \$1 18¼a1 19; No. 2 red \$1 22¼c; ungraded white \$1 09a1 26¼; No. 2 red May sales \$1 23¼a1 25; \$1 22a1 23¼; June, sales 488,000 at \$1 23¼a1 25; July, sales 1,672,000 at \$1 25¼a1 25¼.

CORN Receipts 208,000; exports 122,000. No. 3, 63¼a63¾c; No. 2 white 67¼c.

In the Dairy.

About Marketing Butter.

Butter, though one of the chiefest and most regularly-used household essentials, says an exchange of merit, appears also to be one of the most perplexing and unsatisfactory commodities to buy or sell. In the first place, there is no inflexible standard or scale of points by which its quality can be judged—not even an ideal standard that could obtain general recognition. Which is the best of a given number of samples of good butter, is a mere matter of opinion, with a chance for quite as many shades of opinion as there are shades of color. Fruits have their seasons of maturity, and a consequent power of improving in quality after purchase or storing. Even flour is said to be better some little time after it is ground. But a supply of butter is held or laid in with a moral certainty that it will never be any better than at present, and an utter uncertainty as to how much or how fast it may deteriorate. "Make butter when the grass grows," has been a habit to which farmers were almost as much addicted as the observance of the old maxim, "Make hay while the sun shines." And since in the butter-producing portions of the country grass does not grow during more than half the year, the great bulk of the year's supply, especially that designed for market, has been made in the six months commencing with May and ending with October.

The matter is still further complicated by the well-known fact that two or three of the summer months are quite likely to be such as to diminish production, impair qualities, and seriously interfere with handling and distribution. Hence, June and October have come to be recognized as typical months for the production of the best butter, and the article is desirable, or the reverse, accordingly as it approaches or recedes from these standards.

The time is now near at hand when butter will be made a great deal faster than it is wanted for immediate use, and stock will begin to accumulate. Following the decline in price will come weeks, and even months, in which the make will be inferior, and the effect to that already on hand, injurious. A real or fancied scarcity later in the season may restore the pride of the summer accumulations, but in that event the makers of a fine fall product find themselves confronted with the aggravating fact that summer-packed butter is selling for nearly or quite as much as a freshly-made and greatly superior article. But should no scarcity occur, the market continues overstocked to such an extent that the newest and best does not bring a price to correspond with its real merits. And so the thing works from year to year, resulting in a sort of mutual dissatisfaction, in which it is hard to tell which has the greater cause of complaint, the producer or the consumer; for, while one is often compelled to sell good butter for a poor price, the other, perhaps, quite as frequently pays an extravagant price for a very inferior article.

The essence of our subject is embodied in the question, how can butter-makers most profitably dispose of their surplus products? How can the wants of consumers be most satisfactorily supplied?—though secondary in importance to the farmer—may have a direct and important bearing on the answer to the first question. If the butter dealer possesses any skill or extra facilities by which he could improve the quality and increase the intrinsic value of butter, he would be fairly entitled to make a profit on that account. But so long as the

article is likely to leave his hands in worse condition than it is received, it is hard to understand why he should be allowed anything more than a reasonable compensation for getting the goods into the hands of those who are to use them.

Housewives who are notable for culinary skill, are apt to be quite strenuous in regard to having meals eaten as soon as they are ready—before they become cold or lose their exquisite freshness, which can never be restored. So, too, those who make choice butter would much prefer to have their exacting labors appreciated; and such satisfaction would be in nowise impaired if greater profits should be the result.

If butter could more generally go direct from those who make to those who consume, it would fix responsibility for defects, and thus encourage the most punctilious care throughout the entire process of manufacture. There is at least one objection to that method, for the best article may be spoiled by a bad cellar, or none at all, by being kept too long, or other careless management. But for all that, those who do not know how to take care of butter after they receive it, and will not learn, are a class of customers that had better be lost than kept.

It seems a little strange that more of those who buy butter all their lives, do not make permanent arrangements for a regular supply. True, very many do, but such are but a small fraction when compared with those who follow the "hit or miss" method, a method which is so liable to hit a poor article and miss a good one. The true value of butter is something not easily determined, but there are a great many families who would be willing to pay any reasonable price for the certainty of getting a regular and satisfactory supply. And there are also a great many farmers, who would be willing to furnish butter at a reasonable price, knowing that the market could be depended on, and merit appreciated as well as paid for.

It costs more to make butter in the winter than in the summer, but good winter butter is, beyond all question, better than the best summer made, after long keeping; and if, by making butter during the entire year, or nearly so, a more discriminating and better paying class of customers may be retained, there may be a gain in so doing.

To sum up the whole business, and answer the question, "How to sell butter?" in a single sentence, we should say, make butter that will sell, and even if you should be obliged to lay aside, false modesty and use a little energy in finding purchasers, it is no more, and consequently no worse, than successful manufacturers of every description are obliged to do in disposing of their wares.

Mother Swan's Worm Syrup.

Infallible, tasteless, harmless, cathartic; for feverishness, restlessness, worms, constipation. 25c.

The attendance of white pupils in the public schools of South Carolina has increased from 46,444 in 1877 to 65,399 in 1882; in the same period the attendance of negro pupils has increased from 65,932 to 80,575. The number of teachers has increased from 2,674 to 3,413, and the number of schools from 2,483 to 3,187.

For Thick Heads,

Heavy stomachs, bilious conditions.—Wells' May Apple Pills—anti bilious, cathartic. 10 and 25c.

The dance called the hornpipe is supposed to have been so named from its having been performed to the Welsh "pib-corn," that is hornpipe, about 1307.

Indulgent parents who allow their children to eat heartily of high-seasoned food, rich pies, cake, etc., will have to use Hop Bitters to prevent indigestion, sleepless nights, sickness, pain, and, perhaps, death. No family is safe without them in the house.

DARBYS PROPHYLACTIC FLUID

For the prevention and treatment of Diphtheria, Scarlet Fever, Smallpox, Yellow Fever, Malaria, &c.

The free use of the FLUID will do more to arrest and cure these diseases than any known preparation.

Darby's Prophylactic Fluid,

A safeguard against all Pestilence, Infection, Contagion and Epidemics.

Also as a Gargle for the Throat, as a Wash for the Person, and as a Disinfectant for the House.

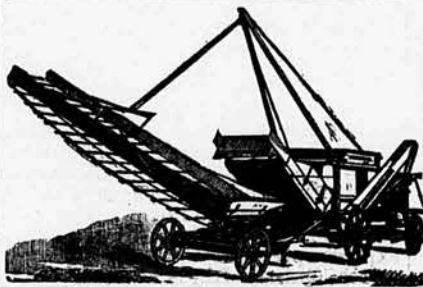
A CERTAIN REMEDY AGAINST ALL CONTAGIOUS DISEASES.

Neutralizes at once all noxious odors and gases. Destroys the germs of disease and septic (putrescent) floating imperceptible in the air or such as have effected a lodgment in the throat or on the person.

Perfectly Harmless used Internally or Externally

J. H. ZEILIN & CO., Proprietors, Manufacturing Chemists, Philadelphia.

Price, 50 cts. per bottle. Pint bottles, \$1.00.



THE RUSSELL INDEPENDENT Lateral Moving Stackers.

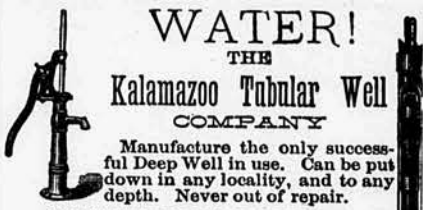
Complete. Convenient. Durable.

It saves from two to four men on the stack. Saves the chaff by depositing it in the centre of the stack.

PRICE, COMPLETE, \$125.00.

Furnished in Four Sizes. Can be adapted to any Thresher. Address for full particulars,

RUSSELL & CO., Massillon, Ohio.



WATER!

THE Kalamazoo Tubular Well COMPANY

Manufacture the only successful Deep Well in use. Can be put down in any locality, and to any depth. Never out of repair.

JUST THE THING FOR OPEN OR BORED WELLS. Buy a Pump which will Work Easy, and Throw a Good Stream.

Sole manufacturers of the NEWELL & LUCASSE Patent Non-Packing Valves and Cylinders, For Tubular Wells, Adjustable Stroke Pumps, and dealers in Well-Drivers' Supplies and Tools.

For circulars and prices, address KALAMAZOO TUBULAR WELL CO., Kalamazoo, Mich.



NOYES' HAYING TOOLS

FOR STACKING OUT IN FIELDS OR MOWING AWAY IN BARN.

Save labor and money: simple, durable, cost but little. No trouble to get over high beams or to the end of deep bays. Thousands now in use. Wood Pulleys, Floor Hooks, etc.

Send for circular and designs for tracking barns, to U. S. Wind Engine & Pump Co., Batavia, Kane Co., Ill.

[State where you saw this advertisement.]

THE FAIRLAMB SYSTEM

—OR—

CATHERING CREAM AND MAKING BUTTER

DAVIS & FAIRLAMB

Manufacturers of and Dealers in

CREAMERY SUPPLIES.

200 Cans sent on trial.

170 Lake St., CHICAGO. Send for Catalogue A.

TIMKEN SPRING VEHICLES!



Easiest riding Vehicle made. Rides as easy as with two horses. The Springs lengthen and shorten according to the weight they carry. Equally well adapted to rough country roads and fine drives of cities. Manufactured and sold by all the leading Carriage Builders and Dealers.

HENRY TIMKEN, Patenteo, ST. LOUIS, MO.

Used exclusively by CHICAGO, ILL. ABBOTT BUGGY CO



DEREDICK'S HAY PRESSES

are sent anywhere on trial to operate against all other

PresSES, the customer keeping the one that suits best.

No one has ever dared show up any other Press, as

Dederick's Press is known to be beyond competition,

and will bale at less expense with twice the rapidity and

load more in a car than any other. The only way inferior

machines can be sold is to deceive the inexperienced by

ridiculously false statements, and thus sell without

sight or seeing, and swindle the purchaser. Working

any other Press alongside of Dederick's always sells the

Press, and all know it too well to show up. Address for circular and location of

Western and Southern storehouses and Agents.

