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OTTAWA AND THE FAIR.

Special Correspondence KANSAS FARMER.

Ottawa, with a population of about 8,000 inhabitants, is the official city of Franklin county, and is most beautifully situated upon slightly undulating prairie and wooded land, near the central portion of the county. Through the northern part of this elegant city flows, from west to east, the classic Marais des Cygnes river, over which span several magnificent bridges, thus giving free access to and from either side of this placid stream. This city ranks among the foremost of business centers of the Great West, and is fast assuming metropolitan airs. An ordinance has just been passed by her City Council authorizing certain parties to put in a system of waterworks, which, when once completed, will do much toward enhancing the value of all property within her corporate limits.

Railway facilities are good, six outlets of this most important commercial factor enables the city to have intercourse with all portions of the inhabitable globe, thereby granting every one desiring a home in a quiet, healthful, temperate, refined, prosperous, live, go-ahead, industrious business place an opportunity to avail themselves of advantages offered by this pretty city, so nicely ensconced on both sides of the "river of the swans," and that, too, right in the heart of an exceedingly rich farming community.

In Ottawa is located the far-famed Forest Park; of the like there is no equal in the West. Here is where the Inter-State Sunday School Assembly holds forth each year, in all its magnificent splendor. Here is where nature has displayed her wonderful skill in planning a natural park in which the chosen ones of Israel might gather from time to time and offer up tributes of praise, study the Divine Word, recreate and render thanks unto Him who doeth all things well to those reposing their trust in the God of Heaven and earth. Forest Park belongs to the city of Ottawa, and is only a few steps distant from the Southern Kansas railway depot, from which the entrance and park are in plain view. Along the south side of this resort gently flows the Marais des Cygnes river, upon the waters of which many small boats ply hither and thither; also the steamer "Gertie" makes trips up the river for several miles and return—a delightful pastime.

Within this park the Franklin County Agricultural and Mechanical Association hold their annual fairs, and the exhibition just terminated has been decidedly one of the best ever held, and in point of location, advantages, buildings, etc., far excels that of any other association to be found in the State. In fact, no other society can begin to cope with this in the above axioms. Even the Kansas City fair fails to make as good an exhibit as was here shown this season. And, furthermore, the managers of Forest Park had the wishes of their patrons carried into effect, by excluding all gambling schemes from the grounds, thus making a visit to the fair an object of pleasure and profit, instead of disgust and shame. This management deserves unstinted praise for the untiring efforts put forth to make the fair a success in every sense of the term. No discordant element prevailed, everything moved off smoothly, and all went their way happy, wishing for the Association a bright, prosperous future. Among the new structures erected this season is "Assembly

Hall," costing \$2,500, which, for architectural beauty and finish, stands without an equal, and the new Secretary's office, too, surpasses anything of the kind heretofore seen upon fair grounds. Besides these two edifices, there has been built new barns, stables, stalls and pens, each having ample room for the purpose intended. All of the foregoing improvements cause the Franklin County Association and Ottawa city to feel happily proud, and well they may, for without exception every one justly pronounces this park the pre-eminence of all others.

Every line of exhibit was very complete and almost faultless.

The Fine Arts Department, occupying a greater portion of Assembly Hall, was certainly an attraction of rare worth. Among the arts were exhibited many choice paintings, executed by home talent, which attracted, by their design and exquisite finish, the attention and commendation of all. The leading merchants of Ottawa added value to the displays of this building through artistically-arranged exhibits.

In Horticultural Hall were exhibited in tasteful style the productions of both farm and orchard. Here was shown the finest display of fruit yet witnessed by your correspondent this season. One party had seventy different varieties of apples on exhibition, and of course captured many prizes.

In the farm product display were shown several monstrosities, one being a pumpkin weighing 173 pounds, and another a squash weighing 106 pounds.

The Franklin County Sugar Company made a fine exhibit of their productions, consisting of sugars and syrups manufactured from the common sorghum cane. This industry deserves careful consideration at the hands of every Kansan, for the time is certainly coming when sugar and syrups made of sorghum will find its way into the homes of people who now look upon the production with aversion. From the rapidity of sales now being made the company feel confident that future demands will far exceed their fondest anticipations. Patronize home industry, and thus build up material worth within the confines of our own commonwealth.

A new and commodious amphitheater is one of the additional features of Forest Park this year. It is built in the latest and most approved style.

The agricultural implement exhibit was elegant, and made additionally attractive by having the machinery kept in motion by steam during hours of display. Among the noticeable features of this department was a corn-harvesting machine, which, if it can do the work intended, will create a revolution in the mode of gathering and husking corn.

The poultry exhibit was quite choice, very complete and consisted of the leading varieties.

In the swine department, there were shown—Berkshires, 26; Poland-Chinas, 97; Jersey Reds, 7; Suffolks, 13,—making in all 143 head, the largest display of fine hogs ever seen at any fair in eastern Kansas. Among the exhibitors were J. A. Davidson, W. B. Higdon and J. R. Killough, of Richmond; E. Lambert, of Homewood; S. McCulloch, W. F. Swift, C. O. Blankenbaker, W. S. Hanna and I. L. Whipple, of Ottawa; W. W. Nelson, of Centropolis, and others.

The sheep display was not as complete as

expected, however the showing was choice and creditable.

The cattle show was indeed extraordinarily fine, and consisted of Short-horns, Herefords, Holstein-Friesians, Jerseys, Devonshires, Polled Angus and grades. Among the cattle exhibitors from abroad were W. Latimer, of Garnett, and J. S. Hawes, of Colony, Kas., the former gentleman having 13 head of Short-horns and the latter 13 head of Herefords. Both lots were gems of perfection and created unbounded, enthusiastic commendation from all visitors, especially from those interested in the propagation of first-class stock. The total number of cattle on exhibition was 74.

The horse department made a decided exhibition within itself. Here were seen horses adapted for every purpose and kind of work. In this animal is found one of nature's most useful gifts to man, without which life certainly would be a forlorn hope to a majority of humanity. How wonderfully grand, powerful and intelligent are these noble steeds, and, too, how docile and susceptible of being moulded to suit man's ever-changing fancies. Johnson Bros., of Garnett, exhibited twelve of their celebrated Percheron-Norman stallions at this fair. They have most assuredly one of the best studs of horses to be found anywhere.

One of the leading attractions at this exhibition was the balloon ascensions which took place twice during the fair, under the supervision of Prof. Joseph Gomes, who made the ascent each time, and while sailing through the air performed many difficult feats upon the trapeze, which to the beholder seemed hazardous, and more perilous, as the monster air-ship kept gaining heavenward and the object of interest grew smaller. After reaching a height of over 3,000 feet the vessel gradually lowered, landing the performer safe upon terra firma.

Everyone aiding in making the Franklin County Fair an immense affair deserve being highly complimented, especially the President, Secretary, Chief of Police, and their able corps of assistants throughout.

The gate receipts aggregated over \$4,000, notwithstanding the unpropitious condition of the elements at times.

The advertisements of the leading stock exhibitors at this great Fair will be found elsewhere in the KANSAS FARMER. Please write them for what you want and don't forget to mention this paper. Below are the awards:

HORSES.

Stallions.—Two years and under 3, H. C. Thomas first premium, and C. Lewis second; 4 years and over, H. C. Eakind first, and T. J. Bell second; 1 year and under, T. G. Stewart first, and G. W. Snyder second; 3 years and under 4, J. S. Leavitt first, and Johnson Bros. second; sucking colt, G. S. Bosworth first, and J. P. Harrison second.

Mares.—Two years and under 3, J. C. Scott first, and G. S. Bosworth second; 3 years and under 4, E. Lambert first, and Thomas Miller second; 4 years and over, E. Lambert first, and M. L. Stewart second; 1 year and under 2, C. F. Lamb first, and T. G. Stewart second; brood mare with colt, I. G. Grimes first, and W. Roach second; sucking colt, W. Roach first, and J. D. Carson second. The foregoing are horses for all work.

Draft Stallions.—Sucking colt, E. J. Steward first, and C. Decker second; 2 years and under 3, G. Shead first, and Johnson Bros. second; 1 year and under 2, H. L.

Burns first, and S. Redenbaugh second; 3 years and under 4, Johnson Bros. first, and W. F. Thompson second; 4 years and over, Johnson Bros. first and came second.

Draft Mares.—Three years and over, C. Decker first, and A. Decker second; 1 year and under 2, Geo. Miller first, and C. Decker second; brood mare 3 years and over with sucking colt, Geo. Shead first; 4 years and over, Geo. Miller first, and John Fisher second; 3 years and under 4, Johnson Bros. first; 2 years and under 3, C. Decker first, and A. J. Evans second; sucking colt, I. J. Grimes first, and G. Shead second.

Sweepstakes.—A. Bazil first, and T. J. Bell second. Other classes were given and premiums awarded, but space will not permit our publishing the results.

CATTLE.

Short horns.—Bull, 2 years and under 3, W. B. Lafollet first, and A. J. Hendricks second; bull 3 years and under 4, W. Latimer first, and T. G. Stewart second; bull 1 year and under 2, T. G. Stewart first, and W. Latimer second; bull calf, W. Latimer first, and J. P. Harrison second; cow 3 years and under 4, W. Latimer first, and Henry Anthony second; cow 2 years and under 3, W. Latimer first and same second; heifer 1 year and under 2, W. Latimer first and same second.

Herefords.—Bull 2 years and under 3, Geo. Miller first; bull 1 year and under 2, H. W. Leeds first; bull 3 years and over, J. S. Hawes first and same second; bull calf, J. S. Hawes first and same second; cow 2 years and under 3, J. S. Hawes first and same second; cow 1 year and under 2, J. S. Hawes first, and H. W. Leeds second; cow 3 years and over, J. S. Hawes first; heifer calf, J. S. Hawes first and same second.

Polled-Angus.—Bull 3 years and over, W. H. Tennison first; bull under 1 year, W. H. Tennison second.

Jerseys.—Bull calf, J. C. Scott first; cow 3 years and over, W. W. Nelson second.

Devonshire.—Cow 3 years and over, W. W. Nelson first; bull 3 years and over, C. Matthews first.

Holstein-Friesian.—Bull 2 years and under 3, P. I. McEckron first; bull calf, P. I. McEckron first and same second; cow 3 years and over, P. I. McEckron first and same second; cow 2 years and under 3, P. I. McEckron first and same second; heifer calf, P. I. McEckron first and same second.

Sweepstakes.—Bull any age or breed, J. S. Hawes, Colony, Kas.; cow any age or breed, W. Latimer, Garnett, Kas.

SWINE.

Poland-China.—Sow 1 year and over, J. A. Davidson first, and C. O. Blankenbaker second; sow 6 months and under 1 year, J. A. Davidson first, and C. O. Blankenbaker second; boar over 1 year, I. L. Whipple first, and W. S. Hanna second; boar 6 months and under 1 year, W. S. Hanna first, and W. B. Higdon second; sow and five sucking pigs, W. S. Hanna first, and J. A. Davidson second; boar under 6 months, W. B. Higdon first, and J. R. Killough second; sow under 6 months, W. B. Higdon first, and I. L. Whipple second.

Berkshires.—Boar over 1 year, S. McCulloch first, and W. F. Swift second; sow and five pigs under 10 weeks, W. F. Swift first; boar 6 months and under 1 year, S. McCulloch first and same second; boar under 6 months, S. McCulloch first and same second; sow over one year, S. McCulloch first and

(Concluded on page 4.)

The Stock Interest.

PUBLIC SALES OF FINE CATTLE.

Dates claimed only for sales advertised in the KANSAS FARMER.
October 13—Pettis County Short-horn Breeders' Association, Short-horns, Sedalia, Mo.
October 23—Hon. T. W. Harvey, Turlington, Neb.
November 3 and 4—Inter-State Short-horn Breeders, Kansas City Fat Stock Show.
S. E. Ward & Son, Short-horns, first Friday of Kansas City Fat Stock Show.

Jersey Cattle--How to Feed.

