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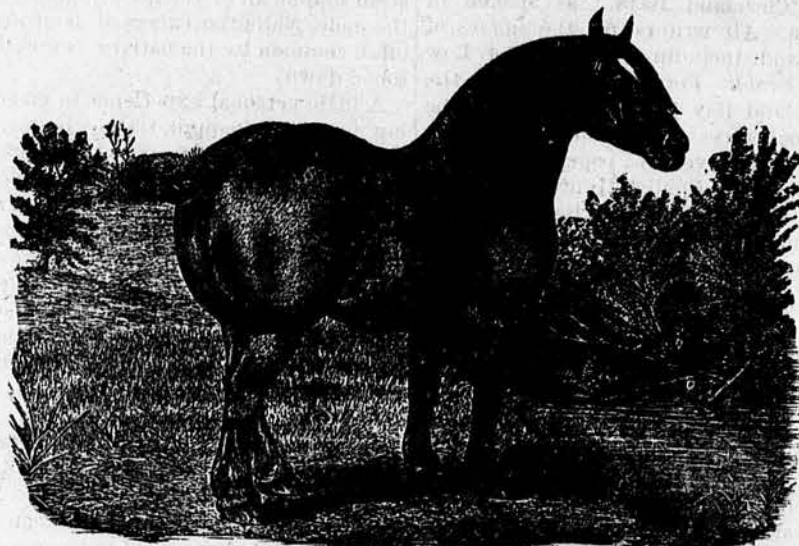
## CHICAGO FAT STOCK SHOW.

The seventh annual exhibition of the American Fat Stock Show, held under the auspices of the Illinois State Board of Agriculture was the most successful one yet held, and the arrangement was far superior to any previous show. The show of sheep and swine was small, the great feature is confined almost exclusively to cattle, and the battle of the breeds is closely contested. It was very noticeable that the Short-horns had the lead in numbers, but were closely followed by the Herefords, making the largest and best exhibit ever made by the breed and winning a due share of all the class premiums competed for in the show ring. The Galloway and Aberdeen-Angus cattle were few in number, but the few that were shown were the best that could be procured in America. This breed won scarcely anything until they competed for the dressed carcass prizes, when they fortunately carried off more than their proportion as compared with the numbers of the other breeds. Thos. B. Wales, Jr., Secretary of the Holstein Herd Book, and one of the most prominent breeders in the country, made an exhibit of twenty-one Holsteins, and while they won nothing of importance at the Fat Stock Show outside of their own class, the breed was brought into great prominence as a great combination beef and dairy breed.

The number of cattle on exhibition numbered about 300 head, including 53 sale cattle, and were distributed by breeds as follows: 38 thoroughbred and 84 grade Short-horns, 25 thoroughbred and 40 grade Herefords, 31 thoroughbred and two grade Holstein, 6 thoroughbred and 8 Aberdeen-Angus, 2 Galloways and 1 West Highlander. In the sheep department there was 55 entries consisting of 18 South Downs, 5 Cotswolds, 3 Shropshires, 3 Hampshires, 1 Oxford, and 23 cross-bred, of the foregoing named breeds. There was 70 entries of swine consisting of 22 Poland-Chinas, 7 grade Berkshires, 5 Yorghires, 4 Essex, 6 Suffolks, and 15 Duroc Jersey Reds. In addition to the fat stock there was shown fifty head of imported draft horses, consisting of 26 Normans, 13 Clydesdales, 6 full-blood and 4 grade English Shires and 1 Cleveland Bay. The show was well attended by breeders from all parts of the country. The various national associations held here by the different breeders contributes largely to the occasion. It is quite evident that farmers do not appreciate the importance of these shows, or there would be a much greater representation present.

The judges of the fat stock on foot were Messrs. Peter Emrich, Evansville, Ind.; J. S. Messler, Canton, Ill., and C. E. Bunn, Peoria. Experienced and expert butchers did their work in a satisfactory and creditable manner. The prizes in the Shorthorn class were carried off by T. W. Harvey, Turlington, Neb; J. H. Potts & Son, Jacksonville, Ill.; B. Waddle, Marion, O.; Morrow & Renick, of Kentucky; and Canada West Farm Stock Association of Canada. The prizes in the Hereford class were taken by Fowler & Vannatta, Fowler, Ind.; Adam Earl, Lafayette, Ind.; and the Indiana Blooded Stock company, Indianapolis, Ind. The Aberdeen-Angus prizes were won by Hon. M. H. Cochrane, of Canada, and T. W. Harvey, of Nebraska. The awards for Holsteins were won by Thos. B. Wales, Jr., Iowa City, Ia., and Lucien Scott, Leavenworth, Kan.

The following is a list of the principal



**KANKAKEE VALLEY BOB, FIVE YEARS OLD,**  
Imported Norman Stallion, owned by JAS. A. PERRY, Wilmington, Ill.

awards made at the show and were won as indicated below:

### GRADES OR CROSSES.

Best steer, barren or spayed cow, 3 and under 4 years, first to a grade Shorthorn owned by Jas. Ross & Son, Bucyrus, O.; second to a grade Shorthorn owned by J. H. Potts & Son; third, grade Hereford, owned by Fowler & Vannatta. In the class 2 and under 3 years there was 39 entries. First, to a grade Shorthorn owned by Morrow & Renick; second, to a grade Hereford owned by Indiana Blooded Stock company; third, grade Hereford owned by Adam Earl. In the yearling class there were 23 head. The first won by grade Hereford owned by Fowler & Vannatta; second to a grade Shorthorn owned by J. R. Peake & Son, Winchester, Ill.; third, grade Shorthorn, owned by Potts & Son. In the class under one year the grade Herefords won all three prizes, only one lot of Shorthorns competing.

### ALL BREEDS AND GRADES BY AGES.

Best steer, barren or spayed cow, 3 and under 4 years, \$50, to Hereford grade, owned by Fowler & Vannatta.

Best 2 and under 3 years, \$50, to a grade Short-horn owned by J. P. Gillett, Elkhart, Ill.

Best, 1 and under 2 years, \$50, to a grade Short-horn owned by J. R. Peake & Son.

Best under 1 year, \$50, to a grade Hereford owned by J. R. Price, Williamsville, Ill.

### SWEEPSTAKES.

Best Short-horn in the show, \$75, awarded to Clarence Kirklevington, owned by Canada West Farm Stock association.

Best Hereford in the show, \$75, awarded to Prince, owned by Indiana Blooded Stock company.

Best Aberdeen-Angus shown, \$75, to Black Prince, owned by Geany Bros., Canada.

Best animal shown in grades or crosses, \$75, to Charlie Ross, owned by Jno. Ross & Son.

### GRAND SWEEPSTAKES.

One hundred dollars awarded to Clarence Kirklevington, a thoroughbred Short-horn owned by Canada West Farm Stock association.

### DRESSED CARCASS.

For this practical test there were slaughtered thirty heaves, thirteen hogs and eight sheep. The awards are as follows:

For best carcass, 3 and under 4 years old, premium \$75, to steer Chicago, a Short-horn

owned by James R. Anderson, of Anderson, O.

Best carcass of beef, 2 years and under 3, premium \$75, awarded to steer Abernathy, owned by the Aberdeen-Angus association, of Independence, Mo.

For best carcass of beef, 1 and under 2 years, premium \$75, awarded to steer Quality, a grade Angus, owned by M. H. Cochrane, of Compton, Can.

Best carcass of beef, under 1 year old, premium \$75, awarded to Hereford steer John Yeomans, owned by Tom C. Ponting, of Moweaqua, Ill.

The grand sweepstakes' prize of \$100 was awarded to the white steer Clarence Kirklevington, a thoroughbred Short-horn owned by the Canada West Farm Stock association, of Brantford, Can. The award of the sweepstakes prize to this carcass created some dissatisfaction, though a previous prize winner of the many presented for exhibition. The Aberdeen-Angus people felt very happy over their success, they having taken two of the prizes.

The Herefords did not seem to figure very prominently this year as prize winners, though the cattle of this breed presented were of most excellent quality.

The sheep awards were as follows:

For dressed carcass of sheep: Wether, 2 and under 3 years old, premium \$50, awarded to Model, owned by Frank Wilson, Jackson, Mich. Wether, 1 year old and under 2, premium \$25, awarded to Jack, owned by J. H. Potts & Son, Jacksonville, Ill.

Wether, under 1 year old, premium \$25, awarded to Harry, owned by Mrs. Ann Newton, Pontiac, Mich.

On swine meat premiums were awarded as follows:

Carcass of barrow, 12 and under 18 months, premium \$25, awarded to Josoto Chief, owned by Stoane & Loake, Stonington, Ill.; —best carcass of barrow under 1 year old, premium \$25, awarded to John, owned by L. C. Henley, of Mattoon, Ill.

Just why cattle should alone almost completely monopolize the show does not seem to be well understood by visitors. In proportion to their interest in the great live stock industry should they be shown. By this it is not meant that they have occupied less place and attention than they have heretofore, but rather that swine and sheep should

occupy a larger place than they have. Some of the best breeds are scarcely represented and unlike the cattle men, very few of the great breeders of swine and sheep are present at these exhibitions. It is true that animals shown in these departments are worthy, but the aggregate exhibit is entirely too small. H.

## Short-horn Breeders.

Special correspondence KANSAS FARMER

The American Short-horn Breeders' association met in third annual session at the Grand Pacific hotel last evening, with the president, J. H. Pickrell, of Illinois, in the chair. There were 159 members in attendance, either in person or by proxy, representing 343 shares of stock in the association. The joint report of the president and secretary for the past year showed the affairs of the association to be in excellent condition. An indebtedness of \$11,652.50 had been liquidated during the year, and the current expenses of \$22,060.14 had been paid. The total receipts were reported to be \$43,912.95; expenses, \$38,986.68, leaving a balance on hand of \$4,926.27. There remained fourteen shares of stock in the association unsold. The ownership of stock was represented by States as follows, showing a large gain since the last report: Kentucky, 204 shares; Illinois, 157; Missouri, 123; Iowa, 60; Ohio, 49; Indiana, 42; Kansas, 26; Minnesota, 26; Ontario, 12; Wisconsin, 12; New York, 15; California, 9; Massachusetts, 6; Colorado, 1; Michigan, 10; Pennsylvania, 6; Virginia, 6; Quebec, 4; Tennessee, 6; West Virginia, 6; Nebraska, 3; Montana, 1. The question of dividends was one for the consideration of the directors only, but the reporting officers begged leave to suggest that sufficient funds should be kept on hand at all times for the payment of the current expenses of the office and the printing of pedigrees that had already been paid for. There should never be a money or cash dividend declared, but the dividends should be made in the way of reducing the price of herd-books and the entry fees. With a membership of 491, there had been but two deaths within the association during the year: the names of the deceased being James C. Hamilton, of Flat Creek, Ky., and Abraham Renick, of Bath county, Kentucky.

The report was adopted, and the secretary instructed to spread it upon the minutes of the meeting.

An election of three directors to succeed the retiring members of the board resulted in the choice of C. C. Nourse, of Des Moines, Iowa; E. K. Thomas, Middletown, Ky., and L. B. Wing, Newark, O.

A committee, composed of C. C. Nourse, J. H. Sanders, and B. F. Van Meter, was appointed to draft resolutions of respect to the memory of the deceased members, James C. Hamilton and Abraham Renick, of Kentucky.

Mr. Nourse offered a resolution to the effect that the stock remaining unsold be disposed of only to actual breeders of Short-horn cattle, and that not more than one share be sold to any one person, this resolution not to affect the right of stockholders in transferring their stock. Adopted. A resolution instructing the secretary to give notice to delinquents having failed to pay for stock secured that their stock would be forfeited if not paid for in ten days after notice was also adopted.

The meeting then adjourned for one year. H.

One-third of all the banking done in the world is done in England.

## The Stock Interest.

### PUBLIC SALES OF FINE CATTLE.

Data claimed only for sales advertised in the KANSAS FARMER.  
 March 14, 1885—A. H. Lackey & Son, Short-horns, Peabody, Kan.  
 May 20, 1885—Powells & Bennett, Short-horns, Independence, Mo.

#### The Cleveland Bay.

We are indebted to the *Western Rural* for the following compilation relating to a breed of horses in which the KANSAS FARMER takes great interest:

Capt. W. H. Jordan, of the Bremer County Horse Importing Company, has made a diligent search into the history of this horse, and we are indebted to him for what we know of its history, or at least a portion of it. He says that these horses take their name from their established color and the place of their origin—Cleveland, in Yorkshire, England, and are yet found and produced there with all their ancient characteristics, color and formation, except weight. During his last visit to England, in 1882, he made a special study of their origin and history to the present time. He was aided by gentlemen who have known and bred them for the last fifty years or more, and by a free access to the old papers and works on the domestic animals of England, found in the libraries of Hon. Mr. Kitchen, Mr. Stericker, Mr. Jackson and others. The opinion has quite commonly prevailed in this country that the blood horse was freely used in their original make-up. His investigation convinced him this may not be correct. Yorkshire has always been, and is now, noted for its good horsemen and horses; it seems to be their natural home. Its horses are spoken of by the historian as the grandest of their kind, and up to this day the best of the grand horse shows of England is the great Yorkshire. Capt. Jordan says he is quite certain that this race was produced by a judicious, intelligent and continued mating of those native horses—already famous as early as the middle of the last century—nearest in their formation to a horse that would supply the wants and needs of that age and country. This effort resulted in the old English coach horse, the direct ancestor of the Cleveland Bay of to-day. At that time their color was largely chestnut and black, with white marks, from which fact may have sprung the idea of a thoroughbred cross.

From various sources he learned that these horses were greatly sought after in the foreign as well as home markets and were held the highest in value of any in the United Kingdom for business and useful purposes; that they were "sixteen to seventeen hands and over long and deep in the quarters, short and level on the back, deep and wide in the chest, with clean, flat legs and open, sound feet," that they were mainly used for moving the great ponderous coaches of that time rapidly over all parts of England, and for other heavy road work. He says: Early in this century I find them spoken of as "the Bay Coach Horse of Yorkshire," and the "bay with black legs found in the North Riding," and later on a premium list of a horse show to be held at Whitby, in which were two classes of Cleveland Bays, one prize being "£5 and a silver cup for the best Cleveland Bay brood mare." From this time on to the present, prizes have been given in the North Riding for Cleveland Bays by name. Mr. Stericker, of Danby House, Yorkshire, writes me as follows in regard to the Cleveland Bay: "They have been bred in Cleveland all this century, at least. I know several families in the district who have bred them for several generations to their distinct color and formation. Their size is large, action

good, and in points of hardness and strength, they are superior to nearly every other class of horses. At all the leading shows in the Cleveland district, they have given special prizes for Cleveland Bays ever since the formation of Agricultural Shows. I, myself, have won a number of prizes with them, including in 1878 the silver cup, the gift of Hon. O. Duncumb, M. P."

There is good and full evidence that they were widely recognized, not only as a race, but as "bay horses with black legs," reproducing themselves with a certainty unsurpassed by any race except the thoroughbred. Just when their distinctive color became so deeply fixed as to be one of the points by which they were recognized is not known, but it must have been early in the present century according to the prizes offered for "Cleveland Bays," as spoken of above. All writers on the horses of England, including Youatt, Prof. Low and Frank Forrester, recognize the Cleveland Bay by name, as one of the distinct races of England. Forrester in his work, vol. II., page 20, speaks at length of the English Hunter as the produce of the Cleveland Bay dam and thoroughbred sire. Of the Hunter, thus produced, he says: "The first graduation, when pace became a desideratum with hounds, was the stinting of the best Cleveland Bay mares to good thoroughbred horses, with a view to the progeny turning out hunters, and are in every way superior, able and beautiful animals, possessing speed and endurance sufficient to live with the best hounds in any country, except the very fastest, such as the Melton Mowbray, etc., etc. The English Hunter is required to possess the very highest powers of endurance, as well as action. If, then, the Cleveland Bay mare was selected as his maternal ancestor, it is a crowning evidence of the estimation in which they were held at that time. Capt. Jordan proceeds to say: But now I turn to a question of much greater importance. Has this grand race of horses become extinct? Mr. Sanders, of the *Breeders' Gazette*, who for several years past has endeavored to write them out of existence, is finally constrained by the gathering evidence of his folly to turn in, and in a June (1883) number of his paper will be found the following:

"While we have frequently expressed the opinion, based upon that of intelligent English authorities, that the so-called Cleveland Bay of to-day is not entitled to be classed as a distinct breed, yet it is undoubtedly true that many of these horses are very highly bred, and possess great excellence as coach or carriage horses. Mr. Geo. T. Turner, of the *Mark Lane Express*, in a recent private letter to the editor of the *Gazette*, gives it as his opinion that there is still much of the old Cleveland Bay stock remaining—enough, if carefully husbanded and coupled, to bring about the resuscitation of the breed, which he thinks ought, by all means, to be done."

Who that "intelligent English authority" is, upon whom he has based his opinions, I have not been able to find. Certainly there is no higher English authority than those mentioned, and Geo. T. Turner, of the *Mark Lane Express*. Mr. Turner and other intelligent English authorities do squarely contradict Mr. Sanders' statement that the race is extinct. The supply, I am sorry to say, is very limited, difficult to buy, and costly; but in the by-ways and vales of the great moors in the North Riding, they are yet to be found in all their purity and beauty, called by the same name as their ancestors, differing from them only in less weight and better action, retaining their distinctive color,

as well as their level short backs, long deep quarters, clean flat legs, with the dash and vim for which they have ever been noted, and a courage that never gives up. Such is the Cleveland Bay as I found them in England.