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



BUY PORTER'S HAYING TOOLS

Just patented. The most valuable attachment for Hay Carriers and Horse Hay

Forks ever made. Saving the rope from dragging on the ground. A child can do the

work of a man. It saves labor and ex-

pende. Will pay many times its cost. Ask your

dealer for circulars, or send for full descrip-

tion to the manufacturer, J. E. PORTER, Ottawa, Ill.



The Wonderful Efficacy of DR. SCHENCK'S MANDRAKE PILLS

Has been so frequently and satisfactorily proven that it seems almost superfluous to say anything more in their favor. The immense and constantly increasing demand for them, both in this and foreign countries, is the best evidence of their value. Their sale to-day in the United States is far greater than any other cathartic medicine. This demand is not spasmodic, it is regular and steady. It is not of to-day or yesterday, it is an increase that has been steadily growing for the last thirty-five years. What are the reasons for this great and growing demand?

Dr. Schenck's Mandrake Pills contain no mercury, and yet they act with wonderful effect upon the liver. They cleanse the stomach and bowels of all irritating matter, which, if allowed to remain, poisons the blood, and brings on Malaria, Chills and Fever, and many other diseases. They give health and strength to the digestive organs. They create appetite and give vigor to the whole system. They are in fact the medicine of all others which should be taken in times like the present, when malarial and other epidemics are raging, as they prepare the system to resist attacks of disease of every character.

Dr. Schenck's Mandrake Pills are sold by all druggists at 25c. per box, or sent by mail, postpaid, on receipt of price.

Dr. Schenck's Book on Consumption, Liver Complaint and Dyspepsia, in English or German, is sent free to all. Address Dr. J. H. SCHENCK & SON, Philadelphia, Pa.

Out of Debt: Happy Homes

Jefferson county, Kansas, don't owe a dollar. Map, statistics, price of land, etc., free. Address Metzger & Insley, Oskaloosa, Kas.

\$5 to \$20 per day at home. Samples worth \$5 free. Address Stinson & Co., Portland, Maine.

Sorghum Affected by its Food.

The following, which we find in the Southern Planter (Richmond, Va.), is well worth reading by our Kansas sorgo growers. The writer says:

In your editorial, in reply to my enquiry for a specific manure for sorgo, you say that my idea is news to you, that sorgo needs a specific manure, or that the quality of the sorgo is affected by the kind of manure that is used. I agree with you, that sorgo is like the hog, and it is not particular as to what supplies its appetite, but for that very reason I take it, that we ought to be the more particular what kind of manure we place within its reach.

Now, if you will bear with me a little, I will give you my experience as a grower and manufacturer of sorgo, embracing a period of about eight years, working into sorgo each year the cane that grew upon from ten to forty acres of land.

In 1878 I planted a lot in sorgo and took dirt from under an old house that had been standing about thirty years, dropped one single handful of dirt in each and every hill—hills three feet each way. The cane came on fine, large rich stalks. I worked the cane into syrup myself; but to my surprise the syrup was unfit for use, having a salty, nasty taste. Evidently it had fed largely on the saltpeter and the general filth that was under the old house—hog like.

Then again, I planted a lot in sorgo, on which cows had been penned, until it was very rich; the cane grew wonderful, made a yield of about three hundred gallons per acre, but as the syrup was cooking on the pan (Cook's Evaporator) the bystanders could actually smell the cow-dung in the whole mass.

And again, I planted a very rich piece of bottom land in sorgo; the land some years before and for several years was an old pond, but had been drained and cultivated in corn. It produced large crops of corn. I concluded to try it in sorgo. The sorgo grew to an unusual size, ripened up fine and in good time; was cut at as near the right time as I knew how, but to my great surprise when we passed the cane through the mill (a heavy four-horse Victor mill) we got but little juice, and as the juice passed over the evaporator we got but little syrup. This juice when tested with a French glass saccharometer marked only a degree or so richer than soft water which you know makes zero. Now, while the hog was on this lot making cane he found plenty to supply his appetite, but as soon as you put him to making sorgo he gets down to the starving point.

Hence my enquiry after a specific fertilizer for the sorgo crop, as it takes but a few crops to completely exhaust land on which it grows. Of its properties to produce a syrup observation has shown me that "just any thing" will not do as a manure for the sorgo crop. Sorghum has such power of assimilation, that it even partakes of the color of the soil on which it grows, besides partaking of the quality or flavor of the manure on which it feeds.

The English flockmaster has settled two points in British experience: First, that mutton is more profitable than wool, and second, that among English mutton consumers there is a decided preference for down or black faced mutton. Tender, juicy flesh, with a fine grain and a rich flavor, ripe and yet carrying plenty of lean meat, is that which suits the English market. A combination of these qualities is found to most perfection in some of the black or gray faced breeds or their crosses. This preference on the part of the buyers is so marked that the butcher is enabled to give at least two cents per pound more for darkened mutton than for any of the white faced and long woolled sheep.

Thousands saved from death by Dr. King's New Discovery for Consumption. Trial bottles free.

There are ninety-one city companies in London. Of these, twelve, the mercers, grocers, drapers, fishmongers, goldsmiths, skippers, merchant tailors, haberdashers, salters, ironmongers, vintners and clothworkers are styled honorable. The wealth of these bodies is enormous.

"Rough on Rats."

Clears out rats, mice, roaches, flies, ants, bed-bugs, skunks, chipmunks, gophers. 15c. Druggists.

A Voice from the People.

THE GREATEST CURATIVE SUCCESS OF THE AGE.

No medicine introduced to the public has ever met with the success accorded to Hop Bitters. It stands to-day the best known curative article in the world. Its marvellous renown is not due to the advertising it has received. It is famous by reason of its inherent virtues. It does all that is claimed for it. It is the most powerful, speedy and effective agent known for the building up of debilitated systems and general family medicine.

Winston, Forsythe Co., N. C., March 15, 1880.
Gents: I desire to express to you my thanks for your wonderful Hop Bitters. I was troubled with Dyspepsia for five years previous to commencing the use of your Hop Bitters some six months ago. My cure has been wonderful. I am pastor of the First Methodist church of this place, and my whole congregation can testify to the great virtue of your Bitters.

Very respectfully, REV. H. FEREBEE.
Rochester, N. Y., March 11, 1880.
Hop Bitters Co.: Please accept our grateful acknowledgement for the Hop Bitters you were so kind to donate, and which were such a benefit to us. We are so built up with it we feel young again.

OLD LADIES.
Of the Home of the Friendless.
Delevan, Wis., Sept. 24, 1880.
Gents: I have taken not quite one bottle of the Hop Bitters. I was a feeble old man of 78 when I got it. To-day I am as active and feel as well as I did at 30. I see a great many that need such a medicine.

D. ROYCE.
Monroe, Mich., Sept. 25, 1875.
Sirs: I have been taking Hop Bitters for inflammation of the kidneys and bladder; it has done for me what four doctors failed to do—cured me. The effect of the Bitters seemed like magic.

W. L. CARTER.
If you have a sick friend, whose life is a burden, one bottle of Hop Bitters will restore that friend to perfect health and happiness.

Bradford, Pa., May 8, 1881.
"It has cured me of several diseases, such as nervousness, sickness at the stomach, monthly troubles, etc. I have not seen a sick day since I took Hop Bitters."

MRS. FANNIE GREEN.
Evansville, Wis., June 24, 1882.

Gentlemen: No medicine has had one-half the sale here and given such universal satisfaction as your Hop Bitters have. We take pleasure in speaking for their welfare, as every one tries them is well satisfied with their results. Several such remarkable cures have been made with them here that there are a number of earnest workers in the Hop Bitters cause. One person gained eleven pounds from taking only a few bottles.

SMITH & DEX.
Bay City, Mich., Feb. 2, 1880.
Hop Bitters Company: I think it my duty to send you a recommendation for the benefit of any person wishing to know whether Hop Bitters are good or not. I know they are good for general debility and indigestion; strengthen the nervous system and make new life. I recommend my patients to use them.

DR. A. PLATT.
Treator of Chronic Diseases.
Superior, Wis., Jan., 1880.

I heard in my neighborhood that your Hop Bitters was doing such a great deal of good among the sick and afflicted with most every kind of disease, and as I had been troubled for fifteen years with neuralgia and all kinds of rheumatic complaints and kidney trouble, I took one bottle according to directions. It at once did me a great deal of good, and I used four bottles more. I am an old man, but am now as well as I can wish. There are seven or eight families in our place using Hop Bitters for their family medicine, and are so well satisfied with it they will use no other. One lady here has been bedridden for years, is well and doing her work from the use of three bottles.

LEONARD WHITBECK.

What it Did for an Old Lady.

Coshocton Station, N. Y., Dec. 28, 1878.
Gents: A number of people had been using your Bitters here, and with marked effect. A lady of over seventy years, had been sick for the past ten years; she had not been able to be around. Six months ago she was helpless. I sent forty-five miles and got a bottle of Hop Bitters. It had such an effect on her that she was able to dress herself and walk about the house. After taking two bottles more she was able to take care of her own room and walk out to her neighbor's, and has improved all the time since. My wife and children also have derived great benefit from their use. W. B. HATHAWAY, Agt. U. S. Ex. Co.

Honest Old Tim.

Gorham, N. H., July 14, 1879.
Gents: Whoever you are, I don't know; but I thank the Lord, and feel grateful to you to know that in this world of adulterated medicines there is one compound that proves and does all it advertises to do, and more. Four years ago I had a slight shock of palsy, which unnerved me to such an extent that the least excitement would make me shake like the ague. Last May I was induced to try Hop Bitters. I used one bottle, but did not see any change; another did so change my nerves that they are now as steady as they ever were. It used to take both hands to write, but now my good right hand writes this. Now, if you continue to manufacture as honest and good an article as you do, you will accumulate an honest fortune, and confer the greatest blessing on your fellow-men that was ever conferred on mankind.

TIM BURCH.
Anna Maria Krider, Wife of Tobias K.

Chambersburg, July 25, 1875.
This is to let the people know that I, Anna Maria Krider, wife of Tobias Krider, am now past seventy-four years of age. My health has been very bad for many years past. I was troubled with weakness, bad cough, dyspepsia, great debility and constipation of the bowels. I was so miserable I could eat nothing. I heard of Hop Bitters and was resolved to try them. I have only used three bottles, and I feel wonderful good, well and strong again. My bowels are regular, my appetite good, and cough gone. I think it my duty to let the people know how bad I was and what the medicine has done for me, so they can cure themselves with it.