The manner of feeding in order to produce rich and sweet milk, is a thing that to the ordinary agriculturist would appear at first sight easy of solution, but it is not so. It should be remembered that the animal whose capabilities are for milking, becomes lean on the same quantity of food that will make the feeding cattle fat. The consequence of this is, that the milking cow is more affected by the changes of temperature than the fat one. Jerseys should always have a dry, clean shed, should always be protected from cold winds and not be allowed to drink cold water if the best results are desired, though the St. Lambert herd had cold water and cold winds, but were housed every night from September to June; during the months of June, July, August and September, they were housed on wet nights or days, and though the Jersey is hardy, as our experience has most indisputably proved, there is a great difference between obliging an animal to endure hardship unnecessarily, and taking care to keep it in a good healthy vigorous condition to endure hardship, should circumstances make it necessary; and as more food is required where animals are not properly housed and taken care of, it may truly be said in effect that warmth is food. And in the spring the cold nights are hurtful to the Jerseys and all high-blooded animals, as it must be confessed that the extremes to which breeding for points has been pushed, have been rather conducive to an increased delicacy of constitution and physical sensitiveness, though we maintain and can prove that the Jersey is much less susceptible to this failing than any other famous breeds which have, without doubt, decreased in value on this account.

The Jerseys should be curried daily with a curry card, especially during winter. A few minutes devoted to each animal every day are profitably spent in currying it and the benefits are soon apparent. The first requisite in feeding is, of course, abundance of food; there should be no stinting. We fed usually cut hay and large quantities of straw, which they carefully picked over. In the early part of the winter, we fed meal and chaff—but little corn meal—but later, about the end of December or beginning of January, we fed cut mangels. These are not good for Jerseys when first gathered, and we took care always to throw out all roots that showed any symptoms of decay or rotteness, as any impurity or imperfection in the food is sure to affect the milk and butter injuriously. We fed about a bucketful daily of cut mangels to each cow, half a bucketful to those that were young, or not, for any reason or other, giving a yield of milk. It is a good plan to mix meal or shorts with the cut roots when feeding, as it corrects the loosening effects of the mangels.

We do not believe at all in carrots or turnips for Jerseys, or in fact for any milk or butter cattle. We know many are opposed to mangels as a food for the dairy cow, but it is only necessary to use a little care and judgment in their use; they should not be fed till January, should not be fed in too large quantities, and should have a small quantity of meal mixed with them, and

then mangels are right royal food for Jerseys, and we strongly advise their use in preference to other roots.

In the feeding of cows, whether Jerseys or others, the intelligent breeder is sure to note one fact very forcibly, and that is that animals have their idiosyncrasies and that they differ greatly sometimes, one from the other, in their ability to relish, digest, and make the most of their feed. Some animals are large feeders, some not so much so, and the breeder will soon see these in his herd and govern himself accordingly. One important question is the quantity of food that cows should be allowed. Ought a cow to be allowed to eat all she will if food is kept supplied to her, or is there a limit, beyond which it is a waste to feed her? I know there is, as I have found out in my own experience, but I give the following as a proof; (it is furnished by Prof. Atwater;) it is an account of a trial made at Moeckern, by the celebrated Dr. Kuehn, with four cows:

"During one period of several weeks, they received all the green clover they would eat. During another, a smaller ration was given, and a part of the clover was replaced by straw. The fodder and milk were carefully weighed and analyzed. Every precaution was taken to insure accuracy.

"The rations in the two periods were as follows:

Kind of Food.	The organic substances contained:	
	Albuminoids	Carbohydrates
	Lbs.	Lbs.
(1) 87 lbs. green clover and 6.7 lbs. barley straw...	3.8	17.8
(2) 128 lbs green clover.....	5.6	15

"The result was that the cows gave as much milk, and milk as rich in fat (butter) and casein, with the smaller ration, of which a part was straw, as they did with the larger ration of pure clover. The cost of the milk, as based upon the value of the fodder, was just about 50 per cent. more with the clover alone than with the mixture of clover and straw. The 3.8 pounds of albuminoids was sufficient, and in the pure clover, with its 5.6 pounds, there was a waste. Part of this waste was due to the *ad libitum* foddering, but a part was due to the unnecessarily large amount of albuminoids in the green clover."

All of which goes to prove that too much food may be given to cows, the limit being the powers of digestion and conversion of the food into useful products. It also goes to prove that the relation of and between the quantity of digestible albuminoids and carbohydrates should be as one of the former to five and one-half of the latter, in order to obtain the best results. The evidence of feeding Jerseys goes to show that even with them, for richness of milk or butter, the individual cow must be relied upon, and a cow that does not possess the thorough and full Jersey characteristics can not be made to give a full and proper return for the food given, in nearly the same degree as a good Jersey does. Blood will and does tell, now and always.

And I agree in the main with the following conclusions as stated by another writer, though it is always to be understood as regards agricultural maxims there is always a small margin for variation of opinion without entire disagreement:

1st. Quality of food appears not to affect the quality of milk. A "butter cow" or a "cheese cow" must be so from her own inherent qualities, and cannot be created by giving rich food.

2d. Protection from cold and storms saves food, and enables cows to produce more milk than when unprotected.

3d. An average milch cow requires, for each 1,000 pounds of live weight, from twenty-four to twenty-eight pounds of dry food substance per day.—H. B. Stevens in *New England Farmer*.

Popular Errors Regarding the Effects of Moisture on Horses' Feet.

Prof. John Gangee, Sr., says: "There is a prevailing idea with the English, and which we can trace to no other nation, that wet, and even wet with filth, is good for the horses' feet. That the above idea, so long entertained, has given rise to practices exceedingly injurious to horses, we shall endeavor to show. Before giving expression to our sense of the matter, it may help to set inquiry in its proper channel if we note down a few questions. What evidence have we, either from writings or traditional custom, that soddening with wet is conducive to the healthy function of the horse's foot? Failing in proof or tangible evidence, what does all analogy teach us? What does close and long study of the physiology of the horse's foot teach us, and what does long experience and extensive practice, with observation unprejudiced, teach us? Why that our ancient philosophers were right, and that modern custom is wrong. Horses' feet are spoiled by the softening, soaking, filthy practices of the present day. We shall not enter here on the subject as it applies to diseases of horses' feet, to soreness, viz., animal suffering, and to loss; these all follow as the sequel, and their amount is incalculable. We shall regard the subject only in its hygiene aspects at present. The first questions for solution are: Is softening of the horses' feet a desirable condition, or is a firm compactness, which implies cleanliness and normal freedom from external moisture, the natural state, hence the condition we should aim to preserve? The more this condition is stirred up, the greater amount of scientific research that is brought to bear with the best of experience, so in proportion shall we find that a dry and cleanly condition is the only right one, and that all the soaking and filth is wrong. Hence, the wet farmyard not only gives rise to feeble feet in your stock, but produces bad wearing horses; if not in appearance they are relatively weak, like rickety children. The same influence deteriorates used horses when turned out and long exposed to the influence of soft surface, wet, and filth. In stables, wet felt, stopping with cowdung, etc., are injurious, just in proportion to the extent to which they are applied. If we study the horse in a state where he is least subjected to restraint and artificial treatment, we find him in the highest degree of perfection in climates, the temperature of which is much higher than in this kingdom or any part of western or northern Europe; and as an invariable rule, the feet of horses are perfect just in proportion as the animal is bred and kept on dry firm soil. There is not an atom of evidence to show that soddening horses' feet is salutary, while there is enough to prove the contrary; and that the custom which sanctions the maceration as it is adopted or permitted, is an extremely injurious one. Whilst we see that the horse was originally of, and is found most perfect in, warm climates and on dry sound soils, custom with us has decreed that in addition to our more humid soil and atmosphere, his feet are subject to and kept surrounded by moisture.

When we turn from the horse to the comparative study of other animals, we find that none of these instinctively live on a wet surface. The wild boar and the half domesticated buffalo wallow in the mire under a southern sky, but only for a short interval of time; they betake themselves to dry ground, hence their feet are firm, their hoofs jet black, tough and elastic.

It applies to our domesticated quad-

upeds as a law, that the natural element by which the surface of their bodies should be surrounded is atmospheric air, and to the feet additionally, at proper seasons, the firm soil, not excluding hard rock. This is the case whether animals are endowed with hoofs or feet otherwise constructed, but especially to those with hoofs. The horse species, the ox, the deer, goat, sheep, pig, and the whole range of animals with hoofs are in the best state on clean dry soil. With regard to horses, the injurious effects of wet and filth have increased progressively within our memory. In the first place, they are bred more and more artificially; horses which are bred where they have insufficiency of space, where they lack proper arrangements as to cleanliness, dryness, and firmness of ground surface, but instead, are made to go fetlock deep in wet dung during five or six months in the year, can neither acquire sound, firm, nor well formed feet, wiry sinews, or with rare exceptions, become good, wearing, lasting animals.

Gaited Horses.

The increase of wealth in large cities has of late years caused considerable changes in relation to fashionable out-of-door exercise. The saddle is coming to be more and more used by women as well as men. This is noticeable year by year. Ladies' horses with easy and peculiar gaits now sell for high prices. In England the walk, trot, canter and gallop are the only recognized gaits, though a considerable innovation would also seem there to be in progress: Kentucky is the recognized home for peculiarly-gaited saddlers in the United States, as it is the home of the running horse, and measurably now of the trotting horse. These peculiar gaits are sought to be bred in, and successfully so, as all know who have carefully studied the question of heredity. Bred to a peculiarity they at length become in a measure as natural to the progeny as do the especial traits of the pointer, setter, shepherd dog, and spaniel to dogs. Fast walking, "flat-footed," running walk, dog trot, fox trot, single foot—developed from the fox trot—rack and pacing are here recognized gaits in the horses, in addition to the canter and gallop. Trainers to these gaits and to perfecting saddle horses to docile changes from one to the other command high wages, since the educator must not only be a perfect horseman, but in addition should have a peculiar temperament to command the attention and obedience of the animal.

Sheep Notes.

In feeding sheep, the more the feed can be varied, the better results will be obtained.

The approximate number of sheep in the world is set down at 415,000,000. Of this number 53,000,000, or nearly 14 per cent. are raised in the United States.

Keep a few sheep on the farm, if not many. Wool will always bring cash at some price, and it comes off when there is little else to sell. Mutton always sells well, and is always good for the table. Keep sheep.

In the work on feeding animals, by Prof. Stewart, it is stated, as the result of careful experiment, that ten pounds of turnips and one and a half pounds of corn will fatten a young sheep or lamb faster than three pounds of corn alone.

Some think very highly of the Shropshire breed of sheep—good for the production of mutton and what is known as clothing or delaine wool. This sheep is possessed of strong constitutional vigor, produces a compact fleece, matures early, and is a beautiful form. It is claimed that Shropshires will do

excellently well in large flocks, and the ewes are very prolific, producing, it is said, 40 per cent. of twins. The ewes make good mothers, giving plenty of milk, and are careful.

The sheep is exceedingly neat and even fastidious about its food and drink, and hence should have clean grass and clear running water. Though they use less water than other animals, often passing some days without it, it is none the less necessary for their comfort and health that it should be accessible.

Breeding ewes require a little grain food during the winter. With clover hay, a small quantity of mixed grain, oats, rye and buckwheat, and as much oat straw as they will eat, ewes will do very well and rear healthy lambs. About four ounces of grain a day is sufficient for each ewe; a bushel per one hundred head is the regular allowance. Corn alone is too fattening, but a small quantity may be given without harm if mixed with other grain.

Pig-Weaning.

In weaning pigs there is something more to be considered than simply taking them away from their mother. They should be weaned gradually so as not to get any stunt or set back. To take pigs away from their mother and little home, before they have been taught to eat, gives them a check for at least two weeks, and this is quite a little part of their lives, if they are designed for slaughter when they are six to eight months old. Feeding them in a separate place to which they have access, will accustom them to eating, and when deprived of their mother's milk, they will not refuse to eat until driven to it by hunger.

They must not be fed too much at a time, or they will eat so much that they will become poddy. When the food is very sloppy, they will take so much that the stomach will be distended beyond its natural size, and the result is a pot-bellied pig, which means a pig with an unnatural and disordered stomach, a mean-looking pig, and one which never makes a good animal. It makes hog enough, for it always has an unnatural appetite to fill the big void made by the washy or excessive food it had when young. A little and often should be the rule with pigs when weaning, and also afterward. A healthy hog has a very quick digestion if the stomach is not over-crowded. When this rule is followed, they grow faster and keep their shape better. The little pigs should never be fed more than they will eat up clean; for if they have any swill or milk left over, they will muck in it, and drop their excretions in it, so that it will become very foul and unhealthful.