#### Swine Breeding and Feeding.

The principal aim of the breeder, in the opinion of Mr. Petton in *Rural New Yorker*, should be to get healthy, vigorous pigs, that will come to maturity quickly, and furnish the most pounds from a given amount of food. The days of breeding sows to scrub males are past; what we now want, is careful selection of both male and female. Choose the best natives, or the common stock of the country, and cross them with pure-bred males, and the results will be very satisfactory. The pigs seem to take all of the good qualities of the male, while the excess of bone and offal, common to the natives is greatly toned down.

A little personal experience in breeding may not inappropriately be mentioned. In September, 1879, I purchased a pure-bred Berkshire boar, and crossed him on common stock: the results were very gratifying—so much so that many of the neighbors patronized the animal, some even coming the distance of ten miles, and all obtained equally satisfactory results. The idea that I most wish to impress is, that money judiciously expended in the purchase of pure-bred males is money invested at a good rate of interest. What investment will pay a man better? I had forty pigs that made an average of 339 pounds when 11 months old as the results of a first cross between my Berkshire and the common stock. For breeding, select long, rangy sows that are from good mothers; cross those with a fine-boned, compact, heavily hammed and shouldered male; care should be taken to select males that have short legs and small heads and ears. It is always best to breed from old sows; there is always less risk to run; they are better mothers and produce more milk than the young ones.

I prefer to have my pigs come in March or even as early as January, and then keep them thriving until I am ready to sell. Pigs reared in this way should be kept in a warm stable or pen, with the sow, till two or three months old. Great care should be used not to feed the sow much for two or three days after farrowing, for fear of creating fever. After that time she must have all the bran, corn-meal and barley-meal with milk that she will eat up clean. The pigs will soon learn to eat. When warm weather comes and clover begins to start, they may be turned into a small range after "ringing," and there is no danger but that they will thrive. The days of feeding swine in a mud-hole of a pen are past; now plenty of range in the pasture, with pure water, is the most preferred of all conditions of profitable hog-raising.

In many localities, where from 40 to 100 or more acres of corn are raised, the swine do their own feeding; they are turned into a portion of a field and allowed to hulk for themselves. While this method is in favor with many, I still adhere to the good old way of saving the stalk for fodder, and feeding the corn by the basketful. Pretty good pork may be made by feeding pumpkins in the fall. Hogs of this kind, which were very numerous last season, are called "skips." I have grown pork on nothing but clover and water in the summer, and finished with slops, soft corn, pumpkins and boiled potatoes, with good results. The main item in feeding is to keep the animal healthy, and then it will eat well.

A few years ago it was a very common practice to keep June to September

pigs over winter, and with much crowding get them fat by the next October; such a practice now seems a little too long and expensive. Competition and the market demand quickly-made pork, which shall be healthy and eatable. Who wants to eat pork that has been stunted and half starved through the first half of its existence. Quickly-grown pig pork, tender and juicy, will always be in demand at the highest prices.

Keep your herd of swine respectable and clean; feed them clean and proper food and drink—breed well, feed well, and then sell well, and your efforts will be crowned with success and a good profit.

#### Accidents--Fractures.

There are no accidents to which the domestic animal is more liable than fractures. As these cases demand prompt action on the part of the farmer, before a veterinary surgeon can be called, there is no part of veterinary practice with which the farmer should be more familiar.

Fractures are classified (1) according to the direction in which the bone is broken, and (2) according to the severity of the injury and its relation to the soft structures. When the bone is broken without injury to these structures, the fracture is said to be simple; compound, when an open wound communicates with the fractured bone; comminuted, when the bone is broken into several fragments; complicated, when the adjacent structures are severely injured, such as when the blood vessels are lacerated or the tissues seriously contused. The first thing to be done is to ascertain which one or more of the foregoing conditions exists, and the treatment must be regulated accordingly. This is most easily determined by the extent of the lameness, the suddenness with which it is manifested, the magnitude of the deformity, and the nature of the unnatural movements of the part. In some cases, especially when the limb is but slightly splintered or fractured longitudinally, there is but little manifestation of lameness, but such injuries require close inspection and treatment, as softening is likely to set in.

Shortly after the accident, a transparent fluid called lymph begins to exude from the fractured bone. After a time this matter becomes dense and firm, and it is then called a callous. This is the reparative material which brings about the union of the bones, causing the fracture to be healed. The breach thus repaired is brought about in one of two methods: (1) The callous may ensheath the ends of the bones, as when a broken rod is mended by means of a ring surrounding the detached ends; and (2) the reparative matter gathers on the ends of the bones gluing them together. The ensheathing method is the more common. After awhile, the time varying according to circumstances, these accumulated deposits become changed into regular bone, and then the fracture may be regarded as healed. If the process of repair is arrested before ossification, or change to bone, takes place, a false joint may be formed.

Very soon after the occurrence of the fracture, irritation and swelling take place, so that it is of great consequence to perform reduction at the very earliest moment, else the increasing irritation and swelling will impede the work of adjustment. After the bones are brought into their natural position, put on splints and bandages; and in severe cases, put the patient into a sling. In compound fractures the danger and difficulty in treatment are greatly increased. Violent inflammation and fever set in, terminating in suppuration (formation of pus), and gangrene. The liability of this danger may be obviated by first treating the wound, thus converting a compound fracture into a simple one.—*Farmers' Advocate*.

### In the Dairy.

#### A Talk About Cows.

Waldo F. Brown, an experienced stock man and good writer, tells the *Country Gentleman's* readers what he thinks about cows. He thinks the farmer's cow should be of good size that she may produce a calf that will be profitable to raise for beef if a male, and also that she herself may be profitably turned into beef as soon as by age, her milking powers show signs of failing, and here I wish to make this point. A majority of farmers keep their cows too long. I believe that except in the case of those which prove extraordinarily profitable for milk or butter, or possess some qualities which render them superior, it will be more profitable to fatten cows at from five to eight years old than to milk them longer. If you look at the market reports in any of our papers you will find the poorest grade of cattle quoted at from \$1.75 to \$2.25 per hundred, and in the same papers you will see good fat cows quoted at from \$4 to \$5 per hundred. In visiting the stock yards I have seen pens of old bony cows, with wrinkled horns and protruding hips, and have ceased to wonder at these low quotations. Aside from the difference of two cents per pound or more in price at selling time, these cows have often been kept for some years at a loss, and if sold five or more years sooner this double loss might have been avoided. If a cow milks hard or does not prove to be gentle, I never milk her more than one season. If she is a fair, ordinary cow, I turn her for beef when in her prime, but occasionally I find a cow that possesses such a combination of valuable qualities that I keep her to old age, and I have kept such cows at a profit till nearly twenty years old.

Another point I will make is, that for the farmer it is more desirable that the cow give a large amount of milk, than that it be very rich. I know this is contrary to the general opinion, and that the fact that a small quantity of milk will make a pound of butter is ordinarily considered decisive of a good cow. I affirm that for the farmer the cow which gives four gallons of milk a day, from which ten pounds of butter a week is made, is worth more than the one which produces the same amount of butter from two gallons of milk per day. The average price of butter is so low that when we take into consideration the labor to produce and prepare it for market, there is often a greater net profit from the skim milk fed to stock than from the butter. If I have described the cow most profitable to the farmer, she certainly is not a Jersey, for most of this breed are undersized and give but a moderate quantity of very rich milk. In addition to this, her milk, though rich in butter, is quite poor after it has been skimmed, so that it is worth much less for feeding than that of some other breeds. I have found it a decided advantage to the quality of the product to have one Jersey cow to each two or three others in the herd, as their milk gives butter of a better color and firmer texture than from most other breeds.

After careful experiment I conclude that, as a rule, more profit can be had from a cow that comes in fresh in the fall than in the spring. There are several reasons for this: 1. The cow is usually in better condition in fall than in the spring. After a cow has run dry on pasture for two months or more in the summer, she is usually in better flesh and condition for calving and giving milk than if she comes in in early spring after months of dry feed. 2. Again, the cow that calves in the fall goes on fresh pasture just at the time

she would naturally begin to shrink in her milk, and the season of flush milk is prolonged. 3. The average price of butter is considerably greater from October to May than from May to October, so that we can make a greater profit from the cow that is fresh in the fall. 4. The most disagreeable season of the year to milk, and the hardest to make a good quality of butter is during the heat of summer, and at this season it is wise to produce only what the family requires. 5. I find a fall calf can be raised with less trouble than one born in spring, for the reason that it does not require the same care to winter a calf that is a full year old, and has had an entire season on grass, that it does the spring calf that is weaned in the fall, and must spend six months on dry feed before it goes to pasture. The profitable way to fatten a cow is to fatten and milk at the same time. If you do not breed the cow she can usually be milked at a profit from eighteen months to two years, and occasionally you will find one that can be milked a much longer time. A cow in her prime—say from 6 to 8 years old—that has given milk a year or more can be milked all winter and dried the first of April, and in four weeks go to the butcher at the season of the year when beef is always scarcest and highest in price. The fattest cows I ever sold were milked up to the day the butcher took them, and I calculated that the milk through the winter paid the entire expense of fattening. I have often bought in the fall a thrifty cow—with the marks of a good feeder—that under the treatment she was receiving, was giving but three or four quarts of milk a day, but under full feed soon increased to two gallons and kept up the flow till she went to the butcher in the spring, and I usually sell at an advance of from \$12 to \$25 above cost. The quality of the milk from a full-fed farrow cow is very superior to that from a fresh cow. I have found this plan of milking for a long time without breeding especially valuable with old cows. Occasionally one gets hold of a cow that possesses so many valuable qualities that he wishes to keep her as long as possible. After such a cow passes her prime, breed her to come in in the fall when in good order, and then feed so as to keep her up and milk as long as she will pay for keeping. I have milked for thirty seven months, and have known cases where a cow has been milked for five years without breeding.

#### Milk Setting.

A writer in the *New York Tribune* has been experimenting with cream, and has come to the conclusion, which seems quite reasonable, that the ripening of cream does not consist in, or necessarily include, souring. He says: "When I set a sample of milk for 48 hours at 63 degrees in an atmosphere of pure oxygen, and another equal sample from the same mess of milk for the same time, and at the same temperature, in an atmosphere containing no oxygen, both soured exactly alike and both samples produced exactly the same quantity of butter. If the ripening of cream and development of butter flavor depends on souring alone, these two samples of butter should have been alike, since the milk and cream were sour alike in both samples; but they were not alike. They were very different, and the churning was different. The cream from the milk set in oxygen gas churned in two thirds of the time required for churning the cream of the milk from which oxygen was excluded by enveloping it in carbonic acid gas. The butter from the former was very highly flavored and delicious, and remarkable for its long keeping. The butter from the latter was less flavored, and equally remarkable for being short-lived. The milk-fats in the latter case appeared to have acquired no new flavor from the act of souring, but to have retained unchanged the new-milk flavor they had when the milk was first set. This experiment, repeated till the results were demonstrated to be uniform, is interesting as showing the fallacy of the current opinion that souring is the potent agency in ripening cream, either for the purpose of heightening the flavor of butter, or to give it long-keeping, or to make churning easy, for it proves positively that something else than souring is necessary to these ends, and that that something is free oxygen. Airing, not souring, is the efficient agent for effecting these purposes, but even if well aired the effect will be but feeble if the temperature is kept too low."

### 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.**  
**DEXTER BEVERY & SON**, Leand, Ill., breeders of Thoroughbred Hornstein Cattle. Choice stock for sale, both sexes. Correspondence invited.  
**JOHNSON & WILLIAMS**, Silver Lake, Kas., breeders of Thoroughbred Short Horn Cattle. The herd numbers thirty head, with a Rose of Sharon bull at head.

**LOCUST RETREAT FARM**, Hamon & Campbell, Manchester, S. L. Mo., breeders of REGISTERED STEIN CATTLE and PLYMOUTH ROCK FOWLS. Hold-overs—excellent milk, butter and beef. They are the all-purpose cattle. First class stock for sale. Plymouth Rocks are the farmer's fowl. Pair \$35.00; trio, \$50.00. Eggs \$1.50 for 15.  
**J. M. MARCY & SON**, Wakarusa, Shawnee Co., Kas., breeders of Thoroughbred Short Horns of fashionable families. A few yearling bulls and young cows left for spring trade. Correspondence solicited.  
**BROAD LAWN HERD** of Short Horns. Robt. Patton, Hamlin, Kas., Prop'r. Herd numbers about 120 head. Bulls and Cows for sale.

**ALTAHAM HERD**, W. H. H. Cundiff, Pleasant Hill, Cass Co., Mo., has fashionable-bred Short Horns for sale. Among them are two B. W. of Sharon and one aged show bull. None but the very best allowed to go out from this herd; all others castrated.  
**U. P. BRYNETT & SON**, Lee's Summit, Mo., breeders of Thoroughbred Short Horn CATTLE and Plymouth Rock chickens. In pecun invited.

**POWELL BROS.**, Lee's Summit (Jackson Co.) Mo., breeders of Short Horn Cattle and pure-bred Poland-China Swine and Plymouth Rock Fowls. Stock for sale. Mention this paper.  
**W. A. POWELL**, Lee's Summit, Mo., breeder of the Poverty Hill herd of Thoroughbred Short-Horn Cattle. Inspection and correspondence solicited.

**WALNUT PARK FARM**, Frank Playter, Prop'r., Walnut Crawford Co., Kas. The largest herd of short-horn cattle in Southern Kansas. Stock for sale. Correspondence invited.  
**A. HAMILTON**, Butler, Mo., Thoroughbred Gallo way cattle and calves out of Short-Horn cows by Gallo way bulls for sale.

**J. W. LILLARD**, Nevada, Mo., Breeder of THOROUGH BRED SHORT-HORN. A Young Mary bull at head of herd. Young stock for sale. Satisfaction guaranteed.  
**OAK WOOD HERD** C. E. Elsholtz, Wichita, Kas. Live Stock Auctioneer and breeder of Thoroughbred Short-horn Cattle.

**Hereford Cattle.**  
**SARCOXIE HEREFORD HERD**, J. Gordon Gibb, Lawrence, Kas., importer and breeder of Hereford cattle. Stock for sale.  
**E. S. SHOCKEY**, Early Dawn Hereford Herd, Lawrence, Kas., breeder of Thoroughbred and High-grade Hereford Cattle.

**CATTLE AND SWINE.**  
**GLENVIEW FARM**, G. A. Loude, Humboldt, Kas., breeders of Short-Horn Cattle and Poland-China Swine. Also Saddle and Harness Horses.  
**W. W. NELS & SON**, Chestnut, Franklin Co., Kas., breed pure-bred Poland-China Swine. Also Short-horn and Jersey Cattle. Stock for sale reasonable.

**SHORT-HORN PARK**, containing 2,000 acres, for sale. Also, short-horn cattle and Registered Poland-China. Young stock for sale. Address B. F. Dix, Canton, Mo. Ph. 100 Co., Kas.  
**HILLSIDE STOCK FARM**, W. W. Walmsley, Cambridge, Kas., breeds Thoroughbred Short-horn cattle. Bred Chester-White Swine a specialty.  
**WOODSIDE STOCK FARM**, F. M. Neal, Pleasant Run, Pottawatomie Co., Kas., breeder of Thoroughbred Short-horn cattle, Cotswold sheep, Poland-China and Berkshire hogs. Young stock for sale.

**J. E. GUILD, CAPITAL VIEW STOCK FARM**, Silver Lake, Kas., breeder of THOROUGH BRED SHORT-HORN CATTLE and POLAND CHINA SWINE. Correspondence solicited.  
**D. R. M. EIDSON**, standing Lyon Co., Kas., makes a specialty of the breeding and sale of thoroughbred and high-grade Short-horn Cattle, Hamlet and Fors of the most fashionable strain, pure-bred Jersey Red Hogs and Jersey Cattle.

**COTTONWOOD FARM HERD**, J. J. Mills, Manhattan, Kansas, breeder and shipper of SHORT-HORN CATTLE and BERKSHIRE SWINE. Orders promptly filled by express. The farm is four miles east of Manhattan, north of the Kansas river.

**SHEEP.**  
**E. COPLAND & SON**, DOUGLASS, KANSAS, breeders of Improved American Merino Sheep. The flock is remarkable for size, constitution and length of staple. Buck a specialty.

**SAMUEL JEWETT**, Independence, Mo., breeder of American or Improved Merino Sheep. Vt. Register. 150 Very best Choice stock for sale. Over 300 extra rams. Catalogues free.

**G. B. BOTHWELL**, Breckenridge, Mo., has 1,100 Merino rams for sale. 250 of them are registered. His ven best stock rams shear from 27 lbs. to 33 lbs. weigh from 145 lbs. to 180 lbs.  
**A. F. WILLIAMS & CO.**, Ellsworth, Kas., breeders of Registered Spanish Merino Sheep. "Woolly Head" at head of flock. Choice rams for sale. Satisfaction guaranteed.  
**C. F. HARDICK & SON**, Louisville, Kansas, breeders of REGISTERED AMERICAN MERINO SHEEP. Having good constitution and an even fleece of fine, dense wool. Fine wool a specialty. Come and see our flocks or write us.

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**A. J. CARPENTER**, Milford, Kansas, breeder of Thoroughbred Poland-China Swine. Stock for sale. Inspection and correspondence invited.  
**S. H. TOLD**, Wakarusa, Ohio, breeder of Recorded Premium Chester White Swine and imported Shropshire Down Sheep. Send for circular with price list and particulars. It pays to get the best.

**GEO. W. STONER**, Le. Place, Ill., breeder of registered and selective Duroc Jersey Swine. Superior boar pig for sale.  
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**A. H. HENDRICKS**, Hazel Green, Wis., offers at head to order. Write me before you buy.  
**J. A. DAVIDSON**, Richmond, Franklin Co., Kas., breeder of Poland-China Swine. 170 head in herd. Recorded in A. and O. P. R. C. for white.  
**L. WHIPP**, E. Ottawa, Kas., breeder of Recorded Poland-China and Red Berkshire Swine. Stock for sale at all seasons. Correspondence solicited.