My wife was troubled for years with blotches,

moth patches, freckles and pimples on her face, which nearly annoyed the life out of her. She spent many dollars on the thousand infallible (?) cures, with nothing but injurious effects. A lady friend, of Syracuse, N. Y., who had similar experience and had been cured with Hop Bitters, induced her to try it. One bottle has made her face as smooth, fair and soft as a child's and given her such health that it seems almost a miracle.

A MEMBER OF CANADIAN PARLIAMENT.

A Rich Lady's Experience.

I traveled all over Europe and other foreign countries at a cost of thousands of dollars in search of health and found it not. I returned discouraged and disheartened, and was restored to real youthful health and spirits with less than two bottles of Hop Bitters. I hope others may profit by my experience and stay at home.

A LADY, Augusta, Me.

I had been sick and miserable so long, causing my husband so much trouble and expense, no one knowing what ailed me. I was so completely disheartened and discouraged that I got a bottle of Hop Bitters and used them unknown to my family. I soon began to improve and gained so fast that my husband and family thought it strange and unnatural, but when I told them what had helped me, they said, "Hurrah for Hop Bitters! long may they prosper, for they have made mother well and happy." THE MOTHER.

My mother says Hop Bitters is the only thing that will keep her from her old and severe attacks of paralysis and headache.—Ed. Oswego Sun.

Luddington, Mich., Feb. 2, 1880.

I have sold Hop Bitters for four years and there is no medicine that surpasses them for bilious attacks, kidney complaints and many diseases incident to this malarial climate.

H. T. ALEXANDER.

A NOTED BUT UNTITLED WOMAN.

[From the Boston Globe.]



Messrs. Editors:—

The above is a good likeness of Mrs. Lydia E. Pinkham, of Lynn, Mass., who above all other human beings may be truthfully called the "Dear Friend of Woman," as some of her correspondents love to call her. She is zealously devoted to her work, which is the outcome of a life-study, and is obliged to keep six lady assistants, to help her answer the large correspondence which daily pours in upon her, each bearing its special burden of suffering, or joy at release from it. Her Vegetable Compound is a medicine for good and not evil purposes. I have personally investigated it and am satisfied of the truth of this.

On account of its proven merits, it is recommended and prescribed by the best physicians in the country. One says: "It works like a charm and saves much pain. It will cure entirely the worst form of falling of the uterus, Leucorrhoea, irregular and painful Menstruation, all Ovarian Troubles, Inflammation and Ulceration, Floodings, all Displacements and the consequent spinal weakness, and is especially adapted to the Change of Life."

It permeates every portion of the system, and gives new life and vigor. It removes faintness, dizziness, destroys all craving for stimulants, and relieves weakness of the stomach. It cures Bloating, Headaches, Nervous Prostration, General Debility, Sleeplessness, Depression and Indigestion. That feeling of bearing down, causing pain, weight and backache, is always permanently cured by its use. It will at all times, and under all circumstances, act in harmony with the law that governs the female system.

It costs only \$1 per bottle or six for \$5, and is sold by druggists. Any advice required as to special cases, and the names of many who have been restored to perfect health by the use of the Vegetable Compound, can be obtained by addressing Mrs. P., with stamp for reply, at her home in Lynn, Mass.

For Kidney Complaint of either sex this compound is unsurpassed as abundant testimonials show.

"Mrs. Pinkham's Liver Pills," says one writer, "are the best in the world for the cure of Constipation, Biliousness and Torpidity of the liver. Her Blood Purifier works wonders in its special line and bids fair to equal the Compound in its popularity."

All must respect her as an Angel of Mercy whose sole ambition is to do good to others.

Philadelphia, Pa. (3) Mrs. A. M. D.

Farmers' Newspaper.

Every Farmer should have a good Weekly Newspaper.

THE WEEKLY CAPITAL

Is the most complete Kansas weekly newspaper published. Sample copy free to every applicant. Sent one year for \$1.00. Address,

WEEKLY CAPITAL,
Topeka, Kansas.

SEND FOR ESTIMATES

—TO—

RAMSEY, MILLET & HUDSON,

Printers, Engravers,
Lithographers, Map-Makers,
Binders and Electrotypers.

224 W. 5th St., Kansas City, Mo.

HOLSTEINS!

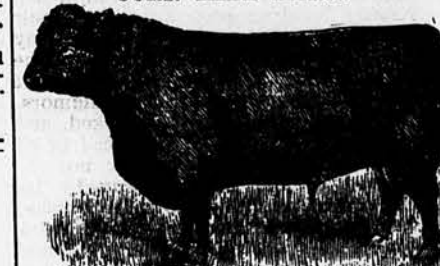
350 PURE BRED

ANIMALS!

The Largest and Choicest Importations ever brought to this country. Every animal selected by a member of the firm in person, and all from the deepest milking families. It will pay every buyer to see this herd before purchasing. Also a SUPERIOR STOCK of

CLYDESDALE AND HAMBLETONIAN HORSES

Personal inspection solicited. Catalogues on application. Mention this paper.

SMITHS & POWELL,
SYRACUSE, N. Y.Galloway Cattle
CORN HILL HERD.

Seventy head of bulls and heifers, the latter coming two and three years old; recently imported and all registered in Scotch Herd Book. Stock for sale. Address L. LEONARD, Mt. Leonard, Saline Co., Mo.

Cottonwood Farm Herds.

ESTABLISHED IN 1876.

J. J. MAILES, Proprietor.

And breeder of Short-Horn Cattle and Berkshire Hogs. My Short-horns consist of 26 females, headed by the Young Mary bull Duke of Oakdale 10,899, who is a model of beauty and perfection, and has proved him self a No. 1 sire.

My Berkshires number 10 head of choice brood sows, headed by Kellor Photograph 3551, who is a massive hog, three years old, and the sire of some of the finest hogs in the State; assisted by Royal Jim, a young and nicely-bred Sally boar of great promise.

Correspondence invited.
Address J. J. MAILES,
Manhattan, Kansas.

THE LINWOOD HERD
SHORT-HORN CATTLE.

Linwood, Leavenworth Co., Kas., is on the U. P. R'y, 27 miles west of Kansas City. The herd is composed of Imported VICTORIAS, VIOLETS, and others from the celebrated herd of A. Cruickshank, Scotland. Also,

GOLDEN DROPS, LADY ELIZABETHS,
YOUNG PHYLISSES, ROSE OF SHARONS
YOUNG MARYS, ETC., ETC.

Imp. BABON VICTOR 42824, bred by Cruickshank and 10025 GOLDEN DROPS HILLHURST 39190 head the herd. Inspection invited. W. A. HARRIS,
Farm joins station. Lawrence, Kas.

EVERY FARMER

who farms for profit should use

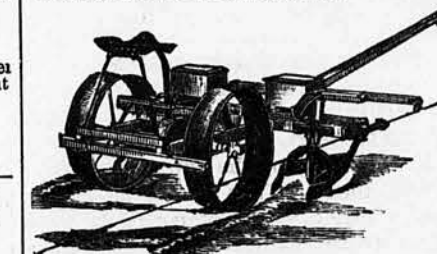
OUR SOIL PULVERIZER.



Strongest, Simplest, most Durable CLOD CRUSHER in the field. Send for circular.
H. P. DEUSCHER, Hamilton, Ohio.

"THE HAMILTON"

Combined Drill, Planter and Wire Check Rower. Wheels can be run on or off the seed row.



Will drill 1 grain at a time 12, 16 or 20 inches apart. Will plant 2, 3 or 4 grains in a hill. Send for Circular.

FARMER & DEUSCHER,
Hamilton, Ohio.

\$72 a week. \$12 a day at home easily made. Costly outfit free. Address True & Co., Augusta, Me.

Dr. Sturdevant says that in growing melons it seems well to add a handful of sulphate of potash, or several handfuls of wood ashes, to each hill. The effect seems to improve greatly the quality of the food grown, and if his experience is sufficient to generalize from, he would say that the addition of potash in excess to the soil upon which the melons are grown will add an excellent quality to the fruit.

Farmers are Mechanics in many ways and need a Mechanical Journal. The Cincinnati Artisan is valuable, and the only 50-cent a year mechanical paper in the country. Send 10 cents for sample and club and premium rates. Address W. P. Thompson, Manager, Cincinnati.

Various Causes—

Advancing years, care, sickness, disappointment, and hereditary predisposition—all operate to turn the hair gray, and either of them inclines it to shed prematurely. AYER'S HAIR VIGOR will restore faded or gray, light or red hair to a rich brown or deep black, as may be desired. It softens and cleanses the scalp, giving it a healthy action. It removes and cures dandruff and humors. By its use falling hair is checked, and a new growth will be produced in all cases where the follicles are not destroyed or the glands decayed. Its effects are beautifully shown on brashy, weak, or sickly hair, on which a few applications will produce the gloss and freshness of youth. Harmless and sure in its results, it is incomparable as a dressing, and is especially valued for the soft lustre and richness of tone it imparts.

AYER'S HAIR VIGOR is colorless; contains neither oil nor dye; and will not soil or color white cambric; yet it lasts long on the hair, and keeps it fresh and vigorous, imparting an agreeable perfume.

For sale by all druggists.

The tendency of population toward the cities, where thousands vainly expect to get rich without work, contains elements of danger. In 1790 one-thirtieth of the population of the United States lived in cities; in 1880, less than a century later, nearly one-fourth of the population was found in cities. Business panics and commercial revulsions alone seem to turn the tide countryward. It would seem that the comfort and comparative independence of rural life would attract many from the sham and glitter of metropolitan existence.

A Vegetable Product,

Only used in AYER'S AGUE CURE, has proven itself a never failing and rapid cure for every form of Malarial Disorder, Fever and Ague, or Chills and Fever. No injury follows its use, and its effects are permanent. It rouses the system to a condition of vigorous health, cleanses the blood of malarial poison, and imparts a feeling of comfort and security most desirable in Ague districts. It is an excellent tonic and preventative, as well as cure, of all complaints peculiar to malarious, marshy and miasmatic regions. The great superiority of AYER'S AGUE CURE over any other compound is that it contains no Quinine, Arsenic, or mineral; consequently it produces no quinsism or injurious effects whatever upon the constitution. Those cured by it are left as healthy as if they had never had the disease.