Five times a day is often enough to feed pigs when they are sucking, and if they get a good supply from their mother, three times will do, or when the old one is fed. When fed five times, the first feeding should be in the morning; the next in the middle of the forenoon; then at noon; again in the middle of the afternoon, and finally at night. These are the best times to feed all through the season; and any amount of food fed at these intervals will make more growth in a given length of time, than the same quantity of food given three times a day. A hog will always eat to excess if confined and fed all it can take. It will always do the same if it breaks into a field of grain or when first turned into a field of corn or peas. After the first gorge, if left alone, it will eat only a good meal and lie down by the food with a complacent expression, as much as to say, "Here is enough."

It is important that the troughs

should be low in which the little pigs eat. When a young pig hangs on its stomach to eat out of a trough, it is just the position to hump up its back and spoil its shape. It may be noticed that I have not recommended corn for pigs. This is because it is the worst kind of food which can be given them, although the commonest. A little mingled with oats or wheat middlings will do no harm, but good; but an entire feeding of corn is a violation of sanitary law, and does not evince good sense.

For cuts from barbed wire fence, sore shoulders, kicks and open sores on animals, use Stewart's Healing Powder, 15 and 50 cts. a box.

The meadows are too frequently neglected; they are drawn upon year after year without return. Judicious tilling and manuring is necessary to prevent their being starved out.

General cleaning up and fumigating of the henry is necessary to destroy the lice and parasites that have accumulated during the warm season just passed, if not already done.

Of the 182 species of weeds farmers have to fight, 119 were imported from Europe. Many of our worst insect enemies, as the Hessian fly, were also brought to us from foreign countries.

Watch carefully the actions of the harness at points where galls or sores are likely to form. A daily bathing of the shoulders in salt and water will tend to harden the skin and prevent chafing.

Ground plaster is one of the best deodorizers of stables. Sprinkled about the stands and over the manure heaps, it will absorb and retain the odors, and thus increase the value of the dressing.

The American Cultivator says much larger and surer crops of strawberries are obtained where several varieties are grown together, than when the fields are planted with but a single variety.

It is perhaps too early to give a reliable estimate of the apple crop in this country, but from all that can be learned so far this price of fruits promises well, and a full average yield may be expected.

A Georgia dairyman has figured out the cost of good butter in that State at 12½ cents per pound, where good pasturage can be had on easy terms for ten months in the year, and the butter sells at 25 cents a pound.

On a farm near Boston the new milk is subjected at once to the action of a centrifugal cream separator, says the Tribune and Farmer, butter extracted in a few minutes and served in the city that same morning for breakfast.

MISSOURI PACIFIC.

Elegant Equipment Between Kansas City and Omaha.

On and after July 1, 1885, the Missouri Pacific night express, between Kansas City and Omaha, leaving Union depot at 8:20 p. m., arriving at Omaha at 6 a. m., returning leave Omaha at 9 p. m., and arrive at Kansas City at 6:35 a. m. daily. These trains will be equipped with two new elegant Pullman palace sleeping cars, the Potosi and Glendale, and elegant palace day coaches. Day express (daily) except Sunday to Omaha leaves Kansas City at 8:45 a. m., arrives at Omaha at 6 p. m. These trains run through Leavenworth, Atchison, Hiawatha, and run to and from the Union Pacific depot at Omaha.

Connections made at Omaha for all points west on the line of the Union Pacific, for all points north to St. Paul, and with all eastern lines from Omaha.

For tickets and sleeping car berths, call on your ticket agent, or No. 1,048 Union avenue and 528 Main street, Kansas City, Mo.

H. C. TOWNSEND, G. P. Agt.,
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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.

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J. M. BUFFINGTON, Oxford, Kas., importer and breeder of Norman and Clyde's deale Horses. Twelve imported and 1 Grade Stallions for sale.

M. D. COVELL, Wellington, Kas., for fifteen years a breeder and importer of Percherons. Stud Book and High-grade acclimated animals, all ages and both sexes, for sale.

FOR SALE—On good terms, two imported Clydesdale Stallions, with books of 1885 included. Both sure breeders. Can see their colts. For particulars address Robert Ritchey, Peabody, Kas.

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W. D. WARREN & CO., Maple Hill, Kas., importers and breeders of RED POLLED CATTLE. Thoroughbred and grade bulls for sale. St. Marys railroad station.

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FISH CREEK HERD of Short-horn Cattle, consisting of the leading families. Young stock and bronze Turkeys for sale. Walter Latimer, Prop'r, Garnett, Kas.

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JOHNSON & WILLIAMS, Silver Lake, Kas., breeders of Thoroughbred Short-horn Cattle. The herd numbers thirty head, with a Rose of Sharon bull at head.

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CEDAR-CROFT HERD SHORT HORNS.—E. C. Evans & Son, Prop'r, Sedalia, Mo. Youngsters of the most popular families for sale. Also Bronze Turkeys and Plymouth Rock Chickens. Write or call at office of Dr. E. C. Evans, in city.

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ALTAHAM HERD. W. H. H. Cundiff, Pleasant Hill, Cass Co., Mo., has fashionable-bred Short-horn Bulls for sale. Among them are two Rose of Sharon and one aged show bull. None but the very best allowed to go out from this herd; all others are castrated.

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CATTLE AND SWINE.

ROME PARK STOCK FARM.—T. A. Hubbard, Wellington, Kas., breeder of high-grade Short-horn Cattle. By ear lot or single. Also breeder of Poland-China and Large English Berkshire Swine. Inspection invited. Write.

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U. P. BENNETT & SON, Lee's Summit, Mo., breeders of THOROUGH-BRED SHORT-HORN CATTLE, Cotswold sheep, Berkshire swine, Bronze turkeys and Plymouth Rock chickens. Inspection 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.

DR. A. M. EIDSON, Reading, Lyon Co., Kas., makes a specialty of the breeding and sale of thoroughbred and high-grade Short-horn Cattle. Hambletonian Horses of the most fashionable strain, pure-bred Jersey Red Hogs and Jersey Cattle.

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I HAVE 10 young pure-bred Short-horn Bulls, 10 Cows and Heifers. A few choice Poland-China Boars and Sows—the latter bred for sale. Send for new catalogue. H. B. Scott, Sedalia, Mo.

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SWINE.

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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.

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OUR ILLUSTRATED JOURNAL.—A full and complete history of the Poland-China Hog, sent free on application. Stock of all ages and conditions for sale. Address J. & C. STRAWN, Newark, Ohio.

SWINE.

Register! POLAND-CHINA and LARGE BERKSHIRE. Breeding stock from best heads in eleven States. Choice Pigs cheap. Write for what you want to F. M. Rooks & Co., Bu 1 game, Kas., or Boonville, Mo.

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V. B. HOWEY, Box 103, Topeka, Kas., breeder and shipper of Thoroughbred Poland-China Swine. Recorded in Ohio Poland-China Record. My breeders are second to none. Write for what you want.

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FAIRVIEW POULTRY YARDS.—Has for sale 200 Chickens each of P. Rocks, Houdans, L. Brahmas, Wyandottes, B. Leghorns and Langshans. Lock box 754. Geo. Taggart, Parsons, Kas.

400 W. F. D. SPANISH and P. Rock chicks for sale, from my prize-winners. General agent for "Poultry Monthly." Agents wanted. Prepared to sell, \$3.00 per 100 lbs. Geo. H. Hughes, North Topeka, Kas.

NEOSHO VALLEY POULTRY YARDS.—Established 1870. Pure-bred Light Brahma, Partridge Cochins, Plymouth Rocks, Eggs in season. Lock in fall. Write for prices. Wm. Hammond, box 190, Emporia, Kas.

N. R. NYE, breeder of the leading varieties of Chickens. Poultry, Leavenworth, Kansas. Send for circular.

EGGS FOR SALE.—From Light Brahmas, Buff Cochins and Plymouth Rocks, 13 for \$1.75; 25 for \$3. Also Pekin Duck eggs, 11 for \$1.75; 22 for \$3. Also Emden Geese eggs 6 for \$2; and Bronze Turkey eggs, 12 for \$3. W. J. McColm, Waveland, Shawnee Co., Kas.

PLYMOUTH ROCK CHICKENS. Eggs for hatching, from the finest breeding pens in the United States. Fowls have taken first premium wherever shown. Eggs safely packed for shipment. Setting of 13, \$2.50. Fowls for sale in the fall. Address E. W. Stevens, Sedalia, Missouri.

MISCELLANEOUS

PROSPECT FARM.—H. W. McAfee, Topeka, Kas. For sale cheap six registered Short-horn bulls, 1 to 2 years old. Also, Clydesdale horses.

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MERINO SHEEP, Berkshire hogs and fifteen varieties of high-class poultry of the best strains. Bucks a specialty. Harry McCullough, Fayette, Mo.

THE ELMWOOD HERD

—OF—

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BREEDERS OF

SHORT-HORN CATTLE

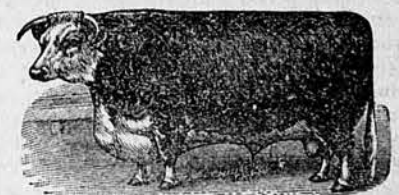
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BERKSHIRE SWINE.

Our herd numbers 130 head of well-bred Short-horns, comprising Cruickshanks, Rose of Sharon, Young Marys, Arabellas, Woodhill Duchesses, Lavinias, Floras, Desdemonas, Lady Janes and other good families. The well-known Cruickshank bull BARMPTON'S PRIDE 49854 and the Bates bull ARCHIE HAMILTON 49792 serve our herd. We make a specialty of milking Short-horns, the Arabellas being specially noted as milkers. Good, useful animals of both sexes always for sale.

Premium Berkshires very cheap.

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Representatives Horace, Lord Wilton, The Grove 3d, and other noted sires Thoroughbred and high-grade bulls and heifers for ranchmen a specialty. Send for Catalogue.

G. E. HUNTON, Breeder,
ABILENE, KAS.

(Continued from page 1.)

same second; sow 6 months and under 1 year, S. McCulloch first and same second; sow under 6 months, S. McCulloch first and same second.

Sweepstakes.—Boar any age or breed, J. A. Davidson; sow any age or breed, C. O. Blankenbaker; sow and five sucking pigs, J. A. Davidson.

Best herd of hogs, J. A. Davidson first, and S. McCulloch second.

SHEEP.

Long-wool.—Buck two years and over, John Fisher first; ewe 2 years and over, A. Harder first and same second.

Fine-wool.—Buck 2 years and over, E. M. Peck first and same second; ewe 2 years and over, G. S. Bosworth first, and E. M. Peck second; ewe 1 year and under 2, E. M. Peck first; ewe lamb, E. M. Peck first, and G. S. Bosworth second; buck two years and over, E. M. Peck first.

Sweepstakes.—Buck any age, E. M. Peck; ewe any age, G. S. Bosworth. HORACE. Ottawa, Oct. 3, 1885.

The Harvey County Fair.

Special correspondence KANSAS FARMER.

The twelfth annual fair of the Harvey County Agricultural and Mechanical Association, held at Newton, Kas., this week, has been the best in every respect of any exhibition heretofore given. The weather was fine, attendance large, displays good to choice, and all happy. No gambling.

Among the curious exhibits was a collection of monies from away back as far as A. D. 70. The collection in samples of United States money was almost complete, of every denomination and variety. A fine and much admired botanical collection was also shown.

In the horse department were exhibited many fine animals; among the number was Astral, the finest thoroughbred stallion in the West.

The cattle display was extra choice, consisting of Short-horns, Holsteins, Jerseys, Herefords, and numerous grades, numbering in all eighty-three head.

The sheep department was very full indeed, there 52 head.

In the swine exhibit were to be seen several very fine animals that for symmetry and general make-up are hard to beat.

The poultry fancier had an opportunity to see a fine display of fowls of excellent breeds.