**CATALPA GROVE STOCK FARM**, J. W. Arnold, Louisville, Kansas, breeds Recorded Poland-China Swine and Merino Sheep. The swine are of the Gibe or Take, Perfection, and other fashionable strains. Stock for sale in pairs not related. Invite correspondence or inspection of stock.  
**W. M. PLUMMER**, Onaga City, Kansas, breeder of Recorded Poland-China Swine. Young stock for sale at reasonable rates.

**ROBERT COOK**, I. A. Allen county, Kansas, Importer and breeder of Poland-China Hogs, Imp. warranted first-class. Write.  
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**W. J. MCCLYM**, Waverland, Shawnee Co., Kansas, breeds Bronze Turkeys, Light Brahma, Plymouth Rock, Buff Cochins and Pekin Ducks. Bronze Turkeys for sale. Check before holidays.  
**FAIRVIEW POULTRY YARDS**, Mrs. G. Taggart, Parsons, Kas., breeder of L. & D. Brahma, B. Leghorns, Houdans, Plymouth Rocks, Langshans, P. Cochins, G. L. Bantams, Wyandottes and B. B. B. Games. Send for price list.

**W. M. WIGHTMAN**, Ottawa, Kansas, breeder of high class poultry—White and Brown Leghorns and Buff Cochins. Eggs, \$2.00 for thirteen.  
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THOROUGH BRED BULLS and HIGH-GRADE BULLS and HEIFERS for sale. Inquiries promptly answered.  
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Irving, Marshall Co., Kansas.

**THE LINWOOD HERD SHORT-HORN CATTLE**



**IMP. BARON VICTOR**  
W. A. HARRIS, LINWOOD, KANSAS  
The herd is composed of VICTORIAS, VIOLETS, LAVENDERS, BEAWITH BUDS, SECRETS and others from the best herds of a Crickshank, Sittlyon, Aberdenshire, Scotland, Golden Drops and Ury's, descended from the famous herd of S. Campbell, Kinellar, Aberdenshire, Scotland. Also YOUNG MARV, YOUNG PHYLINES, LADY ELIZABETH, and Imp. BARON VICTOR 4224, bred by Crickshank, and Imp. DOUBLE GLOSTER head the herd.  
Linwood, Leavenworth Co., Kas., is on the U. P. R. R., 27 miles west of Kansas City. Farm: junction station. Catalogues on application. Inspection invited.

## Thanksgiving.

Let the nations thank Thee, O God,  
With one great throb of gratitude.  
For all Thy gifts, or love or rod,  
And all Thy ways of doing good.

Thanks for the grain that fills our store,  
The blushing fruit Thy bounty wills,  
Thy blessed air on sea and shore,  
Thy cattle on a thousand hills.

Thanks beyond words for peace that floats  
Like a dove o'er our own free shore,  
In words, in deeds, in noble thoughts,  
May it triumph forevermore.

Thanksgiving for the past we speak,  
Lord, for the future much we crave;  
Make us worthy of all we seek—  
A nation good as well as brave.

Thank Thee for grief, though hard to bear,  
We know it is to try our souls  
As fire doth gold, till to the air  
A shining river forth it rolls.

We thank Thee for bereavements sore,  
For them a friend in Thee we own.  
Thank Thee for death—it is the door  
Through which we enter to Thy throne.

O thank Thee for Thyself, great King,  
For hopes that from Thy promise rise,  
That hearts who will may live and sing  
One long thanksgiving in the skies.

—Ex.

## The Soil.

In warm weather, if a vegetable or tree is not breathing and growing, it is dead.

The animal kingdom breathes from the lungs carbonic acid gas, which is poisonous to the blood, and an element of death; and in its stead absorbs oxygen, the element of life, vigor and health. In the vegetable kingdom only the bloom liberates carbonic acid; every other part of each of the different varieties of vegetation, which includes the oldest forests, during the period of their life inhale carbonic acid from the air and exhale in its stead pure oxygen; thus the Author of nature has so organized His living laboratory, that by respiration these life-promoting elements are equalized for His living kingdoms. In the winter season, when vegetation in this climate is not absorbing, but sleeping, the air, that invisible fluid so essential to animal life, would soon be charged and poisoned with carbonic acid from human and animal lungs, were it not that this acid has a strong affinity for ice, cold water, and by them is swallowed up, and then absorbed by the soil. All kinds of gases exist in a free or uncombined state in nature—that is, they are free to liberate themselves when they come in contact with anything which is hungry for them. Rain, as it comes dashing in sheets to the ground, envelopes them between its drops in small quantities.

Pure soil is perfectly decomposed vegetation and mineral substances; as generally found in almost all localities, it is mixed with clay, gravel, sand and undecomposed vegetable and mineral substances. By the process of decomposition, gases are liberated; these mingle with those derived from water and air and play between the particles of the soil.

Grains of all kinds, including every variety of tree and vegetable, are composed of certain gases, acids, and dissolved mineral substances, which they absorb from the soil, together with a large per cent. of carbonic acid inhaled from the air, which the vegetable, by the aid of the direct pure sun—light, changes into carbon. The elements that make up each variety and order of vegetation differ in quantity and quality.

Real soil is not a chemical compound, but a mixture, composed of the following essential elements: nitrogen, chlorine, hydrogen, oxygen, carbonic acid, sulphuric acid, soda, phosphorous, potash, lime, magnesia and silica. The first eight elements make up the principal part of what is called compost, or decomposed vegetable matter; and the last four are in a large measure derived from the oxidation or slow combustion and washings of minerals. Perhaps more than 75 per cent. of all the elements found in vegetable structure is absorbed directly by vegetable cells from the soil; it is the storehouse which furnishes vegetation with the principal part of its food; and unless these elements are replaced the storehouse will in a short time become exhausted. Lime is the chemically-decomposed limestone, and silica is dissolved sand. Potash and lime, by neutralizing the acids, aid in changing the

liquids and gases into solid nutritious substances. Silica gives strength and luster to the clear yellow ripening grain, and nitrogen develops flavor and taste in both body and berry.

The ashes of every one hundred pounds of straw weigh between four and five pounds; these contain all the elements that go to make up good soil, except those that have been expelled by the heat into the air. In every State there are a certain class of farmers who claim that straw, stalks and hay are of no value to the soil, and for this reason they burn in the spring that portion of the stacks and ricks not eaten by the stock, and leave the ashes to the winds of the morning. In this way they cheat the soil that produced it of the elements that would renew it, and which it would gladly in turn utilize to the farmer's benefit. Another class advocate the true theory—that anything a soil grows really reduces the fertilizing material in that soil, in proportion to its weight, and can in a measure only be restored to it when either composted and mixed with it, or fed to stock on the same ground; allowance to be made for that which is used in the increased growth of the animals, and the portion of nitrogen and other gases that have escaped into the atmosphere.

All kinds of grain and vegetables vary in the quantity of silica, as well as potash; thus the quantity of potash in wheat straw is only about five-tenths of 1 per cent. of the whole amount of matter which it contains, while that in beans is  $2\frac{1}{2}$  per cent.; but while the bean straw is richer in potash than that of the wheat, the latter contains seven times as much silica. Every farm or field, no matter how deep and rich the soil may appear to be, may not contain all the elements in sufficient quantities to produce every kind of grain. This could be determined by an agricultural chemist, but this to the energetic farmer, who has but little knowledge of chemistry, or who has not the facilities for analyzing, is not practical; he decides this question by experimenting from year to year with the different kinds of grain and vegetables on his various fields.

Reading farmers, as a rule, are intelligent and successful. The knowledge they have gleaned from agricultural papers and books, together with their experience, teaches them that their fields should be rewarded for their bountiful supply by replenishing; either by grassing and grazing, at least one-third of the time, or by scattering over and plowing under an abundance of compost, straw and refuse, which is composed chiefly of the same chemical elements with which the fields have filled their barns and cribs.

The soil is nature's mother, and also her tomb. Let her be well fed, then from her mould earth's inhabitants may be well fed and clothed.

## Aberdeen-Angus Breeders.

The annual meeting of the Aberdeen-Angus Association was held at Chicago, Nov. 19, with some thirty representative breeders present. The total membership numbers sixty-nine. Readers of the FARMER will remember that at the meeting of the Association held at Kansas City last April, the Secretary was authorized to proceed with the work of securing entries of pedigrees for the first volume of the American Aberdeen-Angus Herd Book. About 700 applications had been received, requiring a total of 2,500 entries. These, in addition to those which have yet to come in, will make a very creditable volume. Entries of pedigrees will be received until March 1, 1885. The Treasurer's report showed that \$1,192.75 had been received, and after defraying expenses left a balance of \$651.20. Messrs. J. R. Harvey, Turlington, Neb., J. A. Cochrane, Compton, Canada, and A. M. Fletcher, Indianapolis, Ind., were elected directors for the ensuing three years. A. D. Adamson, of Scotland, read an able paper regarding the breed, after which the Association provided for a fat stock show fund for duplicating all premiums won by the breed by levying an assessment of 50 cents on each pure-bred Angus. The officers elected for the ensuing year: President, H. C. Burleigh, Vasselboro, Mo.; Vice President, A. Leonard, Mt. Leonard, Mo.; Secretary, Chas. Gudgell, Independence, Mo.; Executive Committee, Messrs. John Geary, J. R. Harvey and Chas. Gudgell. It was decided to receive no entries for the next volume unless certified to by the breeder. The next annual meeting will be held at Chicago during the Fat Stock Show.

## National Poland-China Breeders' Association.

The meeting was held at the Sherman House, Chicago, and was attended by a number of representative breeders from the various States, including representatives of the Ohio, American and Central Poland-China Records. The question before this convention was the consolidation of the various Poland-China Swine Records. All voted favorably to the plan except Levi Arnold, Plainwell, Mich. Remarks were made by nearly all present favorable to a consolidation. There was also some bickering between the various advocates of the several Records, except the Northwestern, at Washington, Kas., as no one present knew but little concerning this Record except the writer. In case a consolidation proved impracticable it was desired that some plan might be devised so that any pedigree that was recorded in any of the records might be made acceptable for either of the others. Messrs. John Gilmore, of the American, Carl Frigeau, of the Ohio, W. E. Jackson, of the Central, and J. O. Young, of the Northwestern, were appointed a committee to draft a standard of eligibility for pedigrees, making them acceptable for all the Swine Records, and report the same at the next annual meeting of this Association. An invitation was extended to the various Swine Record Associations to be present at the next meeting and come prepared with such terms of consolidation as they choose to present. Messrs. Co'e, Jackson and McClung were appointed to draft a constitution and by-laws and present them at the next annual meeting. W. C. Williams, Knightstown, Ind., was elected President, and W. E. Jackson, of Indiana, Secretary. The meeting adjourned to the call of these officers.

## This, That and the Other.

The actress who grows stout usually plays the part of Fatima.

A colony of 3,000 Jews lives near Jerusalem who have dwelt there ever since the year 1. They speak Hebrew and Arabic.

A St. Louis man recently gave fifty cents to a person who saved his life. He was plainly a half-hearted kind of a fellow.

Up to the present war the Chinese troops have never had any uniform other than a small badge worn on the soldier's breast.

The Chinese were enabled to get along a good many hundred years without any metal except the brass they carried in their faces.

An alligator with two heads and four eyes was found recently near Pensacola, Fla. The heads are attached to one neck, and each are as perfect as nature could make them.

A London physician has ascertained that there are six deaths among 1,000 married men, ten among the same number of bachelors, and twenty-nine in the same number of widowers.

Mr. Twynam, of Winchester, England, asserts that a single grain of wheat has produced thirty-nine ears containing in all 2,800 grains, and that three of the largest of the ears had respectively 104, 103 and 101 grains.

At the corner of Washington and Eustis streets, Boston Highlands, formerly Roxbury, is one of the oldest burial places in New England, the first interment in it having been made in 1633. The oldest remaining grave-stone bears date 1653. Here, side by side with the apostle Eliot and Robert Calef, were laid the Dudleys, the Warrens, and others of lesser note. Here Lyon and Lamb lie down together in fraternal harmony, peacefully commingling their ashes with those of Pigge and Peacock, while near them repose the dust of Pepper and Onion—savoury conjunction! Inseparable in life, even in death they are not divided.

It is not unusual to find trees growing in the clefts of ledges, showing unmistakably that the expansion of the roots has forced the rock apart. A case is cited, on good authority, of the root of a sugar maple that had pushed its way under a rock weighing nearly two tons, and by its enlargement lifted it entirely from its bed. Trees have been observed growing on the bare rock, resting upon their roots which ran out into the soil on either side; and yet these roots, supporting the enormous weight of the tree, formed each year new growth on their under side, and lifted the tree by the space of its thick-

ness until seven inches of wood had been formed under the severe pressure.

Since 1871 the consumption of horse flesh for food has more than quadrupled in Paris. Last year there were 5,000,000 pounds eaten. The meat of mules and donkeys is worth one quarter more than that of horses, which only commands 12 cents a pound.

## South American Markets.

A writer in the *Grocer and Tanner* takes a peculiarly hopeful view of the markets afforded to our manufacturers by the South American people. We think he overlooks some important facts concerning our shipping facilities. Still his thoughts are worth considering. He says: It seems strange that American manufacturers should seek relief from the evils of over-production in a temporary suspension of operations. The course is not at all in accord with the American idea, and detracts somewhat from the acuteness of the much-vaunted "Yankee ingenuity." With such a natural outlet for their stocks as is afforded in the South American countries, it is surprising that manufacturers should acknowledge even an accumulation of manufactured goods. In such seasons as we are passing through, manufacturing interests ought to be found in a flourishing condition, if American enterprise is all that is claimed for it. The prices of raw material, labor and the necessities of life were never as low as at present; transportation facilities are much improved over the best means of shipment offered ten years ago and markets which then were considered beyond reach are now the most accessible, and, in fact, the only markets available to the American manufacturer. No creditable effort has been made to secure a satisfactory trade with the rich South American countries which is justly the envy of the commercial world. It has been left for the government to send out an envoy in the interests of the manufacturer, and our trade with the millions of consumers of the Central and South American States and countries. At a recent session of the government's commission of inquiry, it was stated that there are 40,000,000 consumers in the Spanish-American markets, in an area of 8,000,000 square miles, the reverse in climate, resources and products of the United States. They are deficient in manufactures, and need iron supplies, farming implements, and most of what has become with us necessary for life. We need their coffee, sugar and tropical fruits and hard woods. The total foreign commerce of Mexico, Central America, Brazil and the nine South American republics controls is \$675,000,000, and of this trade the United States controls less than one fifth, the lion's share being monopolized by Great Britain, France and other European powers. Eighty per cent. of our exports go to Europe and only five per cent. go to the South American republics. There can be but little accomplished by inquiry in such an expansive field. The only way to test the capacity of such markets for trade in our manufactures is to send out the goods most needed in such quantities that sample lots, at least, shall reach the remotest corner of the new trading territories. Under equitable conditions the American manufacturer need have no serious fear of the competition of his European compeer. It is to the credit of the Pacific coast that California has made an independent effort to establish commercial relations with the new countries, which shall be mutually beneficial and permanent. And it may be added that a steady growth of the commerce passing between California and the Pacific coast countries of Central and South-America gives promise of a Spanish-American trade of great volume for this coast.

The chief of the St. Petersburg police has just issued an order commanding the proprietors of all hotels, restaurants and tea houses to remove the portraits of the Emperor and other members of the Imperial family from their public rooms, because their customers do not always show the proper respect to the representations of the Imperial features, not infrequently almost unrecognizable, by taking off their hats immediately on entering and leaving the premises. Thus very good portraits of the Czar and Czarina have had to be taken down from the walls of first-class European hotels in St. Petersburg.

The apothecary who sells soda water is generally a fizzician.

### Wool Makes the Most Healthy Clothing.

Few persons ever consider the relations that different kinds of clothing bear to health. In the following correspondence of the *London Times*, we have some things on the subject well worth studying. A new gospel has reached us from Germany, the writer says. It promises the physical regeneration of mankind, if we will but adopt a, comparatively speaking, simple reform in our system of clothing. This is no puritanical attack upon the extravagances of fashion nor is it a revival of the time-honored declarations against tight lacing. It is a medical theory, based on the close observation of animal life, demonstrated by scientific experiments and proved by practical experience. The doctrine starts with the fundamental principle that, being animals, we should wear animal clothing. The absorption of vegetable life of poisonous emanations from animal life, is a process not limited, it would appear, to living plants, but continued by vegetable fibre, such as cotton, linen, &c., with the difference that, while the living plant assimilates these emanations, the dead fibre cannot do so, but exhales them again when wetted or warmed. Thus our clothes, in consequence of their vegetable character, attract and retain those noxious principles which should, on the contrary, be thrown off with the greatest possible promptitude. On the other hand, animal material, such as wool, is made by nature to protect animal life, and will not prevent, but assist the evaporation of the emanations coming from the body. This can readily be proved by the sense of smell. It suffices to wear clothes of pure wool throughout, and there is at once an end to the unpleasantness noticed in the linen under-clothing, the cotton lining of the coat, &c. From these facts Dr. Gustav Jaeger, professor of zoology and physiology at Stuttgart, deduces his medical theory which has won innumerable disciples in an incredibly short time.