The direct action of AYER'S AGUE CURE upon the Liver and Digestive Organs makes it a superior remedy for Liver Complaints, producing many remarkable cures, where other medicines have failed.

For sale by all druggists.

Few farmers stop to consider, writes the editor of the Cultivator, how much of fertilizing matter is annually wasted about the farm, nor the expense incurred in purchasing the same materials in other forms. Thus in the apparently insignificant matter of corn cobs is an item worth saving. If the accumulation of corn cobs were gathered up and thrown into the hog pen, they would, by the next year be reduced to manure. It has been estimated in corn cobs grown in this country last year were upwards of two hundred thousand pounds of potash.

ROYAL BAKING POWDER

Absolutely Pure.

This powder never varies. A marvel of purity, strength and wholesomeness. More economical than the ordinary kinds, and cannot be sold in competition with the multitude of low test, short weight, alum or phosphate powders. Sold only in cans. ROYAL BAKING POWDER CO., 106 Wall-st., N. Y.

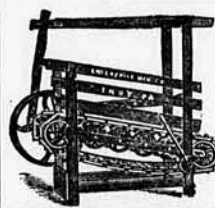
FLAX! FLAX!

\$48,000,000 Annually Wasted by Flax-Growers.

Save it by Sowing DUTCH & RUSSIAN SEED

This will Double the Seed Crop; the seed yielding ONE-THIRD MORE OIL than the common. This makes a fiber fit for the finest manufactures. Will quadruple the income per acre; 300 to 500 per cent. profit on the cost of the better seed. We import this seed in sealed bags. Send for our book on FLAX CULTURE FOR SEED AND FIBER; only 10 Cents. Price List and Annual Descriptive Seed Catalogue Free.

HIRAM SIBLEY & CO., Seedsmen,
Chicago, Ill., Rochester, N. Y.



The Enterprise Improved Dog Churn Power with sweep complete to attach a Dash Chain and Coupling for revolving churn. Has patent adjustable track. The easiest running and best power made. Let your Dog do the Churning. Send for circulars. Address, Enterprise Mfg. Co., Troy, Pa.



Established 1840. THE CELEBRATED "BRADFORD" PORTABLE MILL. CORN, WHEAT & FEED. FLOUR MILL MACHINERY. Send for descriptive Circular. Address plainly THOS. BRADFORD & CO., 174, 176, 178 W. Second St., CINCINNATI, O.

EVAPORATING FRUIT

Full treatise on improved methods, yields, profits, prices and general statistics, free. AMERICAN MFG CO. KESBORO, FRANKLIN COUNTY, PA.



"THE BEST IS CHEAPEST." ENGINES, THRESHERS, SAW-MILLS, Horse Powers, Clover Hullers (Suited to all sections.) Write for FREE Illus. Pamphlet and Prices to The Aultman & Taylor Co., Mansfield, Ohio.

PROSPECT STOCK FARM.



The young imported Clydesdale Stallion "Carron Prince," will serve a limited number of mares at the farm of the undersigned. I will also stand the due young stallion "Donald Dean," sired by imported "Donald Dinnie," at the same place. Farmers should not fail to see these extra fine draft stallions.

H. W. McAFEE,
Two miles west of Topeka—6th street road.

MOST EXTENSIVE PURE-BRED LIVE STOCK ESTABLISHMENT IN THE WORLD.

New Importations Constantly Arriving. Rare Individual Excellence and Choice Breeding.



Clydesdale and Percheron-Norman Horses

Trotting-Bred Roadsters, HOLSTEIN AND DEVON CATTLE. Our customers have the advantage of our many years' experience in breeding and importing, large collections, opportunity of comparing different breeds, low prices, because of extent of business, and low rates of transportation. Catalogues free. Correspondence solicited. POWELL BROTHERS, Springboro, (Crawford Co.) Pennsylvania. Mention the KANSAS FARMER.

STALLION SEASON—AT—NORWOOD STOCK FARM, 1883.

The standard-bred trotting horse Almont Pilot,

The highest inbred stallion in America—bay, 16½ hands high, weight 1,200 pounds; sired by Almont, the sire of W. H. Vanderbilt's Aldine and Early Rose, the fastest double team in the world,—record 2:16½ at Hartford, October, 1882. Also twenty others with records of 2:30 and better.

First dam, Lucille, by Alexander's Abdallah; 2nd dam by Pilot, Jr. Almont, by Alexander's Abdallah; 1st dam by Mambrino Chief; 2d dam by Pilot, Jr. Service—\$25 for the season. Payable Jan. 1st, 1884. Young stallions for sale; also Jersey bull and heifer. E. A. SMITH, Lawrence, Kansas.



Send Me \$3.00

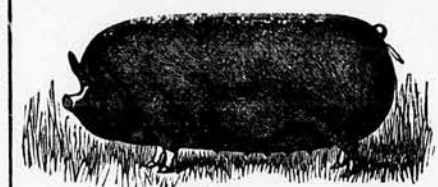
For a Setting of Hatched

BLACK SPANISH EGGS

Twenty-one Premiums—1882—

GEO. H. HUGHES,
145 Kansas Avenue, TOPEKA, Ks.

PLEASANT VALLEY HERD—OF—Pure-bred Berkshire Swine.



I have thirty breeding sows, all matured animals and of the very best strains of blood. I am using three splendid imported boars headed by the splendid prize-winner Plantagenet 2919, winner of five first prizes and gold medal at the leading shows in Canada in 1881. I am now prepared to fill orders for pigs of either sex not akin, or for matured animals. Prices reasonable. Satisfaction guaranteed. Send for catalogue and price list, free. S. McCULLUGH, Ottawa, Kansas.

BONNIE VIEW STOCK FARM.



We have 150 choice Recorded Poland-China Pigs this season.

Stock Sold on their Merits. Pairs not akin shipped and satisfaction guaranteed. Low express rates. Correspondence or inspection invited. W. F. BALDWIN & SON, Steele City, Nebraska.

Acme Herd of Poland Chinas



Fully up to the highest standard in all respects. Orders booked now for June and July delivery. Pedigrees, for either American or Ohio Records, furnished with each sale. All inquiries promptly answered. Address M. STEWART, Wichita, Kansas.

MERINO PARK STOCK FARM,

Winchester, Jefferson Co., Kansas.

WM. BOOTH & SON, Proprietors, Leavenworth,

Breeders of REGISTERED MERINO SHEEP.

None but the very best stock that money and experience can produce or procure are used for breeders. A few choice Rams for sale, ready for service this fall.



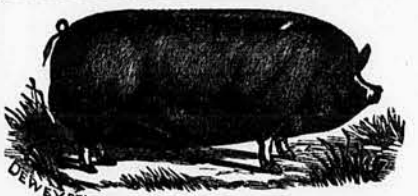
WM. BOOTH & SON, Leavenworth, Kansas, Breeders of Thoroughbred Berkshire Swine. We are using three Boars this season, at the head of which stands Gentry's Lord Liverpool No. 3615, sire Lord Liverpool No. 221. We are breeding twelve as fine Sows as the country can produce. Most of them Registered, and eligible to registry. Stock for sale and satisfaction guaranteed. Our stock are not fitted for the show ring, but for breeding only. Send for prices.



Poland China and Berkshire Hogs.

We have the largest herd of pure bred hogs in the state. For ten years past we have been personally selecting and purchasing, regardless of cost, from the leading Poland China and Berkshire breeders throughout the United States, choice animals to breed from and breeding them with much care. By the constant introduction of new blood of the best strains of each breed we have brought our entire herd to a high state of perfection. We keep several males of each breed not of kin that we may furnish pairs not related. Chang 263 and U. S. Jr. 781, American Poland China Record; and Peerless 2135 and Royal Nindennere 3347 American Berkshire Record are four of our leading males. We have as good hogs as Eastern breeders here. We have over \$10,000 invested in fine hogs and the arrangements for caring for them, and cannot afford (if we were so inclined) to send out inferior animals. We intend to remain in the business, and are bound to keep abreast of the most advanced breeders in the United States. If you want a pig, or pair of pigs, a young male or female, a mature hog, or a sow in pig, write us.

RANDOLPH & RANDOLPH,
Emporia, Lyon Co., Kas.



J. J. ATHERTON,
EMPORIA, : : KANSAS,

Breeder of POLAND-CHINA and BERKSHIRE SWINE.

Seventy-five choice young Berkshires ready for sale; also, Buff and Partridge Cochins, Light Brahma, and Plymouth Rock poultry eggs in season. Terms reasonable. Write.

Established in 1868.



RIVERSIDE FARM HERD.

Poland and Berkshires.

I warrant my stock pure-bred and competent for registry. I have as good Boars at head of my herds as the country will afford, and defy competition. Parties wishing Pigs of either breed of any age, or sows ready to farrow, can be accommodated by sending orders. I send out nothing but FIRST-CLASS STOCK, and warrant satisfaction. Give me a trial.

J. V. RANDOLPH
Emporia, Kansas.

Chester White, Berkshire and Poland China Pigs. Choice Setters, Scotch Shepherds and Fox Hounds, bred and for sale by ALEX. PEOPLES, West Chester, Chester Co., Pa. Send stamps for circular and price-list.

THE STRAY LIST.

HOW TO POST A STRAY.

BY AN ACT of the Legislature, approved Feb 27, 1886, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisement, to forward by mail, notice containing a complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker up, to the KANSAS FARMER, together with the sum of fifty cents for each animal contained in said notice. And such notice shall be published in the FARMER in three successive issues of the paper. It is made the duty of the proprietors of the KANSAS FARMER to send the paper free of cost, to every county clerk in the state to be kept on file in his office for the inspection of all persons interested in strays. A penalty of from \$5.00 to \$50.00 is affixed to any failure of a Justice of the Peace, a County Clerk, or the proprietors of the FARMER for a violation of this law.

How to post a Stray, the fees fines and penalties for not posting.

Broken animals can be taken up at any time in the year. Unbroken animals can only be taken up between the 1st day of November and the 1st day of April, except when found in the lawful enclosure of the taker-up.

No persons, except citizens and householders, can take up a stray.

If an animal liable to be taken, shall come upon the premises of any person, and he fails for ten days, after being notified in writing of the fact, any other citizen and householder may take up the same.