Henry Blakesley, of Peabody, attended with eleven head of Short-horn cattle. He captured four first and one second prize.

Hubbard & Watson, Newton, breeders of and dealers in Holstein-Friesian cattle, have an extensive ranch which adjoins the city of Newton on the northeast. Thereon they have forty head of said cattle, twelve head of which were on exhibition at this fair. Near 77 stands at the head of their herd and is as fine an animal as the West affords. Stock is all free from disease. They have several grades that cannot be excelled. Parties wishing to start in the above line of cattle can correspond with the gentlemen named.

Mr. R. T. Allison, who resides three miles northeast of Newton, is breeder of thoroughbred Poland-China hogs, and exhibited eleven head. He has fifty head in his herd, with Black Jim leading. Mr. A. has a few choice hogs for sale at prices to suit the times.

J. C. Hyde, of Sedgwick county, had at his fair his Norman-Clyde stallion Acme, which he purchased through the KANSAS FARMER. It has given good satisfaction. He had a herd of thoroughbred Short-horn cattle on exhibition, too; also a lot of Poland-China hogs which are of the best strains A. P. C. R. His hogs are in fine health and pretty as a peach. Mr. H. sold several choice pigs at \$10 each, which is his regular price, and are considered very low by every one. He has no cattle for sale, having sold it this fair all that were ready for disposal. Mr. J. W. Simpson, representative from McPherson county, bought of him one four-month-old bull calf for \$100. During the Wichita fair last year a challenge test was made in feeding. In this contest a pig belonging to Mr. Hyde took on one pound of pork to every three pounds of feed given it. If any one else can do better than the above in making pork, it would be well to make the same known through the columns of this paper.

HORACE.

September 25, 1885.

The Winfield Fair.

Special correspondence KANSAS FARMER.

The third annual exhibition of the Cowley County Fair and Driving Park Association closed with this week. It has been a very profitable and highly satisfactory exposition. The location and improvements are far better than that of any other fair association in southern Kansas, and the exhibits and general displays surpassed that of any fair yet attended by your special correspondent.

Cowley county is acknowledged everywhere as having many superior advantages, and from the enthusiasm shown by her citizens at this fair in their efforts to make a desirable exhibit, one will at once conclude that this section of the State is among the choicest of farming communities. All classes of exhibitions were very full and complete and pronounced by every one as hard to excel.

Among the exhibitors from abroad were C. F. Stone, of Peabody, with eight head of thoroughbred Holsteins and a small flock of choice Merino sheep; M. B. Keagy, of Wellington, with seventeen head of Berkshires, and T. A. Hubbard, of same place, with with thirty-four head of Berkshire and Poland-China swine.

T. A. Hubbard, formerly Register of Deeds for Sumner county, is proprietor of Rome Park stock farm. He makes the breeding of thoroughbred swine and Short-horn cattle a specialty. The above gentlemen captured many prizes on their swine.

Mr. Isaac Wood had on exhibition twenty-four head of choice Poland-China swine and carried off several premiums. He is proprietor of the Pioneer Herd of Poland-Chinas, and resides one mile east of Oxford, Kas., in what is known as the celebrated Arkansas valley. His swine are all recorded stock, and are noted as the champion sweepstakes herd of the Southwest. Mr. Wood breeds from the best blood and selects for superior individual merit. For history of herd see Ohio Poland-China Record.

No gambling devices were permitted at this fair. Success ever crowns the efforts of legitimate endeavors to conduct a first-class fair, and how much better everybody feels over the result.

Winfield is decidedly a beautiful city, situated in the midst of as fine a country as any one could wish for or ever hope to see.

September, 22, 1885. HORACE.

Cottonwood Falls Fair.

Special Correspondence KANSAS FARMER.

The fifth annual fair of the Chase County Agricultural Society opened very auspiciously. The weather was all that could have been desired, and nothing interfered to mar the proceeding save the wafting hither and thither of exceeding dry mud.

From the exhibition of stock made at this exposition there can be no doubt as to the value of Chase county for breeding and stock-rearing purposes. What is manifested clearly cannot but have its telling results. New buildings were erected, yet not enough to accommodate all, for the entries of fine stock were more than anticipated.

Only one gambler essayed to work his game, and before he had operated long your correspondent notified the managers of the fact, and in company with the superintendent had the party close up and vacate inside of ten minutes, which he did without hesitancy. If the people who attend the fairs would see that all such places were looked after they might facilitate doing away with this class of migratorians in the shape of human beings. If the fair associations cannot conduct an exhibition without bringing in the worst element of society to prey upon their patrons, then it is time that all such associations should at once cease to exist. People go to the fairs for the purpose of deriving information that will tend to elevate them, and that is what a fair is supposed to be for, but of late it seems quite different. Money, money is the ultimatum of a majority of the fair managements of this day, and it seems to matter not how they get it, just so they get money. The present is all they care to work for, not in the least does the future success of their respective associations seem to affect them. I am glad that some are getting the scales removed from their eyes and are looking at these institutions in their true light.

The cattle exhibit at this fair was simply grand. John McCaskill showed his cele-

brated Hereford cow, Latin 5391, and Geo. Hays had on hand Roan Boy, a fine half-breed Hereford bull calf, sired by Young America 7080, Vol. 3 A. H. B. Mr. John Tod, manager of the Lee ranch, had on exhibition eight Hereford bulls and four Short-horns; six of the Herefords are imported; two of them are of Lord Wilton blood. He also showed twelve grade cows and heifers which for beauty in grades are hard to surpass. Three of his Short-horn bul's were of Col. Harris, proprietor of the "Linwood Herd," and they were deeply impregnated with "Cruickshank" Scotch blood. Mr. Tod also exhibited four heifer calves, which are out of Royal Ravenswood, now owned by the Lee Ranch Company.

This ranch is situated four miles southeast of Cottonwood Falls, on the south fork of the Cottonwood river, and consists of 3,120 acres, 500 of which is choice bottom lands, all well supplied with pure water. Upon it is immense tract there roam at will over 700 head of grade Short horn and Hereford cattle. This company has about 200 head of grade cows, also bull and heifer calves, for sale. The calves are three-fourths Hereford, one-half Hereford, and high-grade Short-horn.

They also make a specialty of breeding the large English Berkshire swine, with Sovereign Duke at head of the herd. Choice boars and sows for disposal.

This well-known ranch, improvements, stock, etc., represent an outlay of \$100,000, and it is a pleasure to note that the company has been very successful in their endeavors to build up an interest in fine stock for central Kansas.

HORACE.

September 28, 1885.

The La Cygne Fair.

Special correspondence KANSAS FARMER.

The thirteenth annual fair of the La Cygne Agricultural and Mechanical Association was held at La Cygne, September 28 to October 3. The first days were unpropitious as regards weather, but with commendable perseverance the exhibitors came in spite of the rain, and by Wednesday noon a more creditable and well-arranged exhibition it has rarely been the privilege of the writer to behold.

The grounds of the Association are near the town and are naturally well adapted to their purposes, and the buildings of previous years and those added this have rendered them quite complete.

Linn county has maintained her position in the front rank for years in the production of fruit, and the exhibit at her fairs this year, and especially here, shows that she is likely to remain there. The corn exhibit was also especially fine, some of the ears exhibited exceeding in size any we have seen before in Kansas. The exhibit of tame grasses was an attractive one, and demonstrated the fact that unusual attention was being paid to this branch of husbandry.

The women's department was replete with handsome things and merited the attention and praise they received.

The horse show, representing all the classes usually shown, was excellent, many of the classes being unusually full. But if this fair run ahead of the generality in this department, it lagged in the cattle and sheep exhibits, though some good specimens were shown in these departments also. The swine exhibit was truly a good one, and some as fine specimens as we have seen anywhere were here.

We spent two days pleasantly among these enterprising people and were kindly treated and carried away with us a good list of subscribers to the FARMER. It is the hope of the writer that he may often meet these hospitable people. The La Cygne Journal issued a daily paper which, as regards size and make-up, eclipsed the ordinary fair daily. Messrs. Kenna & Lane, the publishers, deserve praise for the enterprise thus exhibited.

F.

The only place in Massachusetts where women do not outnumber men is in the prisons. There are in that State 4,389 convicts, of whom 803 are women.

Experiments show that the average person can taste the bitter of quinine when one part is dissolved in 152,000 parts of water. Salt was detected with one part in 640 of water, sugar in 283 of water, baking soda in forty-eight of water. In nearly all cases women detected a smaller quantity than men.

Reds vs. Scrubs.

Kansas Farmer:

Like it is said of Bob Ingersoll, in his tirade against the Bible and churches, that the foundation of his discourses are not facts but bold assertions, so it is with some arrogant breeder of the black hog, who said in a late issue, "The Red hog, like the scrub, must go." Now, if he had said the scrub Reds, like the scrub of any other breed, must go, then he would have come near the present status of hog breeding. He also said that two former breeders were now denouncing them, which is no evidence that, to throw out the scrub Reds which these gentlemen were fooled in buying, and give them them the better breeds of Reds, that they would not soon be praising them as the best, most prolific hogs in existence. I bought my foundation stock of two of these same breeders who now denounce them, and I have ever since been denouncing the same breeders for fooling me into buying such quality of the Reds, and I very soon sent them to the shambles having learned by experience that these big, coarse, long, slab-sided, leggy, long-snouted Reds I first bought were only the best hog for those who fed bountifully from birth to slaughter-pen, which will do in the East and be made to weigh from 600 to 1,000 lbs., but not on the range. So I spent time and money in looking for a better breed of Reds, which I found, and now have a breed of Reds that is the admiration of all who see them, which they might also have had if a little more perseverance had been in their makeup. They are as square and symmetrical as any of the best breeds of Polands or Berkshires; short, low down, broad, dish-faced, and will weigh more to the inch of hog than any of the best of other breeds. I am willing and ready to show and weigh with any of same age; and I invite inspection from any one. I also have Polands and Berkshires breeding by the side of them, but find the Reds are, for a fact, more desirable for all purposes that make hogs valuable and profitable; will live and keep fat on less feed than any others, and at any age are more hardy and free from any kind of disease. With cholera on every side of me, no sick Reds yet. The facts are, old dogs will not learn new tricks. So with breeders of blacks. They say "I don't like the Reds." When asked what they know about them, the general expression is—"Well, not much; but I don't like the color." Then they are so uncharitable as to not want to give them fair play. They may see the worst kind of scrubs, in black and white, and do not denounce the entire breed of blacks and whites for it; but if they see, or get hold of scrub Reds, they proceed at once to cry down all classes of Reds. Now, there are, as all know, scrubs and bad crosses in any of the best breeds of stock, but that is no reason there are not good specimens, also. If the breeder is careful of selection and crossings, he may have valuable hogs of any color; if not, he will have scrubs, as the tendency of all stock is to deteriorate; so it requires judgment and selection, proper crossing and handling to keep any of the best stock up to the standard and improving, and no difference what breed or cross one has, if it is not then crossed on a big corn-crib it will not show up well. As a breeder of the Reds and blacks, I only ask fair play and investigation for the best crosses of the Reds the same as they are ready to give to other colors. I denounce scrub Reds the same as I do scrubs of any kind of stock. DR. A. M. EIDSON.

Reading, Kansas.

Hog Cholera.

Kansas Farmer:

I thought I would write a few lines in regard to the hog disease in this county. It seems that about everybody is a kind of monomaniac on that point and calls every ailment that hogs are heir to hog cholera. I believe that something could be done for hogs, even when there is a contagious disease among them, if we were to try to find out the ailment and give medicine according and not give some cure-all or so-called hog cholera medicine.

The symptoms in this disease are similar or identical to what is called malignant epizootic catarrh in the American Farmers' Encyclopedia of Live Stock, by N. D. Thompson & Co., on page 828. I believe by moving the hogs to high ground and keeping the bowels loose by feeding some aloes in

slop, or most any other purgative, is about the best that can be done. Please give us your opinion. JOHN H. MORICK.

Mankato, Jewell Co., Kas.

P. S.—One thing more I wish to write about. Whenever the so-called hog cholera gets among a herd here the buyer goes and offers about a half cent per pound less than market price for all their hogs that weigh over 150 lbs. if they can only get up and walk, sick or well; then they ship them right off to Kansas City to be slaughtered. Now is that a legitimate business, to ship such diseased hogs? The farmers of course get scared and sell all they have, the buyers making a good thing. J. H. W.