Dr. Jaeger points out that the human body is most susceptible to disease when it contains too large a quantity of water or of fat. The presence in excess of these substances can be tested by the specific weight and the rapidity of nervous action. But the specific weight must be given in proportion with the cubic measurement of the person, and this latter is not easy to ascertain. By the immersion of the body in a measured tank we have a rough and ready method of gauging its cubic capacity, which must correspond with the displacement of the water. Dr. Jaeger, however, has constructed an airtight chamber where a column of mercury records the amount of compression brought to bear upon the air by the introduction of a foreign body or person. Out of 65 men, thus measured, Dr. Jaeger found that the litre weight varied from 764 to 1,060 grammes, a difference of almost 40 per cent. To test the nervous activity, a stop-watch is employed which can record the two-thousandth part of a second. The operator sets the index hand in motion, which has then to be immediately stopped by the person undergoing the test. The difference between the two readings records the time needed for the excitation produced by the sight of the moving handle, to run its course through the eye, the optic nerves, the brain, the nerves of the arm, and finally to reach the muscles which actuate the finger that stops the watch. Experiments conducted in this manner showed in one instance that the rapidity of action after a Turkish bath increased to the extent of 13 per cent.

As the body becomes specifically light through excess of water or fat, the nervous action is impeded or slow. But, to insure the hardening of the body, it is necessary that every pore of the skin should perform its function without let or hindrance. This cannot be, however, so long as we clothe ourselves with vegetable fibres which impede the circulation of the air, retain noxious emanations and expose the surface of the skin to sudden chills. What is now known as Dr. Jaeger's sanitary woolen clothing is so contrived as to obviate these evils. The clothing consists, for men, of tight-fitting stockingette under-garments made of pure undyed wool, fastened over the shoulders and of double thickness over the breast. The coat or jacket is double-breasted, buttoned well up to the throat, contains no lining nor padding, unless of pure wool, and is either undyed or treated only with uninjurious fast dyes. The same

rule applies to the trousers, while the waist-coat is either dispensed with altogether or it forms an inner flap affixed to the side of the coat. Inside the sleeves and the trouser legs there is a contrivance which, fastening tight around the limb, prevents up-draughts; for cold, rheumatism, lumbago, &c., are caught by the sudden rush of cold air to one particular part of the body, and not by the gradual cooling of the entire system. The feet are clad in pure woolen socks with divisions for each toe, while the upper part of the boot is made of felt, the lower part also of felt or of porous leather, and the inner soles consist of perforated leather and layers of felt. Thus the boot is thoroughly porous, and the feet are consequently kept as clean and as pure as the hands. By doubly protecting the front of the body, where the blood vessels converge, these are stimulated; and, as an even temperature throughout is maintained, the necessity for great-coats is obviated, rain or damp having little or no effect, for in every case gradual and even evaporation is insured. While they are the best protection against cold, these clothes are also the coolest in summer. Little or no change need be made between winter and summer, at least in the temperate region; and means have been found by which this system can with equal facility be adopted by women. Nor can a "woolenite" be easily distinguished from the "woodenite," as the wearer of vegetable fibre may be called. The substitution of a collar made of unstarched white cashmere for the customary starched linen collar is the most conspicuous feature in the dress; otherwise it would be difficult to detect the disciples of this system. The cashmere collar, however, is not only most comfortable, but is a useful preventive of throat disorders.

Needless to say, all these precautions taken during the day must be continued at night. The bed must also be free from vegetable fibre. The linen sheet must be replaced by woolen blankets or camel hair rugs, with white cashmere sheets, is preferred. The mattress and pillow should also be stuffed and covered with wool; but when thus protected the sleeper need fear neither cold nor change of temperature, and is, therefore, urged to keep his window well open at night. Indeed, the possibility of thus securing pure air in the bed-room without risk is one of the most important advantages of the system. In reward for this great change in the mode of living the action of the skin is so stimulated that the noxious principles, the "bad humors" our forefathers so often spoke about, are soon given off and evaporated. Corpulence is reduced, the flesh becomes firm and thoroughly "hardened," while the acceleration of nervous action and a general improvement in the physical and mental working powers is demonstrated by the stop watch test. Then, according to Dr. Jaeger, the body has resumed its "normal" condition. We may not hope to realize complete immunity from illness, though we may secure health equal to that of the domestic animals whose lives are also spent under artificial conditions, but who usually enjoy much more freedom from illness than their owners. While we live within four walls we can never attain to the degree of health of sheep, birds, and wild animals.

Such briefly is the reform in clothing approved and carried out by thousands of Germans, not a few Russians, and some Englishmen, and which has been introduced in our midst at the South Kensington International Health Exhibition and by the opening of a depot in Fore street, where articles of every description in connection with the system are to be seen. Already Dr. Jaeger's sanitary woolen system has been adopted by some of our most eminent sanitary reformers; while, in Germany, it has not only revolutionized the trade of Stuttgart, where its founder practices, but the clothes are worn and highly appreciated by such men as Count von Moltke, who may be expected to apply the principles in question to the German army, thus increasing immeasurably the strength of Germany by improving the health of her troops. Of course so startling an innovation will be met by the most strenuous opposition. The general adoption of this novel teaching might not only affect vast trade interests, but the world at large is always reluctant to acknowledge a fundamental error confirmed by daily custom. Still the evidence in its favor is sufficiently strong and the success achieved so wide-

spread that it is, at least, only right to state the case, leaving the public, in Dr. Jaeger's own words, free "to examine everything and retain the best."

### Book Notices.

The danger of incidental harm to the community, or to certain classes of people, from the increased use of machinery, the extension of public works, etc., is greatly diminished when those who make the laws, and especially those whose duty it is to interpret them, recognize that law is a progressive science; that it is a means, not an end; that when a state of things arises for which there is no precedent, a new precedent must be made. How the most enlightened jurists hold this principle constantly in view, and how the common as well as the statute law is thus made to keep pace with the general advance of civilization, is admirably set forth in the leading article in the *North American Review* for December, "Labor and Capital before the Law," by Judge T. M. Cooley, of Michigan. To the same number, William K. Ackerman contributes some suggestive "Notes on Railway Management," Dr. Schliemann tells what he found in his excavations of the ruins of Tiryns, in Southern Greece, and Principal Sharp supplements his scholarly article on "Friendship in Ancient Poetry" with one on "Friendship in English Poetry." The other articles in the number are, "The British House of Lords," by George Ticknor Curtis, and "Responsibility for State Roguery," by John F. Hume.

The Christmas issue of *Harper's Magazine* had for its opening article last year a charming paper on Christmas, by George William Curtis; this year, instead of the editor of the "Easy Chair," it is the editor of the "Drawer," Charles Dudley Warner, who has the place of honor, though Mr. Curtis gives in his own department another pleasant study of Christmas. Mr. Warner's paper is on "Christmas Past," and deals with the customs of the olden time, especially in "Merrie England," with his usual by-play of humor. Speaking of the supposed virtue of eating mince-pie at Christmas-tide, Mr. Warner says: "Then we have a certain test of the piety of the Pilgrims to New England, for they and their descendants did not hesitate to eat mince-pie any day in the year they could get it, and had so much grace that they could take it with impunity for breakfast on a summer morning." In concluding his paper, he says with fervor: "I believe that every year at Christmas-time the windows of heaven open wider than ever before, and more men and women hear the song." The paper, written by an American, obtains an international character by illustration as well as subject, the artists being Messrs. Boughton, who is both American and English, Paget, Wegelin, Green, and Barnard, the latter three having important full-page pictures.

AMERICAN POLAND-CHINA RECORD.—For patrons and breeders, Vol. 6th will close January 15th, 1885. All pedigrees received after that date will be filed for 7th Vol. Recording fee for stockholders 50 cents; all other persons \$1.00 for each pedigree recorded, except in case of dead ancestors (when necessary to record them), which will be recorded free. No pedigree will be filed for record until paid for. If pedigrees, upon examination, and found not to be worthy of record, the fee will be returned with the pedigree. The recorded number cannot be given until the book is printed, as all pedigrees are alphabetically arranged, and cannot be given their numbers until book is complete. The Executive Committee is instructed to receive no pedigrees in the 6th Volume until sire and dam are recorded or sent forward for record. It is best for parties sending in pedigrees to keep copies of them, as copies of pedigrees will not be sent from Secretary's office. We will gladly receive appropriate cuts of Poland-China hogs for 6th Volume at \$1.50 per page; but in no case will advertisements or history of herds be received. The American Poland-China Record is a National publication, and is not published in the interest of any individual, but for the benefit and protection of its patrons. Address John Gilmore, Secretary, Vinton, Iowa.

St. Louis had 2,500 special constables on election day.

### Importations of Percheron Horses.

Several hundred stallions are now annually being imported from France to the United States. The immense wealth they are adding to the nation will be better understood from the estimate that the first cross of a Percheron stallion with a native mare doubles the selling value of the colt when mature. The greatest importer and breeder of this stock is M. W. Dunham, of Wayne, Ill., who has imported nearly 1,700—and during the past twelve months over 600, nearly all of which are recorded with pedigrees in full in the Percheron Stud Book of France, as all careful breeders and business men insist on French records of pedigrees where high prices are paid for imported animals whose value lies in their purity of blood.

The Belcher sugar refinery, of St. Louis, will suspend operations for a time on account of dull trade.

When vegetables are kept in house cellars during winter, the apartment ought to be kept very clean and well ventilated.

John Bright, member of Parliament, expresses the opinion that in the defeat of the protection party in the United States, America was greatly blessed. He thinks that when England and the United States both adopt free trade, the world will be the gainer.

The live stock trade at the Union stock yards (Chicago) for 1883 aggregated over 200 millions of dollars, and included the handling of 1,879,000 cattle, 30,000 calves, 5,649,000 hogs, 750,000 sheep and 15,000 horses, the whole equivalent to 197,000 car loads. A little more than half of the cattle were sold and shipped away alive.

The report of the Commissioner of Pensions for the year ending June 30, 1884, shows that there are 322,756 pensioners on the rolls. The amount paid out during the year for pensions was \$56,908,597. There were added to the rolls during the year, 34,192 new pensioners.

Among the important matters discussed by the Master of the National Grange at the recent meeting in Nashville, is the absorption of wealth by a few persons. He does not propose a remedy, but he submits whether the fact is not sufficient to justify belief in encroachments of money upon liberty of the people.

The Washington monument has reached five hundred and twenty feet, the highest artificial structure in the world. The highest point of the cathedral at Cologne, the next highest building, is five hundred and fifteen feet. The monument is to be dedicated February 22d, next.

It is claimed that there are 5,000,000 sheep in Ohio, representing a capital of more than \$13,000,000, owned by 90,000 persons. The politicians usually estimate that there are 40,000 owners of sheep who rise to the dignity of wool growers, the others being owners of small flocks which supply wool or mutton for home consumption. Ex-Governor Foster, says, however, that a man who owns two sheep is as much stirred up over anything that affects the wool crop as a man who owns a thousand.

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## The Young Folks.

### John's Pumpkin.

Last spring I found a pumpkin seed,  
And thought that I would go  
And plant it in a secret place,  
That no one else would know,  
And watch all summer long to see  
It grow, and grow, and grow,  
And may be raise a pumpkin for  
A Jack-a-lantern show.

I stuck a stick beside the seed,  
And thought that I should shout  
One morning when I stooped and saw  
The greenest little sprout!  
I used to carry water there,  
When no one was about,  
And every day I'd count to see  
How many leaves were out.

Till, by and by, there came a flower  
The color of the sun,  
Which withered up, and then I saw  
The pumpkin was begun;  
But oh! I knew I'd have to wait  
So long to have my fun,  
Before that small green ball could be  
A great big yellow one.

At last, one day, when it had grown  
To be the proper size,  
Said Aunt Matilda: "John, see here,  
I'll give you a surprise!"  
She took me to a pantry shelf,  
And there, before my eyes,  
Was set a dreadful row of half  
A dozen pumpkin pies.

Said Aunt Matilda: "John, I found  
A pumpkin, high and dry,  
Upon a pile of rubbish, down  
Behind that worn-out sty!"  
O, dear, I didn't cry, because  
I'm quite too big to cry,  
But, honestly, I couldn't eat  
A mouthful of the pie.

—Mrs. Geo. Archibald.

### A Horse School.

A correspondent of the *Christian at Work* thus describes a horse school for the benefit of its young readers. I wonder how many of the boys and girls who read this paper ever heard of a school for horses? I am sure I never did until one afternoon last fall I saw an account of Professor Bartholomew's Equine Paradox and determined to go and investigate for myself. I will not give an account of the performance, nor tell how much astonished I was at the remarkable intelligence exhibited by the Professor's four-footed pupils. I have always been a lover of horses since the time my grandfather used to put me on the back of an old mare considerably on the shady side of 20 and let me sit there while she ambled leisurely around nibbling the grass in the close yard, in front of the old farm house down on the east end of Long Island. Since then I have been on the backs of much more valuable horses, from the shaggy little Shetland ponies of the north of Scotland to the thoroughbred hunters of Kentucky and Virginia, or the half-wild mustangs of southern California, but I never enjoyed any of my rides so much as I did the first ones, when my grandfather would let the old mare follow him up the lane toward the Sound, when he went after the cows. I was aware that a horse could be trained to do many things, but I never knew, until I saw Prof. Bartholomew's exhibition, that one could be taught to take a piece of chalk in his mouth and write legible figures on a blackboard and then add them up and put down the result. I must confess that when I first saw it done I felt as if I was dreaming, and then I concluded that it must be some trick. So convinced was I of the unreality of the performance that when it was over I sought Prof. Bartholomew, and after introducing myself, expressed my doubts. He laughed good-humoredly and assured me that I had been awake, then added seriously:

"I am as yet but on the threshold; there is apparently no limit to what a horse can be taught. Mine already understand all I say to them and Caesar begins to answer me in a language which I believe all horses will eventually be able to learn. You doubt? Nellie," he added, calling off. In a moment one of the prettiest little mares I ever saw trotted lightly on the stage and stopped beside the Professor.

"Shake hands with the gentleman," said the Professor.

She looked at me shyly and lifted her left fore-foot.

"Which foot do you shake hands with?" said the Professor in just the tone that one would use toward a child. I could see the expression of embarrassment that came into

her intelligent eyes as she corrected her mistake and offered the right foot.

"Now get the gentleman a chair." Nellie trotted obediently to the side of the stage, and picking up a chair in her teeth brought it over and set it down by the Professor. "Now go and bring Caesar." Again Nellie turned and left the stage. In a few moments she came back followed by a large and not so bright a looking horse.

"He is not so intelligent as the little one," I remarked to the Professor in a whisper, for the almost human understanding of the animals caused me to lower my voice unconsciously, as if I had been speaking of a child instead of a horse.

"Yes, he is, but in a different way; he is not so nervous, and consequently does not look so bright," answered the Professor. Then he added, turning to the horse,—

"Caesar, did you have a good time to-day?"

The horse responded in a sort of subdued whining.

"Should you like to go for a walk?"

Another whining and a lively expression of anticipation was the horse's reply. The Professor asked several more questions which Caesar answered with apparent correctness. I say apparent, because, while I could not understand what the horse said, I could perceive a difference in the expression of his eyes, and also that a negative was shorter and sharper than an affirmative.

Professor Bartholomew noticed my surprise and said, as he laid his hand caressingly on the horse's neck:

This is only the beginning. In the horse we have an animal with a larger brain than a man. Some of his faculties are much more acute than a man's. His memory, for example, is simply marvelous. For instance, you drive along a country road to-day, and then in a gate and stop to call on somebody. Go along the same road with the same horse in a year's time and he will remember the place and want to turn in. Few men have as good memories as horses. The trouble is that men are put in charge of horses who are not fit to have charge of anything. From constant association with low, brutal men, the horse becomes contaminated. Then even the best horse owner rarely takes much pains with his horse's education. He is 'broken,' and, if 'well broke,' that is regarded as sufficient. The poor animal is given over to the tender mercies of some ignorant fellow who should be obliged to serve a year's apprenticeship on a saw-horse before he is allowed to touch a live one. He is beaten, kicked and yelled at until the equine race has come to such a pass that when you see real, natural horses you are amazed. These things are common in Arabia. The Arabian makes a companion of his horse and talks to him as he would to a friend. He does not shout at him and use abusive language. A low quiet tone in speaking to a horse is one of the surest tests of a horseman. A man who yells at a horse not only betrays his coarse, brutal nature, but his ignorance as well. A horse's sense of hearing is so much more acute than a man's that this shouting at them is doubly absurd. When I hear, as I often do when driving along a country road, some coarse voice away across the fields, shouting at the patient team, 'Come over here,' often accompanied by profanity, do you know the impression it makes on the mind of any real horse man? It is as if the man had shouted at the top of his voice, 'I am a coarse, ignorant fellow, not fit to have charge of horses, for I know nothing about them, and by my yelling and shouting and swearing at my animals I propose to show the world what a rough, uncouth, ignorant boor I am'—but I fear I am keeping you too long," said the Professor, interrupting himself.

After some further conversation I arose to go, after I had shaken hands with Nellie and Caesar. The Professor followed me to the door.

"I wish you would say to the boys who read your story that the evidence of a good horseman is uniform and patient kindness, and that while they may not be able to teach their horses as much as I have taught mine, they can teach them something, and the more the horse is petted and talked to the better servant it makes. None of my horses have ever worked on a farm, but I will guarantee to put them in farm work of any kind, and do good work, too, without the slightest 'breaking,' simply because they are educated and their trained intelligence enables them

to understand at once what the uneducated animal has to learn by rote. Urge your young readers to try and see what they can do with the animals under their care."

I took one more look at Nellie, who was standing with her head over the Professor's shoulder, meditatively sucking at one of his coat-buttons and looking as if she understood every word that was said. "Well," I thought, "if education in one generation of horses can produce such intelligence as that, what would be the result if the inheritance of two or three generations of educated horses was added? Everybody who lives on a farm can do something to teach the animals under his care, and if he succeeds only a little, how much easier it will be all around!"

### A Distilling Insect.

Livingstone met with a wonderful distilling insect in Africa, on fig trees. Seven or eight of the insects cluster round a spot on one of the smaller branches, and these keep up a constant distillation of a clear fluid-like water, which, dropping to the ground, forms a puddle. If a vessel is placed under them in the evening, it contains three or four pints of fluid in the morning.