Any person taking up a stray, must immediately advertise the same by posting three written notices in as many places in the township, giving a correct description of such stray.

If such stray is not proven up at the expiration of ten days, the taker-up shall go before any Justice of the Peace of the township, and file an affidavit stating that such stray was taken up on his premises, that he did not drive nor cause it to be driven there, that he has advertised it for ten days, that the marks and brands have not been altered, also he shall give a full description of the same and its cash value. He shall also give a bond to the state of double the value of such stray.

The Justice of the Peace shall within twenty days from the time such stray was taken up, (ten days after posting) make out and return to the County Clerk, a certified copy of the description and value of such stray. If such stray shall be valued at more than ten dollars, it shall be advertised in the KANSAS FARMER in three successive numbers.

The owner of any stray, may within twelve months from the time of taking up, prove the same by evidence before any Justice of the Peace of the county, having first notified the taker up of the time when, and the Justice before whom proof will be offered. The stray shall be delivered to the owner, on the order of the Justice, and upon the payment of all charges and costs. If the owner of a stray fails to prove ownership within twelve months after the time of taking, a complete title shall vest in the taker up.

At the end of a year after a stray is taken up, the Justice of the Peace shall issue a summons to three householders to appear and appraise such stray, summons to be served by the taker up; said appraiser, or two of them shall in all respects describe and truly value said stray, and make a sworn return of the same to the Justice.

They shall also determine the cost of keeping, and the benefits the taker up may have had, and report the same on their appraisement.

In all cases where the title vests in the taker-up, he shall pay into the County Treasury, deducting all costs of taking up, posting and taking care of the stray, one-half of the remainder of the value of such stray.

Any person who shall sell or dispose of a stray, or take the same out of the state before the title shall have vested in him shall be guilty of a misdemeanor and shall forfeit double the value of such stray and be subject to a fine of twenty dollars.

Strays for week ending May 2, 1888.

Douglas county—N. O. Stevens, clerk.
PONY—Taken up by Adam S. Elston, in Willow Springs township, April 3, 1888, one Texas pony mare, 3 years old, dark roan, B. and L. on left shoulder; valued at \$15.

Usage county—C. A. Cottrell, clerk.
COW—Taken up by T. W. Lynch, in Burlington, April 10th, 1888, one cow 3 years old, white and red spotted, white face; valued at \$20.

Greenwood county—J. W. Kenner, clerk.
MARE—Taken up by James L. Noakes, in Salt Springs township, (date not given), one sorrel mare about 6 years old, left hind foot white, bushy or swab tail, no marks or brands; valued at \$30.
COLT—By same, at same time and place, one sorrel colt, about 2 years old, blaze face, left hind foot white, no marks or brands; valued at \$20.

Bourbon county—L. B. Welch, clerk.
STEER—Taken up by Jas. McGinnis, of Franklin township, March 24, 1888, one two-year-old steer, red, crop off right ear, underbit and overbit in left ear; valued at \$20.
COW—Taken up by O. D. Couch, of Scott township, one white cow, marked with crop off right ear, toe on right foot turned up, rope on horns, supposed to be six years old; valued at \$20.

MARE—Taken up by Geo. Heck, of Scott township, March 20, 1888, one chestnut sorrel mare, 7 years old, two white stripes above the hoof, white spot in left eye, roan spot between the eyes, 15 hands high; valued at \$40.
PONY—Taken up by J. T. Walker, of Drywood township, April 7, 1888, one chestnut sorrel horse pony, halter on when taken up, harness marks, six years old; valued at \$30.

Wyandotte county—D. B. Emmons, clerk.
COW—Taken up by Asbury Reeves, of Wyandotte township, April 6, 1888, one cow, 17 years old, pale red, crop off each ear; valued at \$10.

McPherson county—J. A. Fleisher, clerk.
PONY—Taken up by S. E. Tolle, in Gypsum Creek township, April 2, 1888, one brown mare pony, 11 or 12 years old, white dingy spot in forehead; valued at \$20.
Dickinson county—Richard Waring, clerk.

COLT—Taken up by Wm. H. Wyckoff, in Holland township, one dark bay mare colt, two years old, star in forehead; valued at \$35.

Cherokee county—J. T. Veatch, clerk.

MARE—Taken up by Samuel Salisbury, in Spring Valley township, March 22, 1888, one black mare, 16 hands high, 12 years old, blind in right eye, white mark in face, lame in left fore foot, left hind foot white; valued at \$40.

Strays for week ending May 9, 1888.

Wyandotte county—D. B. Emmons, clerk.
HEIFER—Taken up by D. M. Taylor, of Wyandotte township, April 21, 1888, one heifer, 3 years old, underbit in left ear, brush of tail off, no other marks or brands; valued at \$20.

Jefferson County—J. R. Best, Clerk.
HEIFER—Taken up by J. B. Garrett, in Kentucky township, April 4th, 1888, one 8-year-old red and white heifer, white face, large star in forehead, white on top of hips, tail mostly white, no marks or brands perceptible; valued at \$20.

Allen county—T. S. Stoner, clerk.

STEER CALF—Taken up by J. L. Stacy, of Iola

township, March 12, 1888, one bright red steer calf, about one year old; valued at \$12.

STEER CALF—Taken up by O. P. Mattison, of Elmore township, one red steer calf, two stripes on right hind leg, one white spot on left shoulder, white on the belly, white spot on left hind leg; no value given.

HEIFER—Taken up by Gottlieb Reehl, Cottage Grove township, April 23, 1888, one black and white heifer marked on the right ear from upper side and on left ear from the under side, also a brand on right hip—in describable; value not given.

Dickinson County—Richard Waring, Clerk.

COLT—Taken up by J. B. Pray, in Banner township, April 12th, 1888, one bay horse colt, one year old, no marks or brands; valued at \$30.

Strays for week ending May 16, 1888.

Leavenworth County—J. W. Niehaus, Clerk.

COW—Taken up by Christian C. Rhoenborg, of Delaware township, April 27, 1888, one white cow with red ears, one horn broken off, 6 years old, has a small chain around neck with a small bell without a clapper; valued at \$20.

Clay county—J. L. Noble, clerk.

PONY—Taken up by J. C. Woodside, of Bloom township, March 26, 1888, one bay horse pony, small spot in forehead and white strip on nose, hip-shot on right side, about 4 years old; valued at \$15.

Smith county—J. N. Beacorn, clerk.

HORSE COLT—Taken up by S. B. Miller, of Harlan township, April 10, 1888, one 2-year-old horse colt, dark brown, white ring on right fore leg, ring-bone on right hind foot; valued at \$30.

Cherokee county—J. T. Veatch, clerk.

PONY—Taken up by G. W. Wallis, of Crawford township, April 20th, 1888, one dun colored pony horse, 14 hands high, saddle marks, indistinguishable brand on each shoulder, two white hoofs on right side; valued at \$25.

STEER—Taken up by B. E. Jacobs, of Spring Valley township, April 14th, 1888, one 1-year-old spotted roan steer, marked with underbit in left ear and upperbit in right ear; valued at \$18.

Dickinson County—Richard Waring, Clerk.

STALLION—Taken up by J. J. Muenzenmayer, in Liberty township, April 18, 1888, one light gray stallion, 2 years old, branded UT on right shoulder.

STALLION—By same, one 2-year-old black stallion.

MARE—By same, one iron gray mare, branded on right shoulder PT.

MARE COLT—By same, one sorrel mare colt, 1 year old, white face, no other marks or brands.

Valued at \$60.

Cowley county—J. S. Hunt, clerk.

COW—Taken up by H. E. Carder, of Creswell township, March 26, 1888, one 3-year-old brindle cow, underbit in left ear, had calf with her; valued at \$25.

Davis county—P. V. Trovinger, clerk.

MARE—Taken up by Wm. Hawk, of Junction City township, April 14th, 1888, one black mare about 14 hands high, about 9 years old, white hind feet, two white spots in small of back, tip of upper lip white, branded on right and left hips with indistinct brands, bridle and saddle on when taken up; valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.

Valued at \$25.



SUGAR CANE MACHINERY.

Our list of Sugar Cane Machinery comprises the largest and most complete line of Cane Mills, Evaporators, etc., made by any establishment in the world, and includes:

Victor, and Great Western Horse Power Mills, Victor, and Niles Steam Mills, Cook Evaporators,

Automatic Cook Evaporator,

Far Ahead of all Others.

(Patented Sept. 26, 1876, Sept. 23, 1879. Manufactured only by ourselves.)

BLMYER MANUFACTURING CO.,

CINCINNATI, O.

Manufacturers of Portable and Stationary Steam Engines, Boilers, Circular Saw Mills, Steam Sugar Trains, etc.



Zimmerman Fruit & Vegetable Evaporator

Made of Galvanized Iron.

Over 13,000 in Use.

Portable, Economical, Durable and Fire Proof. The products of this Evaporator are unsurpassed as to quality or color, and command the highest price. The racks are made of Galvanized Wire Cloth and the Dryer is first-class in every particular.

Our Nos. 1 and 2 are Excellent Bakers, will bake bread in less time than a stove and for roasting meats, turkey or game cannot be excelled. Full instructions how to dry, bleach, pack and market the products accompany each machine. Send for Illustrated catalogue. Address

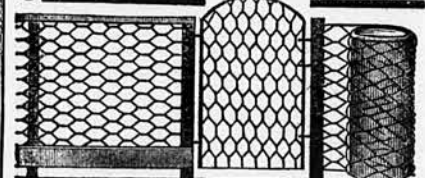
AGENTS WANTED. ZIMMERMAN FRUIT DRYER CO., Cincinnati, Ohio, U. S. A.



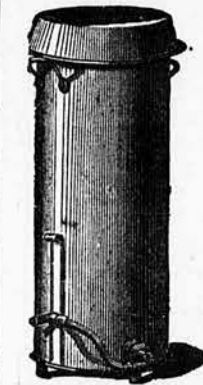
* Our Spring style *
* and price book *
* tells how to order *
* Clothing Shirts or *
* Furnishing Goods. *
* A postal request *
* will get it. * * *

* Wanamaker and Brown. *
OAK HALL, PHILADELPHIA.