[It is not only not a legitimate business, but it is criminal, and the men who are shipping diseased hogs to Kansas City or to any place else, ought to be prosecuted promptly and to the full extent of the law.—Ed. K. F.]

Vaccinating for Black-leg.

Kansas Farmer:

Our fair was a grand success; the first time the entire county united. Some people were dissatisfied because some gambling was allowed and too much horse-racing indulged in. Some people fresh from the East say that we are up with the best any place only in cattle and horses. The small herd of Black Polled Angus that was on hand excited much wonder—the first ever here.

As I noticed some remarks in the FARMER some weeks ago about vaccinating for black-leg, I will report a case that occurred near here quite recently. Several weeks ago I heard that Silas Mitts, who lives one and a half miles southwest of Mankato, had lost a yearling calf in a pasture where they had only pond water to drink. As I was interested on that question I hastened to inquire, and learned that the death was in a pasture where good well water was furnished; another died, then another, and then another, the last two only two days apart. Then the vaccinator was called in, vaccinating attended to and no more died. Nonesickened nor died in the "pond pasture." I obtained this information from Mr. Metts yesterday at the fair. Dr. Marsh has been vaccinating in this county and surroundings for some years with much success. He lives in Mankato, claims to have been the originator of the idea, and is a partner in the arrangement. He used to vaccinate for 50 cents per head, agreeing to pay for all that died, or sold a farm right for \$10.—Is cheaper lately; vaccinates for 25 cents near home. Last spring I paid him \$5 for a box of fifty pills, a vial of virus and printed directions, he coming and performing on five to show the boys "the lick it was done with." They vaccinated the remainder.

A. CHENOWETH.

Mankato, Jewell county.

At Dunkirk the other day an exciting scene was witnessed by thousands of spectators on the sands at that port. At about 4 o'clock in the afternoon a dark object was seen near the shore at a distance of about three miles from the part of the sands occupied by the bathing machines and tents. On its nearer approach it was found to be a whale, and how to capture it became a question eagerly debated. It happening that a company of soldiers was at target practice on the sands, the officer in charge directed a number of his men to fire on the whale. This they did, striking it frequently, but seemingly with little effect, the animal meanwhile making desperate but fruitless efforts to regain deep water. When the tide had receded sufficiently, several soldiers waded waist high into the sea, and one of them drove his bayonet into the eye of the fish. Then there was a convulsive movement, followed by a violent flap of the tail, and all was over. A harpoon, to which was attached a strong rope about thirty feet long, was found sticking in the neck of the whale, in which there was a gash twenty inches long and very deep. The whale measured twenty five feet in length, the girth at the shoulder being fourteen feet.

Among those who have joined the Roman Catholic church since the beginning of the Oxford movement are enumerated thirty-six lords, twenty-five baronets, 302 graduates of Oxford, 149 graduates of Cambridge, 142 army officers, ninety-two lawyers, forty-eight doctors, and 1,010 ladies of aristocratic stations.

What Sporting Men Rely On.

When Lewis R. Redmond, the South Carolina moonshiner, cornered, after for eight years eluding the government officials, was asked to surrender, he exclaimed:

"Never, to men who fire at my back!"

Before he was taken, five bullets had gone clear through him, but strange to relate, he got well, in the hands of a rude backwoods nurse.

By the way, if Garfield had been in the hands of a backwoods nurse, he might have lived. A heap of volunteer testimony against the infallibility of the physicians has been accumulating of late, and people are encouraged to do their own doctoring more and more. It is cheaper and quite as certain.

Before Detective Curtin, of Buffalo, caught Tom Ballard he "covered" him with his revolver. Tom saw the point and tumbled!

Joe Goss was "covered" a few weeks ago and he tumbled, and so did Dan Mace. Death "fetched em" with that dreaded weapon—kidney disease. But they should have been lively and drawn first. They could easily have disarmed the monster had they covered him with that dead shot—Warner's safe cure, which, drawn promptly, always takes the prey. It is doubtless true that sporting men dread this enemy more than any mishap of their profession, and presumably this explains why they as a rule are so partial to that celebrated "dead shot."

Redmond was right. No man should surrender when attacked in the back. He should "draw," face about and proceed to the defence, for such attacks, so common among all classes, will fetch a man every time unless "covered" by that wonderfully successful "dead shot."—Sportsman's News.

The Great Fair at St. Louis

Opening October 5th, and continuing until October 10th, will be in many respects a revelation to those attending. While in other years the attractions have been numerous, the splendid programme which is presented this year surpasses all previous efforts. First \$73,000 have been offered as cash premiums for the excellent products of Art, Industry and Science, by the Fair Association. This alone is a guarantee for the most complete display which has ever been seen in this country.

In addition the above read the programme:

Tuesday, October 5, 1885, Gorgeous Nocturnal Pageant of the Veiled Prophet, comprising thirty-five floats, prepared at an enormous expense.

Wednesday, October 7th, 1885, Grand Athletic Procession, including various societies, from home and abroad, among which will appear the victorious St. Louis Browns, the Champions of the American Association, and as escort the famous Atchison Flambeau Club, who will execute their unique drill on the march.

Thursday, October 8th, 1885, the grand procession of the Trades Display, illustrating the industries, wealth and resources of the Mississippi Valley. On this night the Topeka Flambeau Club which excited such a furore at Washington, in the inaugural procession of President Cleveland, will appear in line and give an exhibition of their astonishing manoeuvres.

Friday, October 9th, 1885, the fun-making Mackerel Brigade will appear in an amusing parade, burlesquing nationalities, society, politics, etc. It will be a procession worth seeing, and those who fail to witness it will miss one of the most prominent features of Fair Week.

Two \$2,500 00 races—On Thursday, October 8th, Maxy Cobb, Phallas and five other celebrated horses will trot for the free-for-all stallion race, and on Saturday, October 10th, Harry Wilkes, Phallas and Maxy Cobb, with eight other celebrated horses, will trot a free-for-all race.

The illumination of the city this year will exceed anything before attempted, rivaling the efforts of London or Paris, and at night with the hundreds of electric lights and the thousands of gas jets, with their many colored globes, will be veritably a fairy scene and a blazing sea of light.

The Exposition which opened September 9th, is the grandest exhibition ever given in this country, and in addition to the complete display of products of art, industry and science, every day, afternoon and evening, are given two Grand Concerts by the

Famous Gilmore's Band. This band is without doubt the finest musical organization of its kind on the American continent.

The Missouri Pacific Railway will sell October 3d to October 9th, inclusive, limited to October 12th, round trip tickets at one fare.

Come and see the Fair, Veiled Prophets, Trades Display, Mackerel Brigade Parade, Athletic Procession and Exposition all in one week.

Ample equipment has been provided by the Missouri Pacific Railway to safely and comfortably transport all who may attend.

Pullman Buffet Parlor Sleeping Cars, double daily line, free Reclining Chair Cars, and handsome day coaches.

Apply for tickets and further information to your nearest ticket agent.

GEO. OLDS, Gen'l Traffic Manager.

H. M. HOXIE, 1st Vice-President.

H. C. TOWNSEND, Gen. Pass. & Tk't Agt.

J. H. LYON, W. P. Agt., Kansas City, Mo.

A FLAG THAT STILL WAVES

O'er the Hearts of the Free and the Home of the Brave.

The flag that waved over Fort McHenry during the bombardment on the night of the 13th of September, 1814, and whose broad stripes and bright stars inspired Key's song, still exists in a tolerable state of preservation. It was preserved by Colonel George Armistead, the commandant of the fort at the time of the attack on Fort McHenry, Baltimore, and bears upon one of its stripes, in his autograph, his name and the date of the bombardment. It has always been retained in his family, and his widow in 1861 bequeathed it to their youngest daughter, Georgiana Appleton, who, some time after the bombardment, was born in Fort McHenry under its folds. Mrs. Appleton died in New York, July 25, 1873, and bequeathed the flag to her son, Mr. Eben Appleton, of Yonkers, New York, who now holds it as a precious relic. It has been frequently displayed at celebrations of the 13th and 14th of September, and was notably used to adorn Washington's war tent, which was raised at Fort McHenry, September 14, 1824, for the reception of General Lafayette. It was again exhibited along the streets of Baltimore during our Sesqui-Centennial celebration by the late William Carter.

Upon this occasion the late Mrs. Margaret Sanderson, the wife of Colonel Henry S. Sanderson, formerly Sheriff and Collector of Baltimore, who always prided herself much on the part she took in constructing the flag that inspired Key to write our national anthem, was induced by some of her friends to visit her native city. She arrived in Baltimore in time to witness the grand display, but did not participate in it. While here she gave the following history of the construction of the flag: Mrs. Mary Pickersgill, who was well known in Baltimore during the war of 1812 as an adept at flag and banner making, was secured by Commodore Barney, General Stricker, General McDonald and other prominent men to make a new garrison flag for Fort McHenry. A number of young girls assisted in the work, and Mrs. Sanderson, who was then between 13 and 14 years of age, was one of the party. The girls made quite a frolic of it, and their young hearts pulsed wildly for the safety of their beloved city and the honor of the volunteers and regulars who were to defend the work of their delicate fingers. Mrs. Sanderson remembered perfectly well that her portion of the labor was to baste the stars on the blue field.

The flag, when completed, was hoisted on a high mast not far from the bastion facing the Patapsco river, in the "Star Fort." The late Mendez I. Cohen, who was perhaps, the last survivor of Captain Nicholson's company of Fencibles, which mustered 110 strong on the morning of the bombardment in the fort, said he had a distinct recollection that one whole British bombshell passed through the flag, and that it was torn by several pieces of another shell. The flag was originally about forty feet long, but the shot of the enemy, time and marauders have combined to diminish its length, until it is now only thirty-two feet long and twenty-nine hoist. Its great width is due to its having fifteen instead of thirteen stripes, each near two feet wide. It has, or rather had, fifteen five-pointed stars, each two feet from point to point, and arranged in five indented

parallel lines, three stars in each horizontal line. The union rests in the ninth, which is a red stripe, instead of the eighth, a white stripe, as in our present flag. All the flags worn by the navy and army during the war of 1812-14, and, in fact, from 1794 to 1818, were so arranged.—Baltimore Sun.

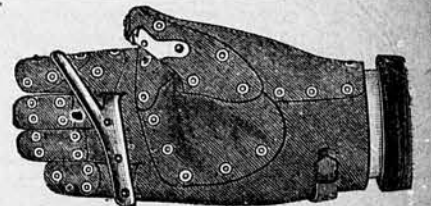
Volume 9 Holstein Herd Book is out. Secretary Wales has placed us under obligations for a copy kindly forwarded to the office. It contains names and addresses of members of the Holstein Breeders' Association of America, the constitution and by-laws of the association, proceedings of the fifth annual meeting at Chicago in March, 1885, proceedings of the joint committee of the Holstein Breeders' Association of America and the Dutch-Friesian Association of America at Buffalo, N. Y., April 16, 1885, proceedings of the Holstein Breeders' Association at Buffalo, N. Y., May 26, 1885, and register of bulls from No. 4,101 to No. 4,664, and register of cows from No. 9,206 to No. 10,560. This is the last volume to be issued by the old Holstein Breeders' Association. The work in future will be done by the consolidated—Holstein-Friesian Association of America. Price of this volume \$2.50. Address Thomas B. Wales, Jr., Iowa City, Iowa.

The politeness of modern villany is excelled only by its boldness. The latest is a Texas case. Sixteen miles east of Rannels, a smooth-faced boy, about 18 years of age, met and passed the stage. He was riding a gray horse, and carried a Winchester rifle and a six-shooter. After the stage had passed him he turned and demanded a halt. The driver whipped up his team and an exciting race for half a mile ensued, before the stage was overhauled by the highwayman, who demanded the mail sacks, at the same time saying he did not care to disturb the passengers, six in number, including a lady. The mail sacks were delivered to him, when he carried them out about twenty yards on the prairie, and leisurely appropriated what he wanted. When it gets so far along that a beardless boy can rob six men and one woman in open daylight it is about time to declare mankind six-renths cowards.