To the question, whence is this fluid derived? the natives reply that the insects suck it out of the trees, and naturalists give the same answer. But Livingstone could never find any wound in the bark, or any proof whatever that the insect had pierced it. Our common frog hopper, which, before it gets its wings, is called 'cuckoo spit,' and lives on many plants in a frothy, spittle-like fluid, is like the African insect, but is much smaller.

Livingstone considers that they derive much of their fluid by absorbing it from the air. He found some of the insects on a castor-oil plant, and he cut away about twenty inches of the bark between the insects and the tree, and destroyed all the vegetable tissue which carried the sap from the tree to the place where the insects were distilling. The distillation was then going on at the rate of one drop in every sixty-seven seconds, or five and a half tablespoonfuls every twenty-four hours.

Next morning, although the supplies of sap were stopped, supposing them to come up from the ground, the fluid was increased to one drop every five seconds, or one pint in every twenty-four hours. He then cut the branch so much that it broke, but they still went on at the rate of one drop every five seconds; while another colony of the insects on a branch of the same tree, gave a drop every seventeen seconds.

### A Pony and His Shoes.

A year or two ago Mr. William Sinclair, pupil teacher, Holm, imported one of the little ponies from Shetland on which to ride to and from school. Up to that time the animal had been unshod, but some time afterward Mr. Sinclair had it shod by Mr. Pratt, the parish blacksmith. The other day Mr. Pratt, whose smith is a long distance from Mr. Sinclair's house, saw the pony, without halter or anything upon it, walking up to where he was working. Thinking the animal had strayed from home, he drove it off, throwing stones after the beast to make it run homeward. This had the desired effect for a short time; but Mr. Pratt had only got fairly at work once more in the smithy when the pony's head again made its appearance at the door. On proceeding a second time outside to drive it away, Mr. Pratt, with a blacksmith's instinct, took a look at the pony's feet, when he observed that one of its shoes had been lost. Having made a shoe, he put it on, and then waited to see what the animal would do. For a moment it looked at the blacksmith as if asking whether he was done, then pawed once or twice to see if the newly-shod foot was comfortable, and finally gave a pleased neigh, erected its head and started homeward at a brisk trot.

### Advantages of Care.

There is no position in life more detrimental to mankind, both intellectually and physically, than one free from responsibility. People who have no particular cares are dead weights upon the world and lead lives that in truth are entirely unsatisfactory to themselves, if they are endowed with any sensibility at all. In every community it will be found that the individuals who are

carrying full loads of responsibilities are the most contented beings of the land, and the cream of it also.

Any young man starting out in life should never seek an occupation where he simply has physical labor to perform, for in taking such a position he only becomes a tool and development will not follow, as the better part of himself is not brought into action. A man can be an employe during his whole life, and yet at all times have the responsibilities of the particular branch of business which he is performing rest entirely upon himself. The mind must be occupied by thoughts of an investigating, mathematical and quickening nature, or it will become stunted and groveling. Further than this, every young man should depend upon his own energies.

The following ages have, on the authority of skilled arboriculturists, been attained by trees: Yew, 3,200 years; schubertia, 3,000; cedar, 2,000; oak, 1,500; spruce, 1,200; lime, 1,100; Oriental palm, 1,000; walnut, 900; olive and cypress, 800; orange, 630; maple, 500; elm, 300.

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Last week's business failures in the United States amounted to 248.

The convention of cattlemen in St. Louis sent \$1,200 to the suffering people in Virginia and Kentucky.

The city of Montreal is plagued with diphtheria and typhoid fever, both believed to be caused by defective city drainage.

The corn crop of the United States for 1884 is about 1,800,000,000 bushels. Kansas produced one-ninth part of it, or 200,000,000 bushels.

Congressman Tucker, of Virginia, has been appointed guardian for President Garfield's children, so far as the property which the President owned in Virginia is concerned.

Persons needing information relating to patents and methods of obtaining them, will receive a little pamphlet on the subject if they will write to Munn & Co., 361 Broadway, N. Y.

The thirteenth annual session of the Kansas State Grange will be held at Fort Scott, commencing on Tuesday, December 9th, at 10 o'clock a. m.

W. H. JONES, Chairman.

Grover Cleveland's plurality in the State of New York is 1,149 on the highest elector and 1,077 on the lowest. The total vote of the State was over 1,100,000. A change of one vote in every 2,000 would have given the State to the other party.

There has been a good deal of talk about the Hessian fly injuring wheat in Kansas this fall; but on investigation it proves to be like the milk sickness—always in some other place. We do not know of one well authenticated case of fly in the State.

The third annual Farmers' Institute at Hiawatha, Brown county, will be held on the 13th, 14th and 15th days of January next. The editor acknowledges receipt of an invitation to attend and deliver a lecture on some appropriate subject.

The Junction City *Tribune* recently contained a carefully written article on sorghum culture, and the editor was kind enough to forward to this office proof slips. Much of the matter, in substance, has appeared in the FARMER, which accounts for our not using the article, but we will need portions of it soon.

### National Cattlemen's Convention.

One of the most important conventions of the kind ever held in this country was in session in St. Louis last week. It consisted of upwards of twelve hundred delegates, representing about twenty-five million head of cattle worth not far from six hundred million dollars. West of the Mississippi alone there are upwards of twenty-one million head of cattle.

The men composing the convention were earnest, energetic men, looking after their own interests. They came from every State and Territory in the Union. The object was to organize the cattle interests so that a man engaged in the cattle business may have more influence in his own business. An association was formed, a constitution and by-laws adopted, and officers elected. There will be annual meetings, and special meetings whenever ordered by the executive committee. Every association of cattlemen and every single herd is entitled to representation at the annual meetings.

The most important action taken by the convention was in relation to leasing or purchasing grazing lands in large bodies, and in relation to the locating of a national cattle trail. On this latter subject, the following resolutions were adopted.

WHEREAS, One of the objects of this Convention is to procure by all legitimate means within its power such legislation from Congress as shall best protect and promote the entire stock interests of the United States, and offer to each and every section of the country ample market and transportation facilities; and

WHEREAS, It is the desire of this Convention that a safe and cheap route be opened from the extensive breeding grounds of the South to the extensive maturing grounds of the North-west; and

WHEREAS, We believe that this can only be accomplished by the establishment of a national stock trail over which stock can be driven; therefore, be it

Resolved, 1. That this Convention does memorialize Congress by such appropriate legislation as shall be sufficient to accomplish the purposes herein intended to open, establish and maintain a national stock trail, beginning at some point on Red River and extending thence in a north or north-west direction to the north line of the United States.

2. That a committee of — members of this Convention be appointed to prepare and present said memorial to Congress in the name and by the authority of this Convention.

This created a good deal of discussion. The Kansas members of the convention opposed the location of the proposed trail over any part of this State, and their reasons will be approved by every Kansan. Our people have lost cattle and money enough by reason of the presence of Texas cattle in the State. We do not want a six or ten mile trip across the State set apart for disease-breeding purposes. Let these cattle kings who have mountains of money build a railroad across the State and transport their cattle by rail, or let them confine the travel to the winter months. It is not comity or good neighborhood for one State or community to subject another to loss unnecessarily.

Another important matter discussed was the government's treatment of Indians in permitting them to leave reservations for purposes of hunting when, as was charged, they steal cattle, burn pasture, and otherwise injure stock interests.

The convention adjourned, after a five day's session, and agreed to meet again next November at St. Louis.

The eighth annual meeting of the American Poland-China Record company will be held at the Northwestern Hotel, Cedar Rapids, Iowa, January 21, 1885. All parties interested in the breeding of Poland-China swine are cordially invited to attend. The Chicago & Northwestern railway will return parties attending at one-third rates on their lines in Iowa and Illinois; the Burlington, Cedar Rapids & Northern railway and

the Chicago, Milwaukee & St. Paul will give the same rates on all their lines. Parties attending should note this and avoid any road that will not give these rates.

### Wheat for Stock Feed.

About the only reason any man can offer for the fact that wheat has not been much used for stock feed is that it has been more in demand for human food than any other grain. Bread is made from barley, buckwheat, rye and corn, but none of those grains produce a flavor that wears as well as wheat. One cares to use buckwheat cakes only when the right season is present. Rye bread does well enough for a change, and barley meal and oat meal answer for an occasional dish when boiled and eaten with milk. Corn makes a good, sweet, wholesome bread, but it invariably gives place to wheat for regular use when it can be obtained readily.

But wheat would not be so generally a favorite among men and women if it did not contain elements that the bodily forces can appropriate. Chemical analysis agrees with universal experience in placing wheat at the head of food grains for humans; and the elements which make it good for men, make it good for animals also. Wheat does not create as much heat as corn does, but it contains more flesh-forming and more fat-forming elements than either oats, barley or corn. Wherever it has been tried the result has always been in its favor as a good article of diet for both man and beast. In another place in this issue, we quote from a Chicago firm of live stock dealers a brief reference to their experience in feeding hogs with wheat.

By reason of low prices of wheat in England, farmers there are discussing the subject of feeding wheat to cattle, and we see in a late number of the *Farmers' Review* that some Colorado cattle men are feeding wheat to their stock with good results.

There is a great deal of wheat in Kansas, and the price is so low that many farmers do not care to sell it now. There is no immediate prospect of a better market. What next year's crop will be no one can foretell. If it should be short, prices of wheat will rise; if it be as abundant as it is this year or anywhere near it, there can be no advance. So, it may be better to dispose of wheat now in the best way that we can. And if fifty or sixty cents a bushel can be made out of it by feeding it to stock, why not use it in that way? We never had any considerable experience in the matter. We have fed crushed wheat to horses with good results, but beyond that we know nothing. Analogy, science, common-sense, and experience of many persons all combine to advocate the claims of wheat as food for stock, and we believe in it. We would therefore advise its use wherever and whenever it may be convenient and profitable. And we would advise experimenting in that direction, at any rate, so that farmers may learn for themselves what are the merits of wheat as stock feed. But care must be taken not to feed it whole. Given in that way, a great deal of it is not crushed in mastication. Especially is that the case with cattle and hogs. It passes into the stomach whole, or a great deal of it does, where it swells and produces various disorders. At least such is the experience of persons who have so used it. By crushing it, or boiling, or steaming, its greatest value is obtained. Then, when it gets into an animal's stomach, it is in condition to yield its elements as the bodily functions need it. An English farmer who has fed wheat to cattle says it should never be fed whole. It should never, under any circumstances, be given to

any kind of stock without being bruised. If given whole, its full fattening value could not possibly be obtained; its influence might even be destructive. It has, moreover, a heating and binding tendency, and on this account should never be substituted entirely for the feeding mixtures generally in use. Give a little linseed cake or other laxative food along with it. Make the allowance at the outset very small, and increase as the animals take to it. It may be soaked or steeped in boiling water, or thoroughly scalded, or boiled, as is often done with corn for hogs. The great thing is to get the kernels in condition that they are readily assimilable in the animal's stomach.

### Thanksgiving.

To-morrow, according to proclamation duly made, the people are expected to give thanks. While Thanksgiving is the text, it is also expected that everybody who can afford it will enjoy a good dinner and pour out his gratitude through coffee and turkey. What would be Thanksgiving without a dinner that one will remember at least a week? Who does not remember his life history by these annual mile-marks regularly placed along the way? And yet there are a great many people who neither know nor care anything about Thanksgiving. But they are persons who cannot afford to have any better dinner on that day than on other days. It is an undisputed fact that the dinner has a great deal to do with Thanksgiving. But the same may be said about Christmas, though no one would assert that there is not something more than a feast about Christmas.

The origin and practice of observing one day every year to render thanks contain lessons of great worth. It may be that a man does not believe in God, or in Christ, or in immortality, and he may say whom shall I thank, and for what, and how? That man surely believes in himself and his fellow man. He believes in the crops he raises, in his grains, his fruits, his vegetables, and his animals. He believes in day and night, in seed time and harvest, in the succession of seasons. He believes in life and he believes in death. He believes in light and darkness, and he knows that he cannot produce a single blade of grass or kernel of corn.

He may say—whom shall I thank? and yet he is really thankful. He does not know why, but when he looks over what he has and enjoys and what his neighbors have and enjoy, a feeling of kindness toward his fellow men creeps over him and through him, filling up his heart with a warmth not always there. He is thankful. That is thanksgiving.

To him that believes in the "Great first cause last understood," thanksgiving is real; it is earnest. He believes that God is the author and giver of every good and perfect gift. He believes that without God's help we would have nothing, because without His aid we can do nothing. Thanksgiving with such a person has a solid foundation. His gratitude has virtue in it.

But the poor. Do they give thanks? Aye, verily. Pure religion is nowhere found more profusely distributed than it is among the lowly. The great Master was a carpenter's son. He came among the poor and oppressed, and upon them in all ages since has His memory been impressed. They always find something to thank God for.

Gratitude ennobles men. It opens up the heart to good impulses. It acknowledges the power in others above and below us of doing good. It is an antidote to selfishness. It makes us better, and it helps us to larger and purer views of life. Let us give thanks.

Please renew your subscription.



Carp for Kansas.

Last Monday Col. W. S. Gile, Kansas State Fish Commissioner, announced at this office that the "fish car" of the U. S. Fish Commission was on the sidetrack of the U. P. railway, in North Topeka, containing the carp to be distributed in Kansas.

The car left Washington, November 19th, with about 20,000 carp for Arkansas, Missouri, Kansas, Colorado, Wyoming Territory, Utah, California and Nebraska.

Feeding Wheat to Hogs.

Some time ago we published an article on the value of wheat, or rather parts of wheat—shipstuff, as food for hogs.

Now, we have a circular letter from Patterson Bros., Chicago, live stock commission merchants, on the same subject. They say: In the year of 1868 we bought wheat in McHenry county, Ill., at 65 cents per bushel, and fed it to our hogs, ground and steamed; or, rather boiling water over it, using it the next day before souring while warm.

and No. 3 wheat for less than 50 to 60 cents in the Great Northwest.

Inquiries Answered.

TUMOR ON COLT'S LEG.—I have a colt that had a bunch growing on his hind leg above the ankle, called by some a blood-wart, by others a cancer-wart, and also a blood tumor. It grows very fast, bleeds a good deal, resembles a wart; have cut it off once, but it is still growing.

LOSS OF CUD—FISTULA.—I have a one-year-old steer that swallowed an Oagee orange apple, and it stopped in its throat. I pushed it down with a stick, and the steer cannot chew its cud. What is the reason, and what is its cud? I have also a mare that has the fistula on the crest. I have taken some pieces of bone out of it. How can I cure it?

—The steer is probably all right now. If the parts were not injured by the pushing down process, and if the apple itself did no injury, the cud will come up again naturally. When fistula has gone as far as to suppurate bones, it requires heroic treatment.

- Verdigris, 1/2 oz.
Copperas, 1/2 oz.
Oil turpentine, 1 oz.
Yellow resin, 4 oz.

KEEPING SWEET POTATOES.—Dry them well, and if your quantity is large, put them in any dry, well-ventilated room that you can keep above freezing point all the time.

Grange Anniversary.

Capital Grange, of Topeka, will celebrate the anniversary of the order at Odd Fellows' hall, Topeka, December 4. Members of this grange are invited to be present, with their invited guests, bringing well filled baskets.

OUR CLUB RATES.

We respectfully ask attention of our readers and friends to our new club rates printed at the head of the first column of the 8th page of the paper.

Gossip About Stock.

The American Hereford Association has appropriated \$2,000 to be used as premiums at the shows in 1885 to be held at Chicago and Kansas City.

If your hogs are coughing or sick or unhealthy, send to La Master & Ferguson for some of their medicine, which you will find advertised in this paper.

The Iowa Improved Stock Breeders' Association hold their eleventh annual convention at Ottumwa, Iowa, Dec. 3, 4 and 5. A profitable session is anticipated.

B. F. Dorsey & Son, Perry, Ill., very recently took thirty-two head of breeding Poland-Chinas to Kansas City to ship to his Kansas and Missouri customers.

The Cowboy band, of Dodge City, have made a national reputation at the great cattle convention recently held at St. Louis. They claim to represent \$20,000,000 hard cash.

During the Chicago Fat Stock Show, Col. Judy & Son made a public sale of Holsteins for Buchanan Bros. Six bulls averaged \$265, and twenty-one females, mostly young heifers, averaged \$213.

The illustration on the 1st page of this paper is a correct picture of one of the Norman horses imported by Jas. A. Perry, Wilmington, Ill. He has 100 head of these noble draft horses on hand which he offers for sale.

Chas. E. Bunn, Peoria, Ill., a young man less than 25 years of age, was one of the judges on sheep, swine, cattle and dressed carcasses at the Chicago Fat Stock Show, and although a comparatively young man he demonstrated to the satisfaction of exhibitors and visitors that he was an expert in the business.

The KANSAS FARMER knows Mr. Yost, the inventor and manufacturer of the Economy Incubator; he is a reliable man; and we think the Incubator is all that he claims it to be.

At the Chicago Fat Stock Show, J. H. Truman, Bushnell, Ill., showed a practical cross from the large English draft stallion and an Indian pony mare. He showed a 4 months' horse colt weighing 500 pounds; the dam, the pony mare, weighed but 700 pounds.

Through the courtesy of Phil M. Springer, Secretary of the American Berkshire Record, we note the following transfers, of interest in the West: Reformer 12462, Wib F. Clements, Agency, Iowa, to Wm. Brown, Lawrence, Kas. Oslin Gem 12463, same. Zelina 3d 12464, same. Model 11363, N. H. Gentry, Sedalia, Mo., to Bahntge, Kates & Co., Winfield, Kas. Lucy Long 11520, same.