SEDGWICK STEEL WIRE FENCE



It is the only general-purpose Wire Fence in use, being a strong net work without bars. It will turn dogs, pigs, sheep and poultry, as well as the most vicious stock, without injury to either fence or stock. It is just the fence for farms, gardens, stock runs, and railroads, and very neat for lawns, parks, schools, and cemeteries. Covered with rust-proof paint (or galvanized) it will last a life time. It is superior to boards or barbed wire in every respect. We ask for its fair trial, knowing it will wear itself into favor. The Sedgwick Gates, made of wrought iron pipe and steel wire, defy all competition in neatness, strength, and durability. We also make the best and cheapest all iron automatic or self-opening gate, also cheapest and neatest all iron fence. Best Wire Stretcher and Post Auger. For prices and particulars ask hardware dealers, or address, mentioning paper, SEDGWICK BROS., Manufacturers, Richmond, Ind.



COOLEY CREAMER.

The COOLEY (the only submerged) system for setting milk for cream is the only way to make the

Most and Best BUTTER

in all seasons of the year.

Creamers, or cans only.

Wholesale or retail, by

J. H. LYMAN,

259 Kansas Avenue,

Topeka, Kas.

DR. A. C. GIBSON'S FEVER and AGUE CURE.

This TONIC NEVER FAILS to cure Fever and Ague, Dumb Ague, Malarial Fever, Night Sweats, Ague Cakes, Neuralgia, Jaundice, Loss of Appetite, Dyspepsia, Bilious Fever, Rheumatism, and Typhoid Fever. Laboratory 1223 Grand Avenue, KANSAS CITY, MO. Sold by all Druggists. Price 25 and 50 Cents.

AGENTS can now grasp a fortune. Outfit worth \$10 free. Address E. G. RIDEOUT & CO., 10 Barclay St., N. Y.



USE LEIS' DANDELION TONIC. THE GREAT BLOOD & LIVER PURIFIER.

A SURE CURE FOR Sick Headache, Dyspepsia, Langour, Nervous Exhaustion arising from overwork or excess of any kind, —AND FOR—

Female Weaknesses. —IT PREVENTS—

Malarial Poisoning and Fever and Ague, And is a Specific for Obstinate

CONSTIPATION.

PRICE \$1.00 PER BOTTLE; SIX FOR \$5.00

SOLD BY DRUGGISTS EVERYWHERE.



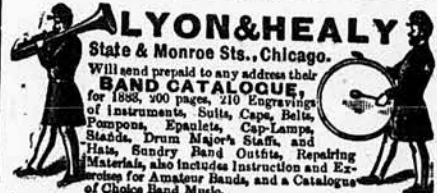
CATARRH

To any suffering with Catarrh or Bronchitis who earnestly desire relief, I can furnish a means of Permanent and Positive Cure. A Home Treatment. No charge for consultation by mail. Valuable Treatise Free. Certificates from Doctors, Lawyers, Ministers, Business-men. Address Rev. P. C. HILDS, Troy, Ohio.

Whitman's Patent Americus.

The Best Cider and Wine Mill made. Will make 20 per cent. more cider than any other. Geared outside. Perfectly Adjustable. Prices as low as any first-class Mill. Mfrs. of Horse-Powers, Corn Shellers, Feed Cutters, Feed Mills, etc. Send for circulars.

Whitman Agricultural Co., ST. LOUIS, MO.



LYON & HEALY. State & Monroe Sts., Chicago. Will send prepaid to any address their BAND CATALOGUE, for 1888, 200 pages, 210 Engravings of instruments, Suits, Caps, Belts, Pompons, Epaulettes, Cap-Lamps, Sticks, Drum Major's Sticks, Hats, Sundry Band Outfits, Repairing Materials, also includes Instruction and Exercises for Amateur Bands, and a Catalogue of Choice Band Music.

The bottom of every well and cistern should be examined at least twice a year, especially if not closely covered. Sticks, filth, worms, toads, &c., often fall in and injure the water. A mirror or piece of common looking glass held so as to throw the sun's rays to the bottom will show everything very plainly, even through a dozen feet of water or more. In some situations, as in a cellar cistern, two or more mirrors may be needed to carry in the light, by double or triple reflection of the rays.

The Shropshire is a mutton breed and producer of what is known as clothing or delaine wool. This sheep is possessed of strong constitutional vigor, produce a compact fleece, mature early and have a beautiful form. It is claimed that they will do excellently well in large flocks, and the ewes are very prolific, producing, it is said, forty per cent. of twins. The ewes make good mothers, giving plenty of milk, and are careful. Those who have tried them speak of them in unbounded praise, and it is the opinion of even some of the breeders of other kinds of sheep that the Shropshire is worthy of a place among the best.

Sheep manure, from its coldness, does not ferment like other dung, therefore retains its value much longer than the excrement of the horse or man. It ranks among the very best of manures produced by animals, especially from those sheep that are fed with rich food for fattening purposes. The mastication of sheep is so perfect there is no danger of weed seeds coming up after having passed through the stomach of a sheep. Both the urine and the dung are very rich in fertilizing properties. Urea, the active principle of urine, has a very large quantity of nitrogen in it, and sheep's urine contains, according to one of our best analysts, 28 parts of urea in every 1,000 parts and 12 parts of salt, among which is a large proportion of phosphoric acid.

Childhood, Manhood, and Hoary Age exclaim in unison, "Behold the Conqueror."

DURING a brief visit to the ancient town of Warwick, R.I., recently, our agent extended his trip to the southeastern extremity of the town, to look about among the wonderful improvements which have been made in the appearance of Warwick Neck during a comparatively brief period, and while conversing on this subject with Col. BENJAMIN S. HAZARD, the popular proprietor of the Warwick Neck Hotel, he learned that the greater part of the handsome summer residences had been erected inside of a dozen years; and he also learned that Col. Hazard had been a great sufferer from a chronic disease of the Kidneys and Bladder over fifteen years, the most painful form of it being a stoppage or retention of the urine, which was so very severe at times as to disable him for his accustomed work, and even confine him to the bed, when a surgeon's assistance would be required to relieve him. He was being doctored a large part of the time, but could get no permanent relief. At times his sufferings were terrible from sharp, cutting pains through the Kidneys and Bladder; and he had suffered so long and so severely that he had become discouraged of getting well again, especially as the doctor stated that it was doubtful if a man of his age, with such a complicated disease of long standing, could be cured. But last summer, when he was suffering intensely from one of these attacks, a gentleman who was boarding at his hotel, urged and persuaded him to try a bottle of Hunt's Remedy, as he had known of some wonderful cures effected by it.

Mr. Hazard says he had no faith in it, but consented reluctantly to try it; and after taking it only two days, the intense pains and aches had disappeared, and he commenced to gain strength rapidly, and in less than a week was attending to his accustomed work, and has never had a return of the pains. Mr. Hazard is over seventy years of age, and on the 25th of Nov., 1882, when our agent met him, although it was a very cold and blustering day, he was in the field with his team at work pulling and loading turnips, as hale and hearty a man as you could wish for, whereas last August he was unable to stand up to oversee the work then going on in this same field.

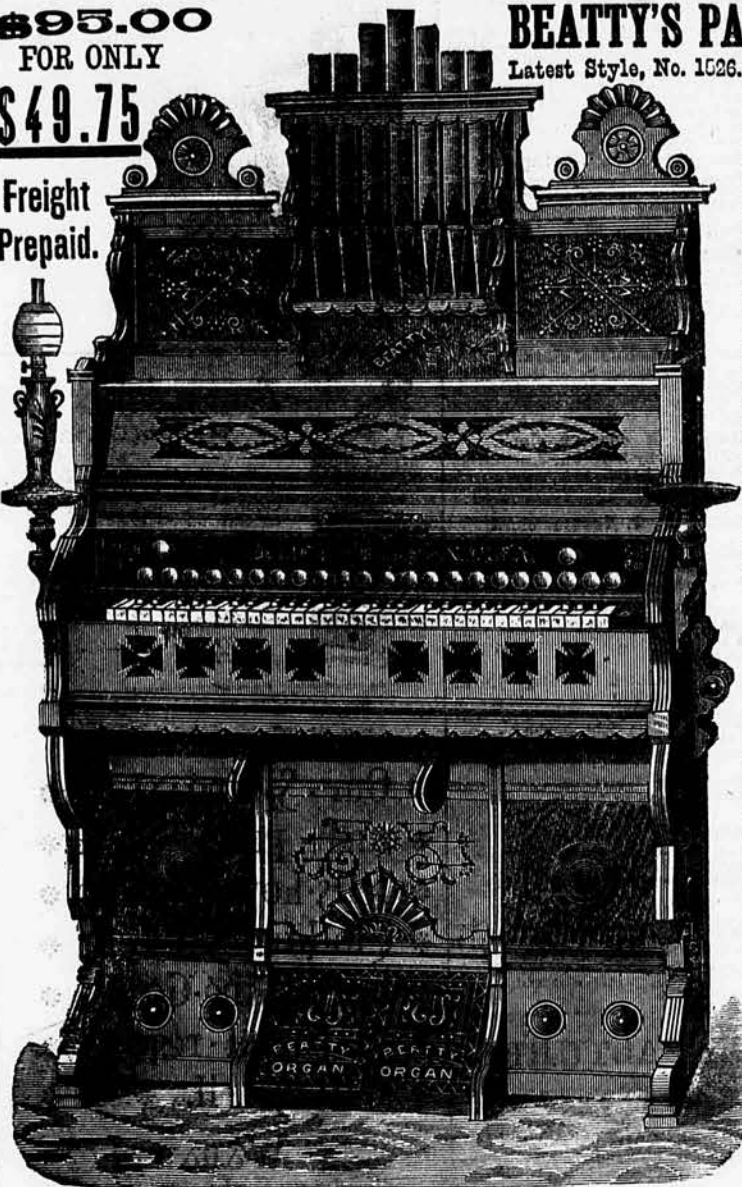
HUNT'S REMEDY had given him health and strength again, and he recommends it to his relatives and friends, several of whom are now taking it, as he considers it a most excellent medicine for all diseases of Kidneys or Bladder.

\$95.00

FOR ONLY

\$49.75

Freight
Prepaid.



BEATTY'S PARLOR ORGANS ONLY \$49.75

Latest Style, No. 1026.