Consumption Cured.

An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellow-men. Actuated by this motive and a desire to relieve human suffering, I will send free of charge, to all who desire it, this recipe in German, French or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper, W. A. NOYES, 149 N. 7th St., Block, B, Chester, N. Y.

That all men would be cowards if they dare. Some men have had the courage to declare



SAVE YOUR HANDS, Time and Money

—BY USING—

Hall's Patent Husking Gloves and Pins.

GUARANTEED To outlast any two pair of the best ordinary gloves made. They positively give in wear more value for the money than any other device for Corn Husking. Being made with

RIVETS AND LACES

INSTEAD OF THREAD,

Heavier, more serviceable leather can be used, and is used, than in any other glove. Ask your merchant for them, or address

HALL & ROSS HUSKING GLOVE CO., 143 & 145 South Clinton St., Chicago.

The Home Circle.

Pine and Palm.

A lonely tree, the rowan grew
Among the boulders; long and lone.
The wild moor heaved beneath the blue
In heathery swells of turf and stone.

They'd wandered east, they'd wandered
west,
With dance and music, song and mirth,
That sunbaked group who paused to rest
On that thin spot of shadowy earth.

With heat and travel overcome,
The bandsman slumbered. On the grass
Lay leathern pipes and cymbaled drum
And bright-peaked hat with bells of brass.

With low soft laughs and whispered fun,
Blithe eyes and lips of loving red,
Two girls sat stringing in the sun
The rowan berries on a thread.

Against a boulder mossy-grown
I saw the singing-woman lean
Her dark round head. Up on the stone
She had placed her gilded tambourine.

Though not asleep, she did but seem
Half-conscious, for the hot sun kissed
Her cheek, and wrapped her heart in dream
Like some glad garden wrapped in mist.

Into the tambourine I dropped
My modest tribute unto art;
The children, threading berries, stopped;
The woman awakened with a start.

She rose and thanked me, bright and free.
Then added: "God is good to-day!
One hour I am in Napoli—
And this is Scotland—far away!"

And I remembered, as I turned,
How, lone in Norland snows, the pine
Dreamed of that lonely palm which yearned
On burning crags beneath the line.

—Heine.

"Strike, While the Iron is Hot."

In the nature of the physical universe it is an axiom that an extreme produces its opposite. The same law which causes the pendulum to vibrate and sends the planets whirling through space to the utmost limit of their orbit and returns them with equal force, governs and holds within unerring power the great masses of humanity in their moral resolutions. And while it is ours to maintain a wise and moral government, which by its own intrinsic nature produces all the benefits to be derived therefrom, it is also ours as a nation to repel these higher principles and drive them to other nations who will be thus benefited by our loss. For it must follow "as the night the day" that while one nation sits in the sublimity and splendor of advanced civilization, others must lie in darkness and obscurity. Can it be that our nation as such has reached her perihelion of civilization and is hanging trembling in the balance between the two opposite powers, good and evil, posing as it were for a moment in the meridian splendor of civilization ere she plunges forward in her downward course? It seems as though all the powers of evil had united their forces to give her an impetus in this direction, and while the moral element in our nation is striving to implant temperance principles (the basis of morality) in our public schools, to counterbalance this, infidelity spitefully snatches from thence the Bible, not that she is able to deprive Christians of reading and family worship, but that by this means she will drive them from the public schools where temperance principles are to be taught. This offended class will, as a natural result, swing to the other extreme, building sectarian schools, as the Catholics do, wherein their unfortunate children will be educated in a one-sided, contracted form of principles, detrimental in the extreme to a Republican form of government.

We do not think that this is the individual motive instigating infidels to exclude Bible reading from the public schools, but should it become general, that same spirit of opposition which leads them to desire the exclusion of the Bible will drive the opposite class to the other extreme; i. e., exclusive sectarianism, both religious and political.

It is not of an antipathy toward impure literature that prompts the infidel to this action. Were it so, why do they not cry out against the flood of vile trash which pours through every avenue of society, the slum and most contagious pestilential sentiments which the lower grade of humanity can produce? Every mail which rushes to our city is reeking with it. It is placed in the hands of our innocent children gratuitously. Yes, shut out all the good and useful lessons

which are taught in the Bible, but let your own and neighbors' children be literally filled with the vile slums that emanate from lowest grade of city life. Let them see it on our streets, call them to the public fair where they are to be entertained by harlots and gamblers, pickpockets and scoundrels of every hue; plant dens of infamy in every street to lure our children to destruction. And then tell us you are too sensitive to have the Ten Commandments read to your children by the best and most intelligent class in our community—the teachers.

"O, consistency! thou art a Jewell." What are the farmers thinking of? When they bring their wives and children to (what proposes to be) the agricultural fairs, an institution designed to promote their interests in every sense, and find themselves simply transformed into a "cat's-paw" to scratch the dimes into the pockets of the association, nay, even required to pay for the privilege; see their boys, innocent of these pitfalls, (country greenhorns is what these sharpers term them) flutter by dozens round the tempting bait until their last nickel has disappeared behind the magic wonder, give place for another group. I tell you plainly, if every farmer felt as I do about these things, there would be an indignation meeting in our county, and before another year an agricultural association that would leave these sharks on dry land. It can be done. Farmers, look to your ballot; take the fort and hold it.

MRS. M. J. HUNTER.
Concordia, Kas.

Bad, Bad Husbands.

I was amused on reading Griselda's last letter on stoves, and can truly say that I am glad my husband is a stockman instead of a farmer, if they have such a hard time in getting wood to burn. I always had an idea that farmers, as a general rule, made good husbands, but I see now that I was mistaken. When a man will allow his wife to cook for fourteen persons and have the care of little children, and then, as though that were not enough, to let her chop wood, I don't think such a man has any heart. His crops ought not to grow, and he ought not to prosper in any way. And the men who are always telling what their mother did, and how she did it, do not consider that their wives have any feelings. When will men learn that their wives have feelings just as tender as in the early married days? When will they learn that they are something better than mere machines, fit only to tend the baby, cook the meals and chop wood, while the husband speaks more kind words to his horse than to his wife, and she, poor soul, is starving for a few words of praise and love. It may be that when the grass is growing above her grave he will say, "Well, Mary was a good wife; always had the meals ready, and 'by George' she could make good bread." Surely that would be praise enough for any one.

"The world will still move on apace,
Nor for one moment cease its din;
Some other one will fill her place,
And soon forget that she has been."

BRAMBLEBUSH.

Recipes and Notes.

Cleaning Gloves.—Dissolve one teaspoonful of cream of tartar in a half teacupful of water and saturate the soiled parts. Then rub gently till dry.

A good way to cook potatoes for breakfast is to cut medium-sized ones in quarters, drop them into hot lard, and fry till brown, the same as doughnuts.

Plum Pudding.—1 lb. suet, 1 lb. raisins, 1 lb. currants, $\frac{1}{2}$ lb. brown sugar, 1 teacup of molasses, 1 nutmeg, 4 eggs, $\frac{1}{2}$ lb. citron, 3 lbs. of flour. Mix up with milk; boil six hours.

One of the prettiest ways in which you can garnish salads in winter is to fringe short stalks of celery and put around the edge of the salad bowl. Fringe by means of coarse needles.

If the dish in which escalloped oysters and similar preparations are baked is well buttered, it will be a saving of time and money, for the oysters and crumbs will not stick to the dish.

Unless you have hired help whom you can trust implicitly, it is a good idea to use earthen dishes for milk in place of tin; they are kept clean with much less trouble. The scientists of the present day and hour claim that the germs of disease hide in the prev-

ices of a milk-pan, and that nothing but conscientious application of absolutely boiling water will remove the danger.

To clean carpets: Dampen some Indian meal, mix salt with it, and sprinkle over the carpet; sweep vigorously. Take a small, sharp-pointed stick to remove the salt and meal from cracks and corners.

Barley water, so often recommended for the sick, may be varied and made to relish by adding stoned raisins to it. Let it boil after putting the raisins in. If figs are preferred, cut them in pieces and put them in.

If troubled with the smoke from soft coal so that you cannot lay your clothes on the grass to bleach, you can improve their looks in this way: After rubbing them pour absolutely boiling water over them, and let them lie in this water all night. Next morning scald and rinse as usual. This does a great deal toward clearing out the yellowish color they would otherwise certainly have.

Nice bread-cake is made of two cups of light bread dough, one and a half cups of sugar, half a cup of butter, three tablespoonfuls of sour milk, half a teaspoonful of soda, a cup of raisins chopped and with flour dusted over them. Stir all in but the raisins, and put them in the last thing. It should rise for half an hour and then be baked in a moderate oven.

Suet Pudding.—Here is what is said to be a splendid recipe for suet pudding: Half cup sour milk, $\frac{1}{2}$ cup molasses, $\frac{1}{2}$ cup suet, $\frac{1}{2}$ cup raisins, $\frac{1}{2}$ cups of flour, $\frac{1}{2}$ teaspoon salt, $\frac{1}{2}$ teaspoon soda, 1 teaspoon cinnamon, same of cloves, $\frac{1}{2}$ teaspoon nutmeg. Sauce for pudding—4 tablespoonfuls sugar, 2 of butter, 1 of flour, white of one egg; then add to a gill of boiling water; steam the pudding three hours and the sauce just a few minutes.

Escalloped eggs make a nice dish for supper. Bread or cracker crumbs may be used. They should be wet with milk, or with water in which you put some melted butter. Then put a layer of the crumbs, and then of cold boiled eggs, seasoning with pepper and salt. Then put in a layer of chopped meat—this may be of cold chicken, boiled ham, or even of beef, if tender and chopped fine—and so on in alternating layers until the dish is full. Have a layer of the crumbs on the top, with little lumps of butter scattered over it. Bake until thoroughly cooked through. For a medium-sized pudding dish an hour is none too long.

How to Use Crab-apples.

J. C. Plumb, writing to the *Western Farmer* on the above subject, says:

"As this fruit is universally plenty and fine this year, while in many sections the larger apples are very scarce, it is well to know some of the many ways of making the Siberian family useful. The sweet and subacid varieties are valuable for eating out of hand, for baking and sweet pickles, and for these purposes alone find a ready market at the prices of the best apples. But the common acid varieties, from the Transcendent down to the Soulard, and the native crab of the woods, have their uses, the most common of which are:

Apple Jelly.—Stew until well cooked with water only sufficient to cover the fruit; drain and press gently through a double cheese-cloth; sugar equal to juice, 'pound for pound,' boil twenty minutes; skim twice, and it is ready for the glass or crock. If glass is used they should be taken from hot water. When cold lay a white paper on the jelly, and tie another over the top of the crock. Less sugar may be used but it will require more boiling. If the juice be poured the jelly will be thin, and cooking makes it dark colored; so for a very nice article only the best materials should be used.

Canned Apples.—Prepare as before, being careful to have all perfect fruit; sweeten to taste and seal up as other fruit. The new way is to put in any sweet earthen jar. Lay a clean paper on the fruit, and over all tie a double fold of cotton batting. The same care must be used in having the fruit hot as in ordinary canning. We found this entirely successful last year. Keep in cool cellar until wanted in winter.

Marmalade.—When the fruit is cooked, as before, press the pulp through a colander, add one-half pound of sugar to a pound of apple, and put down with the batten covering.

Spiced Apples.—Is made the same way,

with the addition of spices to suit the taste.

Sweet Pickles.—Steam the fruit until a fork is easily pushed through it, being careful not to overdo them; jar with a pickle as follows: For each 10 lbs. use 3 lbs. of sugar, 1 quart of vinegar, 2 ounces of cinnamon, 2 ounces of cloves. Boil and pour over the apples while hot.

In all the above work, we consider the best granulated sugar the cheapest.

Dried Apples.—We are this year trying the Northern plan of drying our Transcendents by punching out the core with a tin tub one half inch in diameter and stringing and hang in the hot-box over the stove. With good sound fruit this is quickly prepared, and when only well wilted can be safely kept by packing in clean crocks or tubs with the air excluded with the cotton batting. We expect to have the finest grade of dried fruit we have ever used. The skin of nearly the entire Siberian family is so thin that it is not in the way when the fruit is cooked for use, and even this year there are enough of them to fill a large gap in the loss of the apple crop.