The attendance at the meeting of the Red Polled Cattle Club of America was quite small, although the interest regarding the breed and its success is unabated. The officers elected were, for President, L. F. Ross, Iowa City, Ia.; Vice President, J. M. Knapp, Beton, Mich.; Secretary, J. C. Murray, Maquoketa, Ia.; Treasurer, W. D. Warren, Maple Hill, Kas. It was decided to get up a register of all pure-bred Red polled cattle in America, and all having such are requested to correspond with the Secretary for the necessary blanks, etc.

Renew Now.

Readers of the KANSAS FARMER are invited to renew now. Do not wait until your subscription has expired, and you have missed a month's issues.

The Missouri State Horticultural Society will hold its twenty-seventh annual meeting at St. Joseph, December 9, 10 and 11, next. The society is making extra efforts to have Missouri horticulture represented at New Orleans.

THE MARKETS.

By Telegraph, November 24, 1884.

STOCK MARKETS.

St. Louis.

The Western Live Stock Journal reports. HOGS Receipts 3 700, shipments 1,800. Market stronger. Yorkers 4 00a 15, packing 4 15a 30, heavy 4 25a 35.

CATTLE Receipts 2,100, shipments 800. Market steady for top grades, poor lower. Exports nominally 6 15a 50, good to choice shipping steers 5 50a 6 10, common to medium 4 25a 25, native butchers' steers 3 20a 4 15, cows and heifers 2 40a 4 00, stockers 3 25a 3 50, feeders 3 75a 4 25, Texas steers 3 00a 4 00.

SHEEP Receipts 1,800, shipments 1,100. Market dull. Natives 2 00a 2 25, Texas 1 75a 3 00.

Chicago.

The Drovers' Journal reports: HOGS Receipts 23,000, shipments 3,000. Market slow, fairly active; opened 10c higher and closed a shade weaker. Heavy grades 4 25a 4 45, light 4 00a 4 35, rough 4 00a 4 20.

CATTLE Receipts 7,500, shipments 2,000. Market steady. Exports 6 25a 6 60, good to choice shipping steers 5 60a 6 10, common to medium 4 25 a 5 00, Texans 3 30a 3 75.

SHEEP Receipts 2,700, shipments 400. Market steady and unchanged. Common to fair 2 12 3/4 a 3 00 medium to good 3 00a 3 50, choice 3 60a 4 00, lambs 3 50a 4 40.

Kansas City.

The Daily Indicator reports:

CATTLE Receipts 2,446. The market to-day was weak and 10a 15c lower. Exports 5 90a 6 30, good to choice shipping steers 5 25a 5 75, common to medium 4 50a 5 15, feeders 3 75a 4 30, cows 2 60a 3 25, grass Texas steers 3 10a 3 35, Colorado half-bred steers 3 40a 4 25, New Mexico steers 3 30a 3 80. HOGS Receipts 2,917. The market opened firm and 15c higher, but closed weaker. Lots averaging 235 to 277 lbs sold at 4 10a 4 25, bulk at 4 15a 4 20. SHEEP Receipts 373. Market quiet. Fair to good muttons 2 80a 3 20.

PRODUCE MARKETS.

St. Louis.

WHEAT Cash 76 3/4c.
CORN Cash 86c.
RYE 46 3/4c bid.
BARLEY 65a 75c.

Chicago.

WHEAT Demand active. Nov 73 3/4a 74 3/4c, Dec 74 3/8a 74 3/4c, Jan 74 3/8a 75 1/2c.
CORN Demand active and market materially lower. Cash 38 3/4c, Nov 38a 39c.
RYE Steady at 51c.
BARLEY Dull at 58 3/4c.
FLAXSEED Weaker at 1 29.

Kansas City.

Price Current Reports:
WHEAT Received into elevators the past 48 hours 22,799 bus, withdrawn 15,730, in store 880, 121. The tone of the market to-day was firm. No 2 Red Winter Cash 51 3/4c bid, 51 1/2c asked. Nov 51 1/2c bid, 52c asked. Dec 5 cars at 52 1/2c. Jan 30 cars at 54 1/2c; 5 cars at 54 1/2c; 5 cars at 54 1/2c; 20 cars at 54 1/2c.

CORN Received into elevators the past 48 hours 20,525 bus, withdrawn 18,059, in store 64,870. The little reaction upward of Saturday was followed by a greater decline to-day which made corn the cheapest of the season. Nov No. 2 mixed dropped from 27 3/4c to 26 3/4c. Year and Jan each sold at 24 3/4c the first corn that has gone below 25c. May was very active, opening unchanged at 27c and closing 1/4c off at 26 3/4c.

RYE No. 2 cash 38 3/4c bid, 39c asked.
OATS No. 2 cash no bids nor offerings. Nov 20c bid 22 1/4c asked, no offerings.
CASTOR BEANS Quoted at 1 56a 1 60 per bus.
FLAX SEED We quote at 1 17a 1 18 per bus, upon the basis of pure.

BUTTER The demand is fair for choice to fancy selections of roll and dairy stock. All grades of creamery are quiet to day, and low and medium of other grades are dull.

We quote packed:
Creamery, fancy fresh made..... 27a
Creamery, choice "..... 27a 24
Creamery, fair..... 20a 22
Choice dairy..... 21a 22
Fair to good dairy..... 12a 14
Storepacked table goods..... 12a
We quote rolls:
Good to choice..... 14a 15
Common..... 10a 12
Inferior..... 6a 8

EGGS The supply is equal to the demand, but is unequally distributed among dealers. Those with light supplies are holding 1c higher, but the market in general may be quoted as unchanged and steady at 25c.

CHEESE We quote new eastern out of store. Full cream: Young America 14c per lb; do twins or flats 13 1/2c; do Cheddar. 13 1/2c. Part skim: Young America 9a 10c; flats 8 1/2a 9c; cheddar 8 1/2a 9c. Skims: Young America 6a 7c; flats 5 1/2a 6c; Cheddar 5 1/2a 6c.

APPLES Consignments of Missouri and Kansas choice to fancy 1 50a 1 75 per bbl. common to good 1 00a 1 25 do. Home grown from wagons 35a 50c per bus for shipping fruit.

POTATOES We quote home grown in a small way at 30a 35c per bus. Consignments in car loads: Early Rose 30c, White Neshamock 32a 34c, Peach-blow and other choice varieties 37a 40c.

SWEET POTATOES Home grown 50c for red per bus; yellow 75a 80c per bus.

TURNIPS We quote consignments at 35a 40c per bus.

SORGHUM We quote consignments in car loads: old dark 10a 15c per gal, new good 10a 25c, do fancy syrups 25a 40c.

**Horticulture.**

**Transplanting in the Fall.**

Every fall discussion is renewed touching the comparative merits of transplanting trees in fall and spring. Readers of the KANSAS FARMER know our preference for spring planting; but that is slight evidence only that it is better.

Arguments in favor of transplanting in the fall have force, all of them; and among the strongest are two: (1) That the work may be done at a season of the year when there is no hurry or rush about other work; and (2) That when trees are set in the fall they are ready to take advantage of every favorable influence in the early spring.

On every farm there is a period of a few weeks in late fall when there is no great hurry about anything in a region like Kansas. Our corn is ripe in September, and in that month our wheat land is sown. We are in no fret about gathering corn, because we have plenty of time to do that. We can prepare ground for tree planting and set out the trees without taking any note of the time we spend. All along in November, and often far on toward Christmas, excepting an occasional day or two, we may plant trees. And then, when they are planted, the work is done and out of the way when the hurry of spring work comes.

Besides this, when trees are set in the fall, the earth settles well about their roots during winter; and when the first warm days of spring come, they are ready to appropriate any and all benefits of the fresh season. And that is a good deal.

But fall planting implies some work and some conditions not usually taken into the account. It requires the taking up and removal of trees that may not be ready for the change, and if they are not ready, they ought not to be removed. What we mean by not being ready is, that the roots and the new growth of the tree may not be perfectly matured. In a season like the one just passed trees continue to grow longer than they do in a dry, hot summer. Leaves of many deciduous trees are not yet fallen. The writer has young apple trees which have not shed half their leaves yet. In such seasons young trees grown in rich nursery soils continue to grow late, and they remain tender until winter. The roots are in similar condition. They do not reach the resting state until late in the season. The whole tree is tender and unfit to be removed from its place at the usual time for removing trees. Taking them up under such circumstances is not good for them. It must operate to injure the vigor of the tree and tend to shrink and shrivel the young and tender branches and seriously damage the roots. By letting such trees remain in place until spring they mature thoroughly. The roots go into winter rest in their own time, and the wood of the new growth gradually hardens in a natural way, and is lively and plump and bright when spring comes.

Our principal objection to transplanting trees in the fall lies in the facts just stated. If one will cut a growing branch from a vigorous tree and lay it aside a day or two, he will observe that it shrinks, the bark wrinkles, and the color changes all in a short time. If he wait until the tree has its full year's growth and the branches are all matured, then he may remove a twig, and it will lie days without exhibiting any signs of change. One was not mature, it had not attained its full life; the other was mature and had its complete growth. It is that principle we desire to point out in reference to the transplanting of trees. A tree ought never to be removed

for transplanting until all that the season can do for it has been done. By permitting trees to remain all winter in the places where they grew during the summer, the natural year is completed, and there is no danger to be apprehended from immature roots or wood. By removing trees in the fall, while in some cases, indeed in many, we may get good stock, yet we are not always safe in that respect. Many of our readers, doubtless, have observed wilted and shrunken branches on trees they have purchased, particularly apple and pear trees. It comes usually from the facts we are considering.

Our practice has been to plant in the spring, and we have had satisfactory success. Planting may interfere a little with other work; but it is quite as important as anything else to be done on the farm, and it is therefore entitled equally to the time necessary.

**The Apple Maggot.**

Apple maggot is what a Michigan horticulturist calls an insect which he regards as worse than the codling moth. In giving its history he says: This insect has attacked the apples in New York and some of the New England States for years, and has been considered by many as the most grievous pest of the orchard. Last year I received this insect from Mr. Phoenix, of Delavan, Wis. The insect has been known to infest the thorn-apple in Michigan, Wisconsin and Illinois for years, but until last fall I have never heard of its attacking our Michigan apples. Whether the Eastern maggots have been imported here in fruit shipped West, or whether our native insects of this species have learned that apples are toothsome, it is hard to say. It is enough to know that it is here, and at work.

As to its history, he says: A two-winged fly lays many eggs on the apple in July. The little, white, footless maggots are pointed at the mouth end, and are possessed of little black freely-movable hooks which are attached to a frame work just back of the head. This pointed black head and the absence of feet are enough to enable us to distinguish this insect from the codling moth larvæ. There are several, not one, as in the case of the old "apple worm," in a single fruit. I have taken twelve maggots from a single apple. These maggots eat through and through the apple and not just about the core, so the apple is not simply injured, it is ruined, unless, forsooth, it is thought well to make cider (?) of such fruit. The filthy tunnels and plump maggots make such apples most disgusting.

The maggots are about two-tenths of an inch long, and when full fed come forth from small circular holes. I have an apple that now, September 30, shows six of these holes.

The larvæ leave the apples in September and October, and go into the earth to pupate. The pupa resembles the larvæ except it is shorter, and not so pointed in front.

The fly which comes forth in June is black, with red head and legs. It is less than one-half an inch long. In form the fly resembles the house fly. The wings are light, crossed with dusky bars.

These maggots do not attract attention very much until in September, and so are much the most harmful in autumn fruit. They do work some, however, in winter fruit. In this respect—being for the most part confined to fall apples—and in this respect alone, they are less to be dreaded than the codling moth. As will be easily understood by the above, this insect is a terrible enemy, and we may well work to stamp it out at the very onset.

As the apples attacked become ripe

early and fall prematurely, we have but to keep sheep or hogs in the orchard to destroy them. This is the only remedy which I can at present suggest. Of course apples containing these maggots which are gathered for use, should be fed to hogs as soon as their condition is learned.

**Branch Valley Nursery Co., Peabody, Ks.**

The Russian Mulberry and Apricot specialties. Nurserymen and Dealers, write for wholesale prices. E. STONER & SON.

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(Established 1870). Nurseries and Green Houses at FORT SCOTT, KANSAS. Largest Stock of Nursery and Green House Plants in the West. BEAUTIFULLY ILLUSTRATED CATALOGUE NOW READY Mailed to applicants free.

**Lee's Summit Nurseries.**

BLAIR BROS., PROPRIETORS,  
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To our Patrons, Orchards and Planters:

We would respectfully call attention to our heavy supplies and most excellent quality of Nursery products, consisting of Apple, Peach, Pear, Cherry, Plum, etc., Berries and Grape Vines of the various sorts. Also Ornamental and Shade Trees, Plants, Roses and Shrubs. Hedge Plants Forest Tree Seedlings and Evergreens, from 6 inches to 4 feet. Prices low.

Special attention is called to the fact that our agents are furnished with written certificates of authorized agency signed by us. We trust upon our patrons requiring agents to show their certificates, so as to avoid any mistakes or deceptions.

Orders sent by mail promptly attended to.

BLAIR BROS., Proprietors,  
Lee's Summit, Mo.



PRINCIPAL.—Third fleece, 26 1/2 lbs.; fourth fleece, 26 1/2.

**R. T. McCULLY & BRO.,**  
LEE'S SUMMIT, JACKSON CO., MO.

Breeders of PURE SPANISH MERINO SHEEP.—Very young R gister 400 Rams unequalled for length and quality of staple constitution and weight of fleeces; 24 selected by R. T. from the leading flocks of Vermont especially for export trade. The line of blood, complete with the high character of the fleeces, insure a reproduction of their excellent qualities. At prices to correspond with wool.

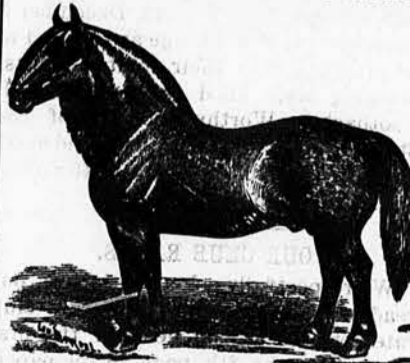
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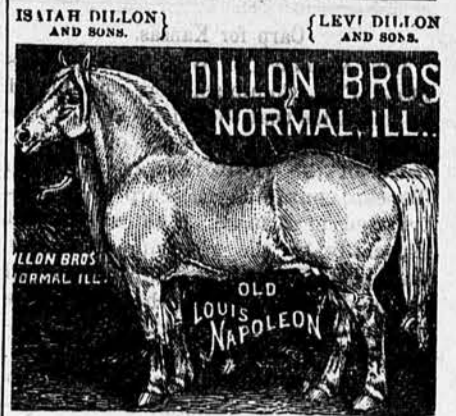
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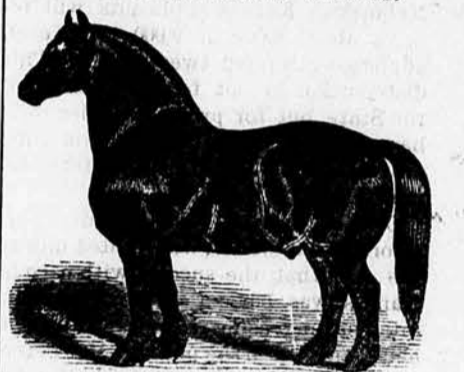
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Choice stock for sale. Also some fine Grades. Correspondence solicited and satisfaction guaranteed.

**—175 HEAD OF—**  
**IMPORTED CLYDESDALES**  
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The largest importer of Clydesdale in the West, the largest breeder of pure Clydesdale 57 Mares now in breeding. Moderate price. No equal opportunity can be found elsewhere to buy matured stallions or young stallions and Mares all ages. Persons invited to examine the stock. Correspondence invited. For particulars, call on or address

**ROBERT HOLLOWAY Alexis, Ill.**

Cuts from barbed wire fence, cured with Stewart's Healing Powder. No scar or gray hair, 50 cts a box.

### The Veterinarian.

[The paragraphs in this department are gathered from our exchanges.—ED. FARMER.]

**EWES PASTURED ON RYE.**—Will it injure ewes with lamb coming in February to pasture them on green rye until snow comes? I have a few acres sowed in August for the above purpose. [I do not think you need fear danger from such source.]

**SWELLED LEGS IN DOG.**—A dog has swellings on the outside joint of his hind legs. The hair is off and it is sensitive to the touch, and runs a little bloody matter. What is the matter with him? Will he have to be killed? [You need not kill him on account of present condition of leg. Cleanse sore twice a day, and wet it well with some of the following lotion: Zinc chl., 3 dr.; water, 1 pint; mix]

**URINATING ABNORMALLY.**—I have a valuable cow that will urinate every ten or fifteen minutes. She does not strain or make any extra effort; have noticed no signs of pain until this morning, when she would switch her tail and stamp with her hind feet a little; she laid down twice in the space of five minutes. Please prescribe for her. [Give an ounce of bicarbonate of potash with half a drachm of powdered opium twice a day. Plenty of flaxseed tea mixed with food, and given as drink.]

**MARE OUT OF CONDITION—CRACKS.**—I have a mare that was over-worked the summer of 1893, being driven to a heavy wagon in the city. She was wintered in the country, and in the spring was very thin in flesh, her coat rough, and legs badly stocked. I brought her out on the farm, gave her a few doses of aloes and saltpetre, after which she improved some, and I have used her all summer. Since harvest she has been declining, and the swelling has returned in her legs. The cleft between the heels, in her fore feet, has become diseased; there is a whitish discharge of a very offensive smell coming from the crack in the heel. The surface of the frog is hard and dry; there is some fever in the feet. [Give one of the following balls every day: Powdered barbadoes aloes, 8 dr; powdered gentian, 2 oz., and a sufficient quantity of Venice turpentine. Mix and make into four balls. Wet some cotton waste with Venetian turpentine and poke down into crack twice a day.]