Dimensions—Height, 74 ins., Depth, 26 ins., Length, 50 ins., Weight, boxed, about 450 lbs.

Regular Price \$95.00 Without Stool, Book and Music.

22 STOPS.—1. Cello, 8 ft. tone; 2. Melodia, 8 ft. tone; 3. Clarabella, 8 ft. tone; 4. Manual Sub-Bass, 16 ft. tone; 5. Bourdon, 16 ft. tone; 6. Saxophone, 8 ft. tone; 7. Viol di Gamba, 8 ft. tone; 8. Diapason, 8 ft. tone; 9. Viola Dolce, 4 ft. tone; 10. Grand Expression, 8 ft. tone; 11. French Horn, 8 ft. tone; 12. Harp Zolian; 13. Vox Humana; 14. Echo, 8 ft. tone; 15. Dulciana, 8 ft. tone; 16. Clarinet, 8 ft. tone; 17. Vox Celeste, 8 ft. tone; 18. Violina, 4 ft. tone; 19. Vox Jubilante, 8 ft. tone; 20. Piccolo, 4 ft. tone; 21. Coupler Harmonique; 22. Orchestral Forte; 23. Grand Organ Knee Stop; 24. Right Organ Knee Stop.

This Organ is a triumph of the organ-builder's art. IT IS VERY BEAUTIFUL IN APPEARANCE, BEING EXACTLY LIKE CUT. The Case is solid Walnut, profusely ornamented with hand-carving and expensive fancy veneers. The Pipe-Top is of the most beautiful design extant. It is deserving of a place in the millionaire's parlor, and would ornament the boudoir of a princess. **FIVE SPECIAL REELS.**—Five Octaves, handsome appearance. It will not take the dirt or dust. It contains the Sweet VOIX CELESTE STOP, the famous French Horn Solo Combination, New Grand Organ Light and Left Knee Stop, to control the entire motion by the Knee, if necessary. Five (5) Sets of GOLDEN TONGUE REELS, as follows: a set of powerful Sub-Bass Reels; set of 3 Octaves of VOIX CELESTE; one set of FRENCH HORN REELS, and 2-3 Octaves each of regular GOLDEN TONGUE REELS. Besides all this, it is fitted up with an OCTAVE COUPLER, which doubles the power of the instrument. Lamp Stands, Pocket for Music, Beatty's Patent Stop Action, also Sounding Boards, &c. It has a Sliding Lid and conveniently arranged Handles for moving. The Bellows, which are of the upright pattern, are made from the best quality of rubber cloth, are of great power, and are fitted up with steel springs and the best quality of pedal straps. The Pedals, instead of being covered with carpet, are polished metal of neat design, and never get out of repair or worn.

SPECIAL TEN-DAY OFFER TO READERS OF THE KANSAS FARMER.

If you will remit me \$49.75 and the annexed Coupon within 10 days from the date hereof, I will box and ship you this Organ, with Organ Bench, Book, etc., exactly the same as I sell for \$95. You should order immediately, and in no case later than 10 days. One year's test trial given and a full warranty for six years. **GIVEN UNDER MY HAND AND SEAL**



May 31st,

1883.

Daniel F. Beatty

COUPON On receipt of this Coupon from any readers of **Kansas Farmer** \$45.25

and \$49.75 in cash by Bank Draft, Post Office Money Order, Registered Letter, Express prepaid, or by Check on your Bank, if forwarded within 10 days from date hereof, I hereby agree to accept this Coupon for \$45.25 as part payment on my celebrated \$49.75 Parlor Organ, with Bench, Book, etc., providing the cash balance of \$49.75 accompanies this Coupon, and I will send you a receipted bill in full for \$95, and box and ship you the Organ just as it is advertised, fully warranted for six years. Money refunded with interest from date of remittance if not as represented after one year's use. (Signed) DANIEL F. BEATTY.

FREIGHT PREPAID. As a further inducement for you, (provided you order immediately, within the 10 days) I agree to prepay freight on the above Organ to your nearest railroad freight station any point east of the Mississippi River, or that far on any going west of it. This is a rare opportunity to place an instrument, as it were, at your very door, all freight prepaid, at manufacturer's wholesale price. Order now; nothing saved by correspondence. **HOW TO ORDER.** Enclosed find \$49.75 for Organ. I have read your statement in this advertisement and I order one on condition that it must prove exactly as represented in this advertisement, or I shall return it at the end of one year's use and demand the return of my money, with interest from the very moment I forwarded it, at six per cent., according to your offer. Be very particular to give Name, Post Office, County, State, Freight Station, and on what Railroad. Be sure to remit by Bank Draft, P. O. Money Order, Registered Letter, Express prepaid, or by Bank Check. You may accept by telegraph on last day and remit by mail on that day, which will secure this special offer. I desire this magnificent instrument introduced without delay, hence this special price, providing order is given immediately. Address or call upon **DANIEL F. BEATTY, Washington, New Jersey.** the Manufacturer

AGITATOR

What Farmers & Threshermen say about the Agitator. Manufactured by **J. I. CASE T. M. CO. RACINE, WIS.**

"Don't Change It." "Perfect as it is."

IN GRAIN, FLAX, TIMOTHY, CLOVER, AND PEAS.



PORTABLE (8, 10, 12 and 16 Horse)

TRACTION (8, 10, and 12 Horse)

STRAW-BURNING (Portable only, 8, 10, 12, 16 Horse)

And 8, 10, 12, 16, 20, 25 and 30 Horse

SKID ENGINES!

We make the most Practical Straw-Burning Engine in the World.

The Popular Double Pinion 4-Wheel Woodbury Horse-Power Reversible Bull Wheel. Runs either way, Low or High Speed. The BEST Power made. Ours Exclusively.

Do you live near Timber? If so, buy our

PORTABLE SAW MILL.

Take it to the timber. SAVE HAULING Logs to the Mill. 5,000 TO 10,000 FEET PER DAY.

ALL MACHINERY WARRANTED.

Write for Catalogue. Costs Nothing

CHAMPION CABINET CREAMERY.



First Premium, Illinois, Michigan and Kansas State Fairs, 1882. All sizes for dairy or factory use. For convenience of handling, raising the cream quickly and thoroughly, and ease of cleaning, are unsurpassed. Send postal for circulars and testimonials. Dairy Implement Co., Bellows Falls, Vt.

Lewis's Combination Force Pump.

Makes three Machines. Made of Brass throughout. My agents are making \$5 to \$30 per day

LEWIS COMBINATION FORCE PUMP

POTATO BUG EXTERMINATOR

INJECTOR

(The above shows the three Combinations.)

cultural Syringe" separate—price, postpaid, zinc, \$1.25; polished brass, \$1.75. Send for illustrated Circular. Price-List and Terms to Agents, etc. I give a long list of customers, each of whom has bought from \$50 to \$2000 worth of these goods in from one to three weeks' time. You can make **P. C. LEWIS, Catskill, New York.** from \$10 to \$20 per day. AGENTS WANTED everywhere.

LANDRETH'S PEDIGREE SEEDS

ESTABLISHED NINETEEN YEARS. **SEEDS** For the MERCHANT on our New Plan. **SEEDS** For the MARKET GARDENER. **SEEDS** For the PRIVATE FAMILY. **SEEDS** Crown by ourselves on our own Farms.

Handsome Illustrated Catalogue and Rural Register FREE TO ALL.

MERCHANTS, SEND US YOUR BUSINESS CARDS FOR TRADE LIST.

DAVID I. ANDRETH & SONS, SEED GROWERS, PHILADELPHIA

SHEEP, WOOL-GROWERS AND STOCKMEN! The Gold-Leaf Dip!

Is the best and most reliable yet discovered. All who used it last year speak of it in the highest terms. It can be used with little trouble. Is a cure for SCAB, insects or screw-worm, and on healthy sheep it promotes the growth of wool so the increased clip will pay more than double what it will cost to use it. Merchants in nearly all the Western towns keep it and have the circulars, giving price and directions for use. When it cannot be had near home, order from

RIDENOUR, BAKER & CO.,

Kansas City, Mo., General Distributing Agents.

GALVANIZED IRON GATES,

COMPLETE, \$5.00 EACH.

"Wire Netting Fence," for Farms, Lawns, Cemeteries, Sheep, &c., cheap as barbed wire. If not for sale in your town, write for illustrations to the manufacturers,

E. HOLENSHADE,

136 Lake Street, Chicago, Ill.

Horticulture.

What Trees and Vines to Plant.

A new settler in northwestern Kansas and a new subscriber to the KANSAS FARMER wants information. He writes:

Will it do to set out fruit trees on new breaking this fall, and best kinds? any Balm of Gilead trees? (there is another name, but I forget it.) Grapes, best kind, how to plant? cherries, best kinds? plums, best kinds; strawberries, best varieties and how to plant; raspberries, best; blackberries, hardy kinds; any dewberry plants. Do evergreens do well, how to set, what time of year to plant? Do red cedars do well?

Answer.—If the ground is well broken this summer, and again deeply plowed in the fall, and then regularly and well cultivated every year for four or five years, your trees may be safely set out this fall. In planting trees it is important that the ground be broken up as deep as the trees are to be set, and as much deeper as it can be done. Old ground is much better than new for trees, but one cannot have old ground the same year that the first furrow is plowed. We have set out and raised fruit trees on fresh soil. We sent to the Centennial display apples grown on trees that were set in ground fresh broke in the spring of 1871. But the breaking was thoroughly done. One shallow furrow was plowed, turning about two inches of the sod, then another 8-inch furrow cut in the same track. This was well separated and pulverized by frequent harrowing, and then the trees were set and the ground planted to potatoes and other vegetables, and regular cultivation continued every year. We have planted several orchards in new ground in Kansas, and never lost a tree on that account. The important thing is to have plenty of loose, well drained soil for the roots to play in, and then continue the working of the soil for low crops. The wildness of the soil soon disappears.

The "Balm of Gilead (allanthus) trees" don't amount to much anywhere, and we would rather have one hardy catalpa than a dozen of them. Evergreens are successfully grown in Kansas. Red cedars grow wild in many parts of the State. But it requires great care in planting them. The soil ought to be sandy. If not so naturally, mix some sand with it. Dig deep large holes; spread the roots out carefully in every direction; see that fine soil is well mixed in among the roots; then, after the roots are all covered make a basin about them in the earth and pour a bucket of water about the trunk so as to wet the roots and settle the soil. After the water is all absorbed, fill the hole and tramp the earth compactly down about tree. Then, if you have but few of them, put a barrel (both heads out) or a box over the tree to protect it against the wind. Bank up earth six inches around the bottom of the barrel on the outside and enough on the inside to make a hollow about the trunk. Then pack in some hay or straw around the tree—say five inches deep, and pour on it a bucket or two of water. And if the weather becomes dry, give it more water occasionally. The mulching keeps the earth damp about the tree, and the barrel keeps the tree from being shaken by wind.

If you have many trees you cannot spend so much time on them; but every one ought to have a pile of straw or hay packed down around it extending out about three feet from the tree for mulching, and then the trees ought to be protected in some way from effects of strong winds. Stakes and strings will do.

As to fruit trees, &c., the following

varieties are recommended by the State Horticultural Society. We have published the list several times, but it will bear repeating.

APPLES.

Summer varieties—five most desirable: 1, Early Harvest; 2, Carolina Red June; 3, Red Astrachan; 4, Early Pen-nock; 5, American Summer Pearmain.

Autumn varieties—five most desirable: 1, Maiden's Blush; 2, Rambo; 3, Lowell; 4, Fameuse; 5, Fall Wine.

Winter varieties—ten most desirable: 1, Winesap; 2, Ben Davis; 3, Jonathan; 4, Rawles Genet; 5, White Winter Pearmain; 6, Missouri Pippin; 7, Willow Twig; 8, Rome Beauty; 9, Gilpin; 10, Domine.

PEACHES.

Early varieties—four most desirable: 1, Crawford's Early; 2, Amsden's June; 3, Hale's Early; 4, Large Early York.

Medium varieties—two most desirable: 1, Stump the World; 2, Old Mixon Free.

Late varieties—three most desirable: 1, Crawford's Late; 2, Heath's Cling; 3, Ward's Late Free.

PEARS.

Five most desirable: 1, Bartlett; 2, Flemish Beauty; 3, Duchess d'Angouleme; 4, Seckel; 5, Louise de Jersey.

PLUMS.

Five most desirable: 1, Wild Goose; 2, Miner; 3, Chickasaw; 4, Damson; 5, Lombard.

CHERRIES.

Six most desirable: 1, Early Richmond; 2, Common Morello; 3, English Morello; 4, May Duke; 5, Governor Wood; 6, Bell Magnifique.

GRAPES.

Four most desirable: 1, Concord; 2, Ives; 3, Dracut Amber; 4, Clinton.

STRAWBERRIES.

Early varieties—three most desirable: 1, Wilson's Albany; 2, Chas Downing; 3, Green Prolific.

Late varieties; Kentucky was the only variety voted for.

BLACKBERRIES.

Three most desirable: 1, Kittatinny; 2, Lawton; 3, Snyder.

RASPBERRIES.

Early varieties: Doolittle was the only variety voted for.

Medium varieties: Miami was the only variety voted for.

Late varieties: 1, McCormick (syn. Mammoth Cluster); 2, Gregg.

RASPBERRIES, RED.

Two most desirable: 1, Turner; 2, Philadelphia.

GOOSEBERRIES.

Four most desirable: 1, Houghton; 2, Pale Red; 3, Downing; 4, Mountain.

CURRENTS.

Four most desirable: 1, Large Red Dutch; 2, White Grape; 3, White Dutch; 4, Black Naples.



IT WILL PAY YOU,
If you run a Mower or Reaper, to purchase a BOSS Sickle Grinder.
It will pay you if you want to handle a reliable Sickle Grinder and one that is sold every year than all others made.
Send for Price List and Catalogue.
Agents wanted for unoccupied territory.
POWELL & DOUGLAS,
Waukegan, Ills.
Mau'frs of Pumps, Windmills, etc.

THE SOUTH AND SOUTHEAST. FLORIDA.

Should you contemplate a trip to Nashville, Chattanooga, Atlanta, Charleston, S. C.; Savannah, Ga.; Jacksonville, Florida, or in fact, any point in the South or Southeast, it will be to your interest to examine the advantages over all other lines offered by the St. Louis, Iron Mountain & Southern R'y.—"Iron Mountain Route" in the way of Fast Time, Elegant Equipments, etc.

At present a Daily Train is run from St. Louis Grand Union Depot, attached to which will be found an elegant Pullman Palace Sleeping Car, which runs through to Nashville, Tenn., where direct connections are made with Express Trains of connecting Lines, for points mentioned above. This Train connects at Nashville with the Jacksonville Express, having a Pullman Palace Sleeping Car of the very finest make attached, which runs through to Jacksonville, Florida, without change.

For further information address
C. B. KINNAN, Asst. Gen'l Pass. Agent. F. CHANDLER, Gen'l Pass. Agent.

BIG Wages summer and winter; samples free. National Copying Co., 300 W. Madison st., Chicago, Ill.

EIGHTH ANNUAL SALE

—OF THE—

Jackson County, Mo., Short-Horn Breeders,

—AT—

Riverview Park, Kansas City, Mo.,

Wednesday, Thursday and Friday, May 23, 24 and 25,



At which time they will sell

175 Head of SHORT-HORN CATTLE.

About one-half of the number will be young bulls, of suitable age for immediate use. The cows and heifers that are old enough will either have calves at their side or be in calf to good bulls. This will be the best opportunity that will be offered this season to secure good Short horns, both for the ranch and professional breeder. Catalogues ready May 1. For further particulars address either of the committee.

Col. L. P. MUIR, Auctioneer.

W. A. CUNNINGHAM, Independence, Mo.
A. J. POWELL, Independence, Mo.
L. BENNETT, Lee's Summit, Mo.

Kansas City Stock Yards,

Covers 120 acres of land. Capacity 10,000 Cattle; 25,000 Hogs; 2,000 Sheep, and 300 Horses and Mules.

C. F. MORSE, General Manager. H. P. CHILD, Supt. E. E. RICHARDSON, Asst. Treas. and Asst. Sec'y
C. F. PATTERSON, Traveling Agent.

Buyers for the extensive local packing houses and for the eastern markets are here at all times, making this the best market in the country for Beef Cattle, Feeding Cattle, and Hogs.

Trains on the following railroads run into these yards:

Kansas Pacific Railway, Atchison, Topeka & Santa Fe R. R.,
Kansas City, Fort Scott & Gulf R. R., Kansas City, Lawrence & Southern R. R.,
Kansas City, St. Joe & Council Bluffs R. R., Missouri Pacific Railway,
Hannibal & St. Joseph R. R., Missouri, Kansas & Texas R. W.,
Wabash, St. Louis & Pacific Railway, Chicago & Alton Railroad, and the
(Formerly St. Louis, Kansas City & Northern Railroad,) Chicago, Rock Island & Pacific R. R.



SIBLEY'S SEEDS

of ALL PLANTS, for ALL CROPS, for ALL CLIMATES. All are tested; only the best sent out. Grain and Farm Seed Manual; History and best methods of culture of Grains, Root Crops, Grasses, Fodder Crops, Tree Planting, etc. only 10cts. Annual Catalogue and Price List of several thousand varieties, FREE.

SIBLEY'S SEEDS

HIRAM SIBLEY & CO. CHICAGO, Ill. Rochester, N.Y.

D. M. MAGIE COMPANY, Oxford, Butler Co., Ohio.—Originators and Breeders of the world-famous Magie or Poland China Swine. The oldest breeders and most extensive shippers of fine bred Swine in America. Have shipped our stock to seven foreign countries, and have sold an average of over 600 pigs and hogs for breeders every year, for several years. The acknowledged superior Swine of the world, because the most profitable. Nothing pays as well on a farm as our breed of swine. You can't afford to be without them. Send to head-quarters, and get the best at reasonable prices. We breed this stock only. Boars and sows from 3 months to 3 years old for sale; also sows bred, stock in pairs, trios and larger numbers not akin. Reduced rates by express.

MOORE'S

HOG CHOLERA CURE.

Is offered to the public after four years of experimenting, which has proved it the ONLY RELIABLE REMEDY for this terrible disease.

It is a Sure Cure and I guarantee that if faithfully tried according to direction and it fails to accomplish all I claim for it, I will return the money paid for it. Send for circulars and testimonials to

Dr. J. B. MOORE, 201 Lake st., CHICAGO. Where my expenses are paid, I will visit 100 or more hogs, and when I treat them I will charge \$1 per head for those I cure, and every hog I lose, that I treat, I will forfeit \$2 per head for same. **ASK YOUR DRUGGIST FOR IT.**

THE DINGEE & CONARD CO'S BEAUTIFUL EVER-BLOOMING

ROSES

The only establishment making a SPECIAL BUSINESS OF ROSES. 50 LARGE HOUSES for ROSES alone. Strong Pot Plants suitable for immediate bloom delivered safely, postpaid, 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; WE GIVE a Handsome Present of choice and valuable ROSES free with every order. Our NEW GUIDE, a complete Treatise on the Rose, 70 pp., elegantly illustrated—free to all. **THE DINGEE & CONARD CO.** Rose Growers, West Grove, Chester Co., Pa.

NORTHERN SUGAR CANE MANUAL.

By Profs. Weber & Scovill, of Champaign, Ill. Sent free by GEO. L. SQUIER, Buffalo, N. Y.

OPIUM

Morphine Habit Cured in 10 to 20 Days. No Pay until Cured. J. L. STEPHENS, M. D., Lebanon, Ohio.

KANSAS

The ATCHISON, TOPEKA and SANTA FE R.R. CO. have now for sale

TWO MILLION ACRES

Choice Farming and Grazing Lands, specially adapted to the Wheat Growing, Stock Raising, and Dairying, located in the Cottonwood Valley and also in the Southwest Kansas. on the 38th parallel, the favored latitude of the world, free from extremes of heat and cold; short winters, pure water, rich soil; in

SOUTHWEST KANSAS

FOR FULL PARTICULARS, ADDRESS
A. S. JOHNSON,
Land Commissioner A. T. & S. F. R. R. Co.
Topeka, Kansas.

LANDS

Spalding's Commercial College
LARGEST, TO-CHEAPEST-BEST
KANSAS CITY, Mo., J. F. SPALDING, AM. PRES.