Hay Fever.

Careful observations fully bear out the germ theory, not only the presence of the germs, but an agitation or disturbance of germs, being the cause of the malady. For instance, upon a not very sultry day, three or four hours in the country have been spent without inconvenience; but on the same day half an hour in an express train has sufficed to bring on the most aggravated symptoms; in the same way, in town, a week or two has been passed without any trouble, but a couple of hours at an open-air exhibition in the same locality, with a moving crowd stirring up dust and pollen, have produced a violent attack.

The only check for hay fever appears to be, first, sleep; second, freedom from pollen; the so-called cures, such as snuff, or other applications to the nostrils, being perfectly useless. The above conditions combined effect an almost miraculous cure, as has been proved by sleeping for a short period under the protection of carefully wetted cloths through which the air is, as it were, filtered, or, more certain still, a night spent at sea. Experience shows that if the attack is once stopped a moderate amount of exposure to germs may be risked without setting it up again. The conclusion to be drawn from this is, that it would be worth the while of some enterprising individual to establish a "hay fever cure."

The arrangement would be extremely simple, neither more nor less than a series of sleeping apartments into which nothing but air deprived by straining through wet flannel of all germs, and possibly cooled down to about 55 deg. or 60 deg., could penetrate. Upon a large scale, such an establishment could be easily worked at a profit, in connection with any of the large Turkish baths or other similar establishments in town.

The beneficial effects of low temperature have been conclusively proved by subjecting a hay fever patient to the action of one of the preserving chambers in a cold store for meat. The remedy, however, was too violent to be generally adopted, but a temperature of 50 deg. would, no doubt, suffice, and could be, of course, born without inconvenience in the hottest summer.—*Scientific American.*

Unanswered yet? Faith cannot be unanswered.
Her feet were firmly planted on the rock;
Amid the wildest storms she stands undaunted,
Nor quails before the loudest thunder shock.
She knows Omnipotence has heard her prayer,
And cries, "It shall be done," some time, somewhere.

D. T. Trofiski publishes the results of a number of observations made by him to ascertain the effects produced on the temperature and pulse by smoking. He has found that in every case, varying according to the condition of the individual, there is an exhilaration of the pulse rate and a slight elevating of temperature.

If from society we learn to live,
'Tis solitude should teach us how to die;
It hath no flatterers; vanity can give
No hollow aid; alone man with his God must strive.

O grant me, Heaven, a middle state,
Neither too humble nor too great;
More than enough for nature's ends,
With something left to treat my friends.

The Young Folks.

The Heritage.

The rich man's son inherits lands,
And piles of brick and stone and gold,
And he inherits soft white hands,
And tender flesh that feels the cold,
Nor dares to wear a garment old;
A heritage, it seems to me,
One scarce would wish to hold in fee.

The rich man's son inherits cares;
The bank may break, the factory burn,
A breath may burst the bubble shares,
And soft white hands could hardly earn
A living that would serve his turn;
A heritage, it seems to me,
One scarce would wish to hold in fee.

The rich man's son inherits wants,
His stomach craves for dainty fare;
With sated heart he hears the pants
Of toiling hands with brown arms bare,
And wearies in his easy chair;
A heritage, it seems to me,
One scarce would wish to hold in fee.

What doth the poor man's son inherit?
Stout muscles and a sinewy heart,
A hardy frame, a harder spirit;
King of two hands he does his part
In every useful toil and art;
A heritage, it seems to me,
A King might wish to hold in fee.

What doth the poor man's son inherit?
Wishes o'erjoyed with humble things,
A rank adjudged by toll-worn merit,
Content that from employment springs,
A heart that in his labor sings;
A heritage, it seems to me,
A King might wish to hold in fee.

What doth the poor man's son inherit?
A patience, learned by being poor,
Courage, if sorrow come, to bear it,
A fellow-feeling that is sure
To make the outcast bless his door;
A heritage, it seems to me,
A King might wish to hold in fee.

O rich man's son! there is a toll
That with all others level stands;
Large charity doth never soil,
But only whiten soft, white hands,
A heritage, it seems to me,
Worth being rich to hold in fee.

O poor man's son! scorn not thy state;
There is worse weariness than thine
In merely being rich and great;
Toil only gives the soul to shine,
And makes rest fragrant and benign;
A heritage, it seems to me,
Worth being poor to hold in fee.

Both, heirs to some six feet of sod,
Are equal in the earth at last;
Both, children of the same dear God,
Prove title to your heirship vast
By record to a well-filled past;
A heritage, it seems to me,
Well worth a life to hold in fee.

—James Russell Lowell.

"STAR-SPANGLED BANNER."

The Thrilling Event Which Inspired This Patriotic Song.

A piece of news was borne across the Atlantic ocean in May, 1814, which chilled with apprehension every American heart. Napoleon Bonaparte had been overcome by the allied armies of Europe, and was safely imprisoned on the island of Elba. This intelligence notified the American people that the fleets and armies of Great Britain, which for twelve years had been waging war with France, were now disengaged, and would have little to do, and would be free to overwhelm and crush the Republic of the United States. We were then in the second year of that contest with Great Britain which we still call the war of 1812. It was a summer of alarm, and the whole coast was alive with the bustle of defensive preparation.

The invasion came. The enemy's ships entered Chesapeake Bay about the first of June, a fleet of frigates and lighter vessels. In August Admiral Cochrane entered the bay in a great ship of eighty guns, bringing with him a fleet and three or four thousand soldiers, which increased the British force in those waters to twenty-three men-of-war and an army of ten thousand troops and marines.

Every one knows what followed. The country was invaded, Washington was sacked and pillaged and its public buildings burned. The enemy retired with considerable loss, it is true, but triumphant and exulting. It was a dearly-bought victory, for it silenced opposition to the war, kindled the national feeling and enlisted every heart in the country's defense.

A few days after, the British forces made their second attempt upon that coast. Baltimore, then a city of forty thousand inhabitants, enriched by the prosperous commerce of the last quarter of a century, would have

been a valuable prize; and would have given the foe a hold on the shores of the Chesapeake, from which they would have been dislodged with difficulty. Washington was but a straggling village, without military value. Baltimore was a commanding position, capable of being defended. Two miles below the city, on a point of land jutting into the water, stood then, and now stands, Fort McHenry, so named after one of the early statesmen of Maryland. Sturdy arms and willing hearts had been laboring there for many weeks to strengthen its fortifications and get additional guns into position, under the direction of Lieutenant Colonel George Armistead. The time had been well employed, and the gallant commander had a modest confidence in his ability to repel the imposing fleet of Cockburn, which now consisted of more than forty vessels and carried seven thousand troops. The fate of Baltimore depended absolutely upon his holding this position.

The star-spangled banner which floated over the fort had been made by a lady of Baltimore, Mrs. Mary Pickersgill, aided by her daughter. These ladies, full of the patriotic feeling of the hour, made a flag worthy of the importance of the occasion. It contained four hundred yards of bunting. It was so large that the ladies were obliged to spread it out in the malt-house of a neighboring brewery.

When Mrs. Pickersgill's daughter was an old lady of 76 years, she used to describe the scene.

"I remember," she wrote, "seeing my mother down on the floor placing the stars. After the completion of the flag she superintended the topping of it, having it fastened in the most secure manner to prevent its being torn away by balls. The wisdom of her precaution was shown during the engagement, many shots piercing it, but it still remained firm to the staff. * * My mother worked many nights until 12 o'clock to complete it in a given time."

The reader will see in a moment the significance of this statement. But for the firm and faithful stitching of these two patriotic ladies, we should probably have had no song of the Star-Spangled Banner.

September the 6th the great British fleet left its anchorage in Chesapeake Bay and sailed for Baltimore; and it entered the Patuxent river, upon which the city stands, five days after. Twelve miles below Baltimore, they landed seven thousand men. Happily, the brave Marylanders and Pennsylvanians were ready for them. Three thousand militiamen, volunteers from Maryland and Pennsylvania, commanded by General John Strickner, well-posted and well-intrenched, withstood this great force, killed their commander, General Ross, and forced them finally to abandon the attack.

While these events were occurring, the great vessels in the British fleet moved up the river, anchored before Fort McHenry, and began to pour upon it that tempest of shot, shell and rockets, which the author of our song has commemorated. Every gun was heard in Baltimore. We can well imagine the feelings of its inhabitants during the twenty-four hours of its continuance.

The author of the song, Francis Scott Key, was not a combatant in the battle, although he witnessed it from beginning to end. During the first operations on that coast Admiral Cockburn and several officers of the British army occupied as their headquarters a house at Marlborough, belonging to an aged physician of the place, Dr. Beanes, whom they detained as a prisoner, lest he should send the news of their landing to Baltimore. He was a particular friend of Mr. Key and his family. Hearing that the Doctor was about to be carried off by the enemy, Key obtained permission from the commanding General of the American forces to go to the British fleet under a flag of truce, and make an attempt to procure the old gentleman's release. In a letter to his mother, written just as he was about to start upon this errand of friendship, he wrote:

"I hope to return in about eight or ten days, though it is uncertain, as I do not know where to find the fleet."

He set sail from Baltimore about the 3d of September, and found the British fleet at the mouth of the Patuxent, bound for the attack on Fort McHenry. He went on board the vessel of Admiral Cochrane, to whom he stated his errand, and asked the release of Dr. Beanes. The Admiral received him with the utmost civility, but informed him

that he could not comply at present with his request, and was obliged even to detain Key himself and his vessel until the operation upon Fort McHenry was concluded.

The Admiral's vessel being overcrowded, he sent the American gentlemen on board the frigate Surprise, commanded by his son, Sir Thomas Cochrane, where they spent the night, and thus moved on to the attack.

During the bombardment of the fort, Mr. Key and his friends, including Dr. Beanes, were sent on board their own little vessel under a guard of marines, and thus they were afforded an opportunity to witness the action.

Of all the thousands of human beings within hearing of that bombardment, there was probably not one so fitted by nature and education to be moved by it. Francis S. Key, then 35 years of age, a lawyer in good standing at the distinguished bar of his native State, was a son of John Ross Key, an officer in the army of the Revolution. He had been noted from his youth up for the ardor of his patriotism, and he had attempted more than once to celebrate in verse the gallant deeds of his countrymen. He had a habit of dashing down lines and stanzas that occurred to him on any old scraps of paper that came first to his hand, and several of his poems were gathered up by his friends from the litter of his office.

All day the bombardment continued without ceasing. During the whole night they remained on deck, following with their eyes the continuous arcs of fire from the enemy's ships to the fort. The anxiety of the poet, and the little company of Americans about him, grew only more intense when darkness covered the scene, and they could form no conception of the progress or the probable issue of the strife.

Suddenly, about 3 in the morning, the firing ceased. As they were anchored at some distance from the British vessels, they were utterly at a loss to interpret this mysterious silence.

Had the fort surrendered!

As they walked up and down the deck of their vessel in the darkness and silence of the night, they kept going to the binnacle to look at their watches to see how many minutes more must elapse before they could discern whether the flag over Fort McHenry was the star-spangled banner, or the union jack of England.

The daylight dawned at length. With a thrill of triumph and gratitude, they saw that "our flag was still there." They soon perceived from many other signs that the attack, both by land and sea, had failed, and that Baltimore was safe. They could see with their glasses the wounded troops carried on board the ships, and at last the whole British army was seen embarking.

A few minutes after the dawn of that glorious day, when the poet first felt sure of the issues of the battle, the impulse to express his feelings in verse rushed upon him. He found in his pocket a letter, and he wrote upon the back of it the first lines of the song. In the excitement of the hour he could not go on with his task, but he wrote some further brief notes and lines upon the letter. Some lines he retained in his memory without making any record of them. When his guard of marines left him free to hoist anchor, and sail for the city, he wrote out the song on the way, very nearly as it now reads, and on reaching his hotel in Baltimore he made a clean copy of it. The next morning he showed it to his brother-in-law, Judge Nicholson, Chief Justice of Maryland, who, judge as he was, had commanded a company of volunteers in Fort McHenry during the bombardment.

We may be sure that such a judge read the song with no critical eye. So delighted was he with it, that he sent it round to a printer, Benjamin Edes, who had also commanded a company of troops in the late operations. An apprentice, Samuel Sands, who was living in Baltimore in 1878, instantly set it in type, and in less than an hour it was distributed all over the city of Baltimore, received by every one with enthusiasm.

But what is a song without music? An old Baltimore soldier told in after years how the words came to be so happily wedded to the music to which it has ever since been sung. A group of volunteers lay scattered over one of the green hills near Baltimore a day or two after the bombardment.

"Have you heard Francis Key's poem?"

said a member of the company, who had just come in from town.

He took a copy of it from his pocket and read it aloud to them as they lay upon the grass. It was called for again. He read it a second time, and a third, more soldiers gathered about to hear it, until the whole regiment seemed to be present.

An actor, named Ferdinand Durang, who was also a soldier, sprung up, rushed into a tent, seized his brother's music book, used by both of them for their flutes, examined piece after piece, and at length cried out:

"Boys, I have hit it!"

He had selected the air of a favorite old English song, called "To Anacreon in Heaven," written by John Stafford Smith, about the year 1772. It was composed for a musical club which met at the Crown and Anchor tavern in London, frequented by Dr. Johnson and Sir Joshua Reynolds. As soon as Ferdinand Durang had selected the music, he mounted a stool and sung it to his assembled comrades with all the fire and spirit of which he was capable. An eyewitness says:

"How the men shouted and clapped! for never was there a wedding of poetry to music made under such inspiring influences. Getting a brief turlough, the Brothers Durang sang it in public soon after. It was caught up in the camps, and sang around the bivouac fires, and whistled in the streets; and when peace was declared, and we scattered to our homes, it was carried to thousands of firesides as the most precious relic of the war of 1812."

The flag of Fort McHenry, which inspired the song of Francis Key, still exists in a tolerable state of preservation. Colonel Armistead caused it to be taken down from the staff after the battle, and its honorable wounds bound about by the very ladies who had made it. It was ever after carefully preserved. He left it to his widow, who in turn, bequeathed it to their youngest daughter, born under it in Fort McHenry, after the bombardment; and she in turn left it to her son, Mr. Eben Appleton, of Yonkers, New York, who now possesses it: It was raised over Fort McHenry for the last time September 14, 1824, at the reception of General Lafayette.

The author of the song died at Baltimore in 1843, aged 64 years, and in 1857 a small volume of his poems was published in the city of New York. He has no living descendants.—James Parton, in *Youth's Companion*.

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The management of the Montgomery county fair gave several yearly subscriptions to the KANSAS FARMER as premiums, for which they have our thanks.

If manure is to be kept rich and in its best condition there should be as nearly no evaporation from it as possible. Hence, a good way is to throw straw or hay or earth over the manure pile unless additions are being made all the time.

The President of the United States recently appointed a Pennsylvania physician, Dr. E. O. Shakespeare, to proceed, under the direction of the Secretary of State, as the representative of the United States to Spain and other countries in Europe where cholera exists, and make an investigation of the causes, progress and proper prevention and cure of the disease, in order that a full report may be made to Congress during its next session.

As an advertising medium the KANSAS FARMER has no equal in this State. Persons having property of any kind which they desire to advertise among country people cannot do better than to try our columns. Here is part of a letter from E. C. Evans & Son, Sedalia, Mo.: They say: "As we have sold farm, stock, and everything, we do not wish our advertisement inserted any longer. We are pleased with your paper and think it our best advertising medium, as most of our orders were from the readers of the KANSAS FARMER. We propose to recommend it to the purchasers of our herd, and other friends."

Reader, please look at the map of Kansas and see where Norton county and Decatur county are situated—away out on the "desert plains," and then remember that they both were represented by most creditable exhibits at the Nebraska State Fair recently held at Lincoln. If those western people do not soon stop, it will become necessary to drop all distinctions between eastern and western Kansas, remembering only that all of us had in the beginning about the same kinds of ups and downs with more ups as we journeyed. It will soon be Kansas, that and nothing more, the prefixes eastern, western, etc., being historic reminders of pre-historic times.

Commerce on Waterways.

In a recent issue of the FARMER attention was called to the action of the waterways' convention at St. Paul, and some thoughts were offered in relation to the decadence of river transportation. It is true that water is a much more tractable agent sometimes than iron or wood, and it is well established that heavy loads may be floated on water a long distance cheaper than they can be carried over land. When canals were first made they afforded improved facilities for transportation, and at that time there was nothing to indicate that any better method would ever be discovered. But railroads have been built alongside the canals and they have captured nearly all the trade.

The subject is called freshly to mind by the interest taken by the people of New York in enlarging the Erie canal. Both of the great political parties at their conventions held two weeks ago adopted resolutions favoring enlarging the canal and improving and strengthening the locks. Two methods are suggested. We learn from the New York Sun that one of the methods proposed is to deepen the canal by digging at the bottom or raising at the top; the other is to enlarge the locks. It is impracticable to deepen the canal, because excavating the bottom would interfere with culverts and disturb the mitre sills of the locks. To fill up on the banks would require rebuilding the locks to such an extent as to make new structures preferable. But, the Sun asks, why should the locks be enlarged when they are already more than adequate to the traffic of the canal? To enlarge the locks would not enlarge the traffic that would pass through them. During the season of 1884 the lockages on the Erie canal at Frankfort were 20,800. In 1873, on the other hand, they were 24,960. Yet in 1884 there were no tolls on the canal, and in 1873 tolls had to be paid. Why enlarge the locks if the present locks are more than sufficient for all the work they have to do? As Mr. Tilden said in his message of 1875, "the theoretical capacity of the canal will be three or four times the largest tonnage it has ever reached. There is no doubt it can conveniently and easily do double the business which has ever existed, even though the locks be not manned and worked with the highest efficiency." If this was true when there were 25,000 lockages in a year, how much more true is it when they have fallen to only 20,800, as in 1884?

And this is the point to which attention is now called. In our article two weeks ago, we gave no figures, being content with the general statement that commerce over canals and rivers is decreasing continually, while that on the railroads is increasing. Discussion of the subject in New York has brought the facts given above and many others. As to the tonnage that passes over the canal and the railroads that run beside it, the Sun gives the official figures, showing that the aggregate tonnage that passed over the Erie and Champlain canal in 1874 was 3,223,112 tons, and that in 1884 it was 2,631,190 tons, a falling off of 591,922 tons. Another fact is to be considered in connection with these. In 1874 the tonnage paid tolls, but in 1884 it did not; the tolls having been abolished two or three years ago. It was thought that the toll system was an injury to the business of the canal, and hence the Legislature made the canals as free as the rivers, the people keeping up the repairs at an annual expense of about \$700,000. But still the business continued to decline.

The entire tonnage of all the New York canals in the year 1874 was 5,804,588 tons, and in the year 1884 it

was 5,009,488 tons, a decrease of 795,100 tons. The total tonnage of two of the great railroads of that State—Central and Erie—for the same years was, in 1874, 12,478,954 tons; for 1884 it was 26,432,016, an increase of nearly 14,000,000 tons.

It is seen from these figures that notwithstanding the state abolished tolls and taxes the people \$700,000 to keep the canals in good condition so that there shall be no hindrance to commerce, business has fallen off in ten years 16 per cent. while in the same ten years the business of the competing railroads increased more than 100 per cent.

Now, the question is, will it pay to open exclusively water routes when we find that people will not use those which have been prepared for their use? It may be that rivers and canals are not alike in this respect, and that commerce would follow rivers when it shuns canals, but why, let us ask, has river commerce fallen off even more than that of canals? There is a good deal to be learned about this matter yet.

A Mistake in Figures.

In our article, "War on Silver," two weeks ago, it is stated that the quantity of pure silver in a standard dollar is 412½ grains. The figures are wrong. There is a mixture of copper with silver in coin—one part in ten—and the mixture is called standard silver. The weight of the dollar is 412½ grains, but one-tenth part of that is copper alloy, so that the quantity of pure silver in the dollar is 371½ grains. We did not observe the mistake until our attention was called to it by a friend who is very much interested in the subject. The standard of fineness in the beginning was the same as that in the Spanish dollar—892 parts pure silver and 107 parts alloy. The weight of the dollar under that standard was 416 grains, containing, however, 371½ grains of pure silver and 44½ grains alloy. In 1837 the standard was changed to 900 parts pure silver and 100 parts alloy, or, as above stated, one part in ten alloy. But the quantity of pure silver was left as it had been, at 371½, and that has never changed since.

Notice to A. H. T. A.

Members of the Anti-Horse Thief Association, Kansas Division: The G. W. Secretary still fails to respond to any of my letters, and in consequence I am under the necessity of assuming the duties of secretary. I have sent blanks for annual reports to all orders that I know of. I presume that there are some that have been omitted, as I had nothing later than the report of '83 from which to get the addresses. If those failing to receive the blanks will notify me, I will forward immediately. To some deputies and orders I sent more than one blank; to all such I would ask to assist in the distribution by sending the surplus to the nearest sub-orders. Again I would urge that every order send at least one representative to the annual meeting at Junction City, October 28th, at 10 a. m. I expect the V. G. W. P., J. J. Sutter, to be present on that occasion.

Fraternally,

M. E. CARSON, G. W. P.
Parsons, October 1, 1885.

An iron railroad tie is now made. It is like one-half of a cylinder—say a stove pipe eight feet long cut in two by a slit through the middle lengthwise, and then the edges bent out into flanges. There are rests on the curve where the rails are to be fastened. The rests are notched so as to receive the rails, and a slight movement ahead of the rails makes it fast.

Raise the Potatoes and Care for Them.

It is about time to take late potatoes out of the ground. Raise them in dry weather. They ought to be uncovered long enough to dry off pretty well, but they ought not to be kept uncovered over night. As soon as they are dry enough so that most of the dirt has fallen off of them they ought to be put on a board floor—any dry and hard substance will do for a floor. They may be piled two feet deep. Cover them, but let the roof be some distance above the potatoes, so that air may pass freely over them. See that the rain is well shut out. When weather turns colder cover lightly with straw or hay to prevent bad effects from frost. When the time comes that freezing weather may be expected, see that they are well protected from the cold. Use the best means at your disposal for their preservation. If you have no potato storage select a piece of dry, well drained ground, on a north slope, is you have it. Lay a bed six inches thick of dry hay or straw, as large as may be needed. On that pile the potatoes in the form of a rick. They ought not to be more than thirty inches deep in the middle. Cover the pile with hay or straw, laying on carefully so that if need be it will help some in shedding water. Cover about six inches, and then put on outside covering of earth all over that will be the depth of the spade or shovel. Take the dirt from the space next adjoining the pit. And take the earth out evenly so that there will not be any little water holes in the bottom when rain comes. After this is all done run a furrow from the ditch about the pit out to a lower place, so that perfect drainage is established. If the pit is out on the open prairie and not protected from winds stand some corn stalks against the pit and keep them there by brush or any other device that you think of.

If one has potato storage in barn or other out house or cellar, two things only are necessary, one is to keep all rain out, and the other to have straw or hay enough all around the potatoes to prevent them from freezing.

In handling potatoes they ought not to be bruised more than is really unavoidable. They soon show signs of rot at the bruised places, and when potatoes begin to rot there is danger of loss. They should be examined occasionally during the winter, whether in store or pit, and whenever they begin to rot they need prompt attention. Of course the farmer will watch the weather closely and not expose a pit when the temperature is near or below freezing point. But by a little care and hard work a large pit may soon be handled, the rotten potatoes thrown out and the sound ones dried and re-pitted. The better plan, if the weather is not too severe and the market too low, is to sell the good ones at once. And when potatoes in a bin begin to rot remove them at once, dry out the bin thoroughly, throw out all the damaged potatoes, dry the good ones and replace them in clean straw or hay. During the time required to make the change keep the potatoes secure from freezing by covering with straw, cornfodder, or anything that will be a sufficient protection.

If there is any other place for potatoes they ought never to be put into cellars in large quantities, if the cellar is under a building that is occupied by man or beast near to the potatoes. As long as they remain dry and healthy there is little or no danger to be apprehended