**CONVULSIONS IN CALF—LAME COW.**—We have a calf dropped May 30, 1894, that was all right, apparently, until three weeks ago, when she was taken with convulsions. When walking, she will suddenly spring from the ground, throw herself violently down on her right side, straighten out with head thrown back as far as she can get it, eyes rolling up, and frothing at mouth. She has had three of these spells, and has about six convulsions at each time, going from one to another. She has been turned out to grass, and put in barn at night, and had a little hay and a handful of shorts and meal mixed. (2) We also have a 2-year-old cow that was taken lame three days ago in both forward knees. She does not seem to want them touched, and they seem sore and swollen some. Her horns seem warmer than natural, and nose dry much of the time; has not a very good appetite. Please tell me what to do for them. [(1) Epileptic fits are caused by indigestion, dentition, worms, and there are a number of other causes. Give calf the following: Raw linseed oil, 6 oz.; spirits of turpentine, 1 oz.; mix. Repeat dose in three or four days. (2) Rub the knees with equal parts of spirits of camphor and tincture of opium three times a day. Give inter-

nally half a general cow-drink every three days.]

**FISTULA IN HORSE.**—I wish your advice in regard to a young horse. He had the fistula in the withers, but I think that is all killed; used corrosive liniment on it, and on the off side of the withers there is a large lump below where it broke and run; it is about four inches broad and about six inches deep. What will drive and scatter the swelling? I have been using kerosene oil, half a pint; spirits of turpentine, half a pint, and gum camphor, 6 oz. The swelling has gone down some. [The fistula was not cured; it is more than probable it will break out on that side now. Better blister it, and if pus has formed it will hasten its formation superficially. If it has not, the swelling will be greatly reduced. Keep watch of it, and if on pressure you find a soft spot at any time it must be freely opened.]

**CHRONIC CATARRH.**—I have suffered for years from Chronic Catarrh. Six weeks ago I was induced to try Ely's Cream Balm. Relief was instantaneous, and continued use has resulted in an almost complete cure.—S. M. GREENE, Book keeper, Steamboat Co., Catskill, N. Y.

I have been a severe sufferer from Catarrh for the past fifteen years, with distressing pain over my eyes. Gradually the disease worked down upon my lungs. About a year and a half ago I commenced using Ely's Cream Balm, with most gratifying results, and am today apparently cured.—Z. C. WARREN, Ruland, Va.

My daughter and myself, great sufferers from Catarrh, have been cured by Ely's Cream Balm. My sense of smell is restored and health greatly improved. C. M. STANLEY, Merchant, Ithaca, N. Y. (Easy to use. Price 50 cents)

Centuries ago oak was by far the most valued forest tree in England, on account of acorns fattening hogs. In ancient records it is put down how many hogs such and such woods would carry. Pannage was the right of feeding swine, and to this day persons adjoining the New Forest have the right of pannage for six weeks there on paying a small fee.

M. N. Foster, a farmer living near Hayward, California, has a hog which spends his time with a flock of geese. Every day when the geese go into the pond for their accustomed swim, the hog plunges in at the same time, and remains as long as the geese do. He seems to enjoy himself in the pond.

Mt. Pleasant Stock Farm Colony, Anderson Co., Kansas.

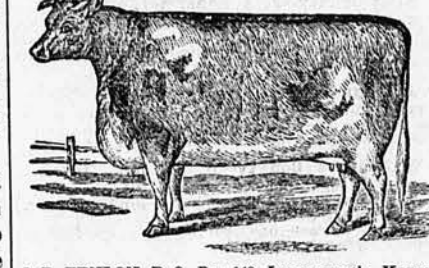


**J. S. HAWES**  
Importer and Breeder of  
**HEREFORD**  
Cattle.

I have one of the largest herds of these famous cattle in the country, numbering about 200 head. Many are from the noted English breeders, T. J. Cartwright, J. B. Green, B. Rogers, W. S. Powell, Warren Evans and P. Turner. The bulls in service are "FORTUNE," "SPARKS," "WINDMILL," "SIR BARTLE FRERE," "SIR DAUPHIN 19th," half brother to T. L. Miller Co.'s "Dauphin 18th," and "THE GROVE 4th," by "The Grove 3d."

To parties wishing to start a Herd I will give very low figures. Write or come.

#### SUNNY SIDE STOCK FARM.



J. P. FENLON, P. O. Box 148, Leavenworth, Kansas.

#### SHORT-HORN CATTLE

of the most noted beef strains, and all superior individuals.  
FOR SALE—Forty Thoroughbred Pure Short-horn Bulls—Rose of Sharon, Young Mary and Princes from 9 months to 2 years old; also 60 High grade Red and in fine condition, from three-quarters grade cows and pedigree bulls.  
Correspondence or inspection of herd cordially invited.

Chester Wolfe, Bookster and Poland-China PIGS, fine Setter Dogs, Scotch Collies, Fox Hounds and Beagles, bred and for sale by W. GIBBONS & CO., West Chester, Chester Co., Pa. Send stamp for Circular and Price List.

### BERKSHIRE HOGS.

My herd now numbers about Forty Breeding Sows and Four Boars, including representatives of the best families of the day, and also prize winners at the leading shows of this country, Canada and England. I have now in use in my herd sows that won in England in 1883, 1882 and 1881, and descendants of noted prize-winners previous to that time. The principal sow in use in my herd at present is "Duke of Monmouth" (1861), who won in 1883 the first prize at four leading shows in England, including first at the Royal Show, and also first prize at two leading shows in Canada. He thus won six continuous first prizes without being beaten. A like record I believe never atained by any other boar. I paid \$400 for "Duke of Monmouth." He is a splendid feeder, an animal of great constitution, and comes from the same family as my old boar, "Lord Liverpool" 221, for whom I paid \$700, and who is now almost eleven years old and still alive. I have now a splendid lot of pigs from three to six months old, the bulk of which are got by "Duke of Monmouth." I would also spare a few of my sows, young or old, when in pig, and part of my breeding boars. I do not advertise prices as low as the lowest, for I can not afford to sell as low as those who bought a cheap class of stock to start with, but my prices are reasonable and within the reach of all who know the value of first-class stock. My herd of Berkshires show as much size as hogs of any breed, and I am sure I can show more quality, activity, constitution and size than is combined in any other breed of hogs. Almost if not every prominent herd of Berkshires in the West contains representatives from my herd, and this alone considered in connection with the many prizes I have won for ten years past at our largest shows, prove beyond a doubt the quality of stock I am producing from year to year. No breeder of any kind of hogs in the United States or Canada has for several years past bought and retained in his herd so many valuable units at an equal cost as I have. I have issued a new catalogue this season containing the pedigrees in full of my herd and a limited description of each animal together with a complete list of prizes won for several years past. This catalogue I will mail free to all who are interested enough to write for it. I am also breeding High grade Short-horn Cattle and Merino Sheep. Have now about 100 good young animals for sale. I have reduced rates for shipping. All parties visiting from a distance will be met at the train, if notice is given in time. For prices or any further information, address

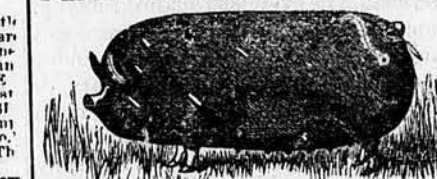
**N. H. GENTRY,**  
Sedalia, Mo.

### JAMES ELLIOTT



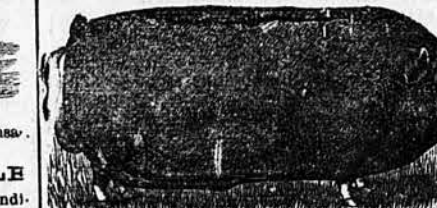
Abilene, Kansas.  
Breeder of High Class BERKSHIRE SWINE. My herd is composed of twenty breeding sows of the leading families known to me, headed by Earl's admirable 1459. My hogs are noted for size, uniformity, fine heads, bristly haunches great dip, with short strong legs. They are perfectly marked, having good coats of hair; with a quantity of bone that enables them to carry great weight, combining quick and easy feeding qualities. Stock all recorded in A. B. R. I am now prepared to fill orders for pigs, of either a sex, reasonable. Correspondence and inspection invited.

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



I have thirty breeding sows, all matured animals 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 prizes and gold medals at the leading shows in Canada in 1891. I am now prepared to fill orders for pigs of either sex not skin, or for matured animals. Price reasonable, satisfaction guaranteed. Send for catalogue and price list, free. S. McCULLUGH, Ottawa, Kansas.

#### WELLINGTON HERD ENGLISH BERKSHIRES.



The Wellington Herd of well-bred and imported Berkshire Swine is headed by Hopeful Joe 489. The herd consists of 16 matured brood sows of the best families. This herd has no superior for size and quality, and is very best strains of Berkshire blood. Stock all recorded in A. B. R. Correspondence and inspection invited. Address **M. B. KEAGY,** Wellington, Kas.

D. M. MAGIE COMPANY, OXFORD, BUTLER CO., OHIO, Originator and Headquarters for Magie or Poland-China Swine. 751 head sold for breeders in 1893. Have shipped stock to Seven Foreign Countries. Send for Circulars.



### RANKIN BALDRIDGE, Parsons, Kansas,

Breeder of Pure Poland-China Hogs. This herd a remarkable for purity, symmetry and are good breeders. Black Jim, a prize-winner, bred by B. F. Dorney, heads the herd. Stock recorded in Central Poland-China Record. Correspondence invited.

<b>IF YOU WANT</b> A Young Sow bred to our crack boar,	<b>POLAND-CHINA SWINE</b>	<b>IF YOU WANT</b> A lot of Plymouth Rock Fowls at \$1.00 each
<b>IF YOU WANT</b> A Young Boar Pig,		<b>IF YOU WANT</b> A Thoroughbred short-horn Bull Calf,
<b>IF YOU WANT</b> A Young Sow Pig,		Write to <b>MILLER BROS.,</b> JUNCTION CITY, KANSAS.
<b>IF YOU WANT</b> Any kind of Poland-China Swine,		

### MEADOW BROOK HERD



O. POLAND-CHINA SWINE.  
Breeding Stock recorded in American and Ohio Records. Tom Duffield 1675 A. P.-C. R., at head of herd. Always open with latest improvements of the favorite breed. Personal inspection solicited. Correspondence promptly answered.  
**JELLEY & FILLEY,** Proprietors, KINGMAN, KANSAS.



### THOROUGHbred POLAND-CHINAS

Produced and bred by A. C. MOORE & SONS, Canton, Ill. The best hog in the world. We have had a specialty of this breed for 38 years. We have had 3 orders of Thoroughbred Poland-Chinas in the world, shipped over 7000 in 1888 and could not supply the demand. We are raising 1,000 pigs for this season's sale. We have 16 sows and 10 males we are breeding now. Our breeders are all recorded in American P.-C. Record. Pigs all eligible to record. Photo card of 48 records free. Swine Journal 25 cts. 2 cent stamps. Come and see our stock; if not as represented we will pay your expenses. Special rates by express.

### Acme Herd of Poland Chinas



At the head of our select herd of 25 matured sows, and two noted boars, Kentucky King 2081 and Challenge 4939, both prize-winners, and for individual merit unsurpassed in the State or elsewhere. At stock of 11 ages generally on hand for sale. Pedigrees, full pedigrees, prices reasonable and satisfaction guaranteed. Address **STEWART & BOYLE,** Wichita, Kas.

### Poland-China and Berkshire HOGS.



We have for sale a fine lot of Poland-China and Berkshire Pigs from 2 to 8 months old. Our is the largest herd of pure-bred Swine in the State, and the very best strains of blood of each breed. If you want any of our stock write and describe what you want. We have been in the business many years, and have sold many hogs in this and in other States and with universal satisfaction to our patrons. Our hogs are fine in form and size, of large size, quick growth, good bone, hard an' of wonderful vitality. Our Poland-Chinas are recorded in the American Poland-China Record.  
**RANDOLPH & RANDOLPH,**  
EMPORIA, LYON CO., KANSAS.



Horses Need Grooming.

The skin of a horse that is worked hard needs a great deal of attention. Confining the horse to the stable, as is generally done for at least a large part of the year, says a recent writer, renders his skin tender, especially when he is warmly blanketed. Expose him now to a great change of temperature, take him out and drive him until heated, return him to the stable, and let him stand uncared for over night, or even for an hour; the skin is rapidly chilled by the evaporation of the sweat, the pores suddenly closed, and often a cold, rheumatic stiffness, or some other disorder, results. Proper grooming prevents this by toughening the skin, keeping it in healthy action, equalizing the circulation, removing obstructions from the pores, and what is of more importance, by rousing the action of the muscles at the surface, which compensates for the want of exercise consequent upon stable life.

Currying and brushing should not be done in the stable; the dust and scurf will be scattered in the manger to mix with the food, besides keeping the stable uncleanly. The animal should be taken out into the lot, securely tied, and handled so gently that he will enjoy rather than fear the application of the curry-comb. A sharp-toothed comb roughly scraped over the tender skin is anything but pleasant, as the shrinking, resisting animal will soon show. This instrument should be lightly applied and dependence placed mainly upon the brush. Currying should be begun at the head and the comb passed lightly up and down until all the dandruff is loosened, when it should be removed with the brush. Much particularity should be observed around the edges of the foretop and the mane. It is always a good plan to sponge off the head and ears, using but little water, and smoothing the hair down to its natural position. In going over the back, quarters, loins, etc., the comb should be used in one hand and the brush in the other, and the work quickly done. Great care should always be observed where the skin lies in folds, as at the union of the legs with the body; but every part should be thoroughly freed from dust and dandruff. It must never be overlooked that grooming is to a horse what bathing is to a person; and in order to clean his skin it must be carefully and thoroughly done.

Many farmers will be surprised to learn that a well-groomed horse will keep fat on less food than one that is neglected, but this is an unquestionable fact. When an animal is well attended to his general health is kept in a better state and he more thoroughly assimilates all of his food. The horses and mules of the Southern farmers are generally sufficiently fed, but it is exceptional where they are well groomed.

Keeping Vegetables Over Winter.

Keeping vegetables in winter is not well understood by all farmers. We agree with a contemporary that as a rule the keeping of vegetables buried or protected out of doors is to be preferred to any other method. Turnips of all kinds, celery, cabbage, carrots, etc., by being carefully buried, not very deep, yet sufficiently so as to protect them from the rains and consequent freezing, will be longest preserved. Celery, cabbage, carrots, etc., are not injured by what may be called dry freezing; in fact, we consider celery to be benefited by it. It must be understood, however, that no roots should be buried in large bodies, because they will of themselves produce heat, and, as a matter of course, decay. Better to be placed in small heaps, or in rows or ridges, covered

with straw or cornfodder, with apertures leading to the body of them, stuffed with straw, which will admit of evaporation and naturally of the escape of the heated, or more properly, of the impure air. We have found, however, by repeated trials, that, by covering these bodies of vegetables with boards, so placed as to shed the water, and the whole on an inclined surface, thus preserving the vegetables in a dry condition, they will be protected against decaying better than any other way. We have kept celery and cabbage to the end of April in a good state.

On some farms the cellars underneath dwellings, which are generally the extent of the building, are used for this purpose, but we do not recommend them. From the warmth of cellars, vegetables will soon decay, and very frequently produce serious illness as well as causing an offensive odor. It would do no harm, however, to deposit there a small quantity of these vegetables for immediate use in the early part of winter, but all else should be placed in the open grounds, after the manner suggested.

A Swiss surgeon has invented a novel and alleged painless mode of extracting teeth. A thick square of soft rubber, perforated in the center, is pushed over the offending tooth until the upper part of the root is well enveloped. The contraction of the rubber exercises a steady and persistent but nearly painless pressure, gradually sundering the nerve and vessels, and lifting the tooth from its bed without troublesome hemorrhage. The process requires four or five days, but is not accompanied by any serious liability to inflammation.

KANSAS FARMERS' MUTUAL FIRE INSURANCE CO., ABILENE, : KANSAS.

OFFICERS: J. E. BONEBRAKE, President. C. H. LEBOLD, Vice President. W. A. MORTON, Secretary. INSURES FARM PROPERTY AND LIVE STOCK Against Fire, Lightning, Tornadoes and Wind Storms.

AGENTS WANTED in Every County in Kansas. For any information, address the Secretary, Abilene, Kansas.

Advertisement for Hearne's Young Folks' Weekly, featuring a picture of a child and text about a subscription offer.

Advertisement for 'Any Person can Play Without a Teacher' featuring a picture of a piano and text about a \$1.00 music guide.

Advertisement for '\$16 BREECH-LOADER' and '\$15 MUZZLE-LOADER NOW \$12' with technical details and contact information for F. POWELL & SON.

100,000 HOLIDAY PRESENTS!

Everybody who sends as directed gets a present worth from 20 cents to \$500. The proprietor of the ILLINOIS AGRICULTURIST being desirous of having the already well known and popular paper more widely circulated and introduced into houses where it is not already known, has determined to throw off all profit this year, and in addition use a portion of his capital for the sole purpose of increasing the circulation to 100,000 copies. After deciding to more extensively advertise than ever before the following plan has been adopted by us:

- List of Presents to Be Given Away. 10 U. S. Government Bonds of \$500.....\$5,000. 10 U. S. Greenbacks of \$500.....5,000. 10 U. S. Greenbacks of \$100.....1,000. 1 Nickel plated Columbia Bicycle.....1,000. 1 Grand Square Piano.....500. 1 Grand Cabinet Organ.....500. 1 Three-seat Rockaway.....200. 1 Silver Dinner Service.....100. 5 Top Burgzies.....1,000. 20 U. S. Greenbacks of \$50 each.....1,000. 1000 Autograph Albums, \$2 each.....2,000. 2 Village Carts.....200. 1 Pony Phaeton.....1,000. 1,000 Pocket Silver Fruit Knives.....1,000. 1,000 Gent's Pocket Knives.....1,000. 1,000 U. S. Greenbacks of \$1 each.....1,000. 10 Gent's Gold Watches, English Movement.....500. 10 Ladies' " " " ".....400. 20 Boys' Silver " " American " ".....200. 2 Solitaire Diamond Finger Rings.....400. 2 Patent Harvesters.....1,000. 2 Elegant Art Gens.....1,000. 5 Raw Silk Parlor Suit Furnitures.....1,000. 1,400 Gold Finger Rings, Ladies' Breast Pins, Gents' Scarf Pins, Lockets, Fans and Chains, and \$2,421 other presents, valued from 20 cents to \$1, makes a grand aggregation of 100,000 presents, thus guaranteeing a present to each and every new subscriber who sends us 50 cents.

Read How You Can Get This Elegant Gold Watch For 50c. 500 GOLD WATCHES FREE! In making up the above list of \$30,000 in Presents, we decided to reserve \$3,000 to be divided equally among the first 500 subscribers received. If you send 50 cents you will be entitled to one receipt good for one present, and if your letter is among the first 500 received you will be entitled to this beautiful watch. We will print in full in the February issue of the ILLINOIS AGRICULTURIST the names and addresses of the winners of the 500 Gold Watches. This offer is bona fide and will be carried out to the letter. Send now, don't wait. The ILLINOIS AGRICULTURIST is so well established, having already 20,000 subscribers, and is backed by ample capital, so that everyone of our subscribers may be sure of getting what we promise. Indeed we could not afford otherwise with a paper that has already secured 20,000 subscribers on its merit. Undoubtedly some who read this new departure will think an offer to give away \$3,000 in presents is most unreasonable and unprofitable; but let us say to all such persons that it costs anywhere from \$25,000 to \$150,000 to secure a large circulation to a paper. We know of a publisher that spent \$50,000 in one week in giving away free copies and advertising his paper, and the money was well spent, for it secured for him an established circulation that paid good interest on the investment. Publishing nowadays must either be done on an extensive scale or not at all. It costs just as much for matter, and just as much for illustrations, electrotypes, editorial services, setting and for setting up the type for a paper of 100 circulation as it does for a paper with 300,000 circulation. On small editions, the expense is spread over so many papers that it is almost entirely lost; thus you can see that large profits can be made only by doing a large business. This is precisely what we propose doing with the ILLINOIS AGRICULTURIST.

Advertisement for a gold watch, featuring a large image of the watch and text describing the promotion and terms.

THE ONLY PERFECT REPEATING SHOT GUN. BUY NO OTHER. The Phoenix Co's New Repeating Shot Gun, WITH RIFLE ATTACHMENT.

Advertisement for the Phoenix Co's Repeating Shot Gun, including technical specifications, a coupon for a free gun, and contact information for Phoenix Firearms Co.

Advertisement for Stewart's Healing Powder, featuring an image of a horse and text describing its uses for various ailments.

Advertisement for The Educator, a weekly publication, with details on subscription rates and content.

### The Poultry Yard.

#### Symptoms of Chicken Cholera.

About all that is known of chicken cholera by farmers is that it is a disease that kills chickens. If fowls die in any number their death is ascribed to this cause, often unjustly through ignorance of the symptoms. Dr. C. A. Robinson, breeder of poultry, writes the *Indiana Farmer*, describing the indications he has observed, but gives no cure or preventive measures. It is something, however, to have the symptoms clearly set forth:

I first noticed a "cull" cockerel of the Plymouth Rock variety moping round and seeming very anxious to drink. I paid little attention to him, thinking he would soon get well. However my calculations in this matter were soon cut short by finding him dead. I now began to inquire into the cause and ere long I had quite a number of patients to look after, and I will describe my experience and observation on chicken cholera by giving the symptoms of a typical case. I will take as an example a fine cockerel that would weigh about five pounds, and one on which I doted considerably for his fine body, perfect plumage, and yellow legs and beak. I expected to keep him for my yards next year. But I don't think I shall now. The very first symptom I noticed in this fellow was the fact that his "face turned pale." To be more explicit, I noticed that just above and below his eyes his skin, which should be very red, became a sickly yellow. Following this the comb became very dark and the wattles also became very dark and contracted. The young fellow now became seemingly quite weak, and I longed to know the cause. Careful observation soon revealed the fact that it was caused by the excessive discharges from the bowels. These were enormous. I have placed a chicken on a perch alone at night and in the morning was astonished at the amount of fecal matter passed during the previous night. These discharges are a vivid greenish yellow, or oftener you will find a large amount of yellow feces, around which will be a quantity of dark green matter. As time goes on these discharges assume a watery appearance and show that the watery element of the blood is oozing from the blood vessels, through the coats of the intestines and is thus passed off. Hence the intense thirst which always accompanies this disease. The feathers become soiled; and particularly the flight or primary feathers of the wing hang down, as though there was not enough strength in the muscles of the wing to hold it up. The eye assumes a deathly appearance, and is kept closed the most of the time. This is especially the case with the older fowls. The fowl becomes stupid, listless, seemingly caring for no one or nothing. If food is thrown to it, no notice will be taken of the kindness, or it will be picked up with seeming indifference, swallowed perhaps to lie in the crop undigested, and will be found so upon examination after death. Secretion of the acids necessary to the solution of the food seems to have been stopped. There is a great relaxation of the parts just before death. Death occurs in a peculiar manner. The chicken begins to flop its wings; and this state continues to be the case until death, which seems to be the result of the stopping of the circulation of the blood. There is a crook in the neck of a chicken that has died with the cholera which at once reveals the nature of the disease with which it died. It may be described thus: As soon as the chicken is thrown into the struggles of death it

bends its head upon its neck and the beak points toward the crop, as if some terrible pang of pain were present and unendurable. After death this peculiar curve is found in the neck and the muscles remain fixed for 48 hours.

#### How to Tell a Sick Fowl.

The comb and wattles are the parts of a fowl to examine first in case of sickness, as they should always be of a bright scarlet color. When the comb looks white, or pale, or black, something is wrong; even lice will cause the comb to change color to a certain extent, when there is refusal of food, for no healthy fowl will refuse to eat if fed on a variety of food, unless already full. Thirst, to a great degree, is another sign; and a nervous, uneasy look is a warning.

A sick fowl often drinks to an excess, especially when attacked by cholera; but again at other times, it refuses both food and drink. Sometimes a hen will go moping about with drooping wings, with no other signs of sickness. Whenever the comb, however, does not show a bright scarlet, and the fowl is not lively, it should be examined and treated immediately.

Delay is dangerous with fowls, and sickness among them is hard to eradicate if not driven off early. A fowl may suffer from a want of certain food which it cannot get in confinement, and unless gratified, will show signs of sickness. For this reason often a change of food will effect a cure.

#### Condition Powders for Hens.

There are many suggestions for making hens lay, but their virtues depend upon stimulating the fowls and supplying them with materials for producing eggs. Here is a recipe, which is a good one (much better than the majority) the cost of the ingredients of which is but very little: Take of bone meal, ground meat and parched wheat (ground), two pounds each; linseed meal, common salt, ground oyster shells and charcoal, one pound each; sulphur, copperas, common bread soda, and fenugreek, half a pound each; saffron, red pepper, ginger, and hyposulphite of soda, one-quarter pound each. Have all the ingredients in a fine condition, mix them together thoroughly, and you will have about thirteen pounds of condition powder, at a cost of less than five cents a pound, and which is not only egg-food but a preventive and cure of many diseases. Give a heaping tablespoonful once a day to every ten fowls, in soft food.—*Poultry Keeper*.



*"I owe my Restoration to Health and Beauty to the CUTICURA REMEDIES."*  
Testimony of a Boston lady.

**DISFIGURIN**—Humors Humiliating Eruptions itching Tortures Scalds, all Rheum and Infantile Humors cured by CUTICURA REMEDIES.

**CUTICURA RESOLVENT**, the new blood purifier cleanses the blood and perpiration of impurities and poisonous elements, and thus removes the cause.

**CUTICURA**, the great skin cure, instantly allays itching and inflammation, cleans the skin and scalp, heals Ulcers and Sores, and restores the Hair.

**CUTICURA SOAP**, an exquisite skin beautifier and toilet Requisite, prepared from CUTICURA, is indispensable in treating Skin Diseases, Baby Humors, Skin Blemishes, Chapped and Oily Skin.

**CUTICURA REMEDIES** are absolutely pure, and the only infallible Blood Purifiers and Skin Beautifiers.

Sold everywhere. Price, Cuticura, 50 cents; Soap, 25 cents; Resolvent, \$1. POTTER DRUG AND CHEMICAL CO. BOSTON, MASS.

### CONSUMPTION.


I have a positive remedy for the above disease, by its use thousands of cases of the worst kind and of long standing have been cured. Indeed, so strong is my faith in its efficacy that I will send TWO BOTTLES FREE, together with a VALUABLE TREATISE on this disease, to any sufferer. Give address to P. O. address, DR. T. A. SLOCUM, 151 Pearl St., N. Y.

### CATARRH

What is Catarrh? It is a disease of the mucous membrane generally originating in the nasal passage and maintained by its strength in the head. From this point it sends out a poisonous virus along the membrane, through the digestive organs, corrupting the blood and producing other troublesome and dangerous symptoms.

**ELY'S CREAM BALM** is a remedy based upon a correct diagnosis of this disease and can be depended upon.

**Give it a trial.**



**ELY'S CREAM BALM CURES COLD IN THE HEAD**  
**HAY-FEVER**  
**PRICE 50 CENTS**  
**ELY BROS., OREGON, U.S.A.**

Ely's Cream Balm Causes no pain. Gives Relief at once. A Thorough Treatment will Cure. Not a Liquid. Not a Snuff. Apply into nostrils. Price 50 cts. at drug stores; 60 cts. by mail, registered. Sample bottle by mail 10 cts.

FLY BROTHERS, Druggists, OREGON, N. Y.

### An Old Soldier's EXPERIENCE.

"Calvert, Texas, May 3, 1882.

"I wish to express my appreciation of the valuable qualities of **Ayer's Cherry Pectoral** as a cough remedy.

"While with Churchill's army, just before the battle of Vicksburg, I contracted a severe cold, which terminated in a dangerous cough. I found no relief till on our march we came to a country store, where, on asking for some remedy, I was urged to try **AYER'S CHERRY PECTORAL**.

"I did so, and was rapidly cured. Since then I have kept the PECTORAL constantly by me, for family use, and I have found it to be an invaluable remedy for throat and lung diseases.

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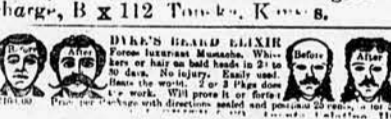
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See that the fowls are supplied with comfortable roosting places. For heavy breeds low perches are better. Fowls are often injured by alighting from high roosts.

It is said thousands of millions of merchantable white pine timber is standing in West Virginia, not worth the price of cutting for market. Someday when railroads get nearer it may be profitable.

The tobacco crop of this country which in 1864 was but 197,000,000 pounds, promises in 1891 to be between 600,000,000 and 700,000,000 pounds, or more than three times that of twenty years ago.

One of the lessons of the year, which has been most forcibly taught, has been the value of sweet corn as a forage plant. It serves as food for hogs, cows or anything. There is pork, milk, butter and beef in it.

The Dairy Commissioner of New York is preparing to prosecute the bogus butter men of that State, under the law of last winter. It will therefore be practically tested whether the law is a dead letter or not.

Somebody has said that snow is the poor man's manure. That might be applied with equal truth to rye. Clover is the great renovator of land, but rye will perform the same generous office on soil so poor that clover will not "catch" at all.

The Merinos are hardy, and when they can be made to unite a good mutton body and a salable fleece, they will take front rank. They are better suited to rough and hilly land, to poor pastures and poor shelter than any other breed, and so they are better able to adapt themselves to climate and other conditions.

Quite a number of cattle have died at Wellington, Kas., from a disease that has, in some instances, been thought to be pleuro-pneumonia, but others who have investigated the matter, are inclined to believe that the losses have been the result of the cattle eating smutty corn, which is uncommonly plentiful this season.

At all times, but especially when fattening, hogs should have a constant supply of salt and clean wood ashes. When kept continually before them, they will not eat too much salt. The more charcoal in the ashes the better. Salt assists in the digestion of the food; ashes rid the intestines of worms and strengthen the appetite.

Apples may be stored in pits like potatoes, and if kept dry and frost-proof, will come out in fine condition in the spring. It is a fact, however, that apples thus stored decay more rapidly when removed from the pits than similar fruit stored in a dry house-cellar with an even temperature, only a few degrees above the freezing point.

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

**TIMKEN SPRING VEHICLES!**



Eastest riding Vehicle made. Rides as easy as a feather. The Springs long, heavy 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, Patentee, St. Louis. Used exclusively by **ABBOTT BUGGY CO. CHICAGO, ILL.**

**IT LEADS ALL.**

No other blood-purifying medicine is made, or has ever been prepared, which so completely meets the wants of physicians and the general public as

**Ayer's Sarsaparilla.**

It leads the list as a truly scientific preparation for all blood diseases. If there is a lurking taint of Scrofula about you, AYER'S SARSAPARILLA will dislodge it and expel it from your system. For constitutional or scrofulous Catarrh, AYER'S SARSAPARILLA is the true remedy. It has cured numberless cases. It will stop the nauseous catarrhal discharges, and remove the sickening odor of the breath, which are indications of scrofulous origin.

"Hutto, Tex., Sept. 28, 1882. "At the age of two years one of my children was terribly afflicted with ulcerous running sores on its face and neck. At the same time its eyes were swollen, much inflamed, and very sore. Physicians told us that a powerful alterative medicine must be employed. They united in recommending AYER'S SARSAPARILLA. A few doses produced a perceptible improvement, which, by an adherence to your directions, was continued to a complete and permanent cure. No evidence has since appeared of the existence of any scrofulous tendencies; and no treatment of any disorder was ever attended by more prompt or effectual results. Yours truly, B. F. JOHNSON."

PREPARED BY **Dr. J. C. Ayer & Co., Lowell, Mass.** Sold by all Druggists; \$1, six bottles for \$5.

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Order on trial, address for circular and location of Western and Southern Storehouses and Agents, P. K. DERICK & CO., Albany, N. Y.

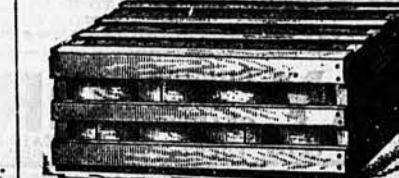
TO THE PUBLIC.—Again noticing advertisements in these columns of premium over Derick's at New York State Fair, I have to say that it is a malicious falsehood, defaming Derick's Press and reputation for the purpose of swindling innocent purchasers with a cheap inferior imitating copy of Derick's Press, which fraud has already brought them several suits from purchasers for the recovery back of purchase money. Order on trial. Get these unscrupulous buccanniers to operate a press alongside of Derick's for a customer, if you can. Give the inventor at least a competitor's chance. P. K. DERICK



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A Sure Cure and Preventive of

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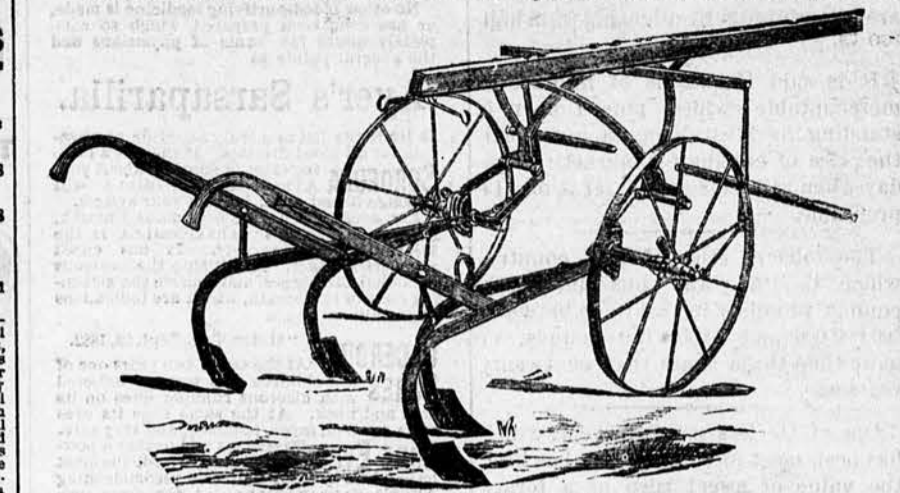
The Remedy has never failed to effect a sure cure. The following testimonial given is a specimen of what all say who have tried the New Remedy: TOPEKA, KAS., November 1, 1884.

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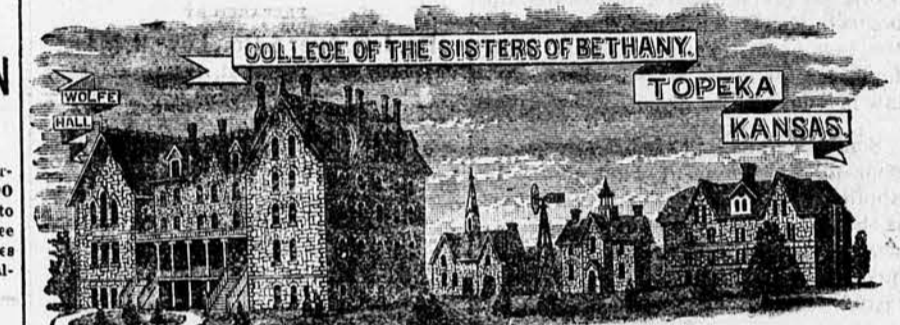
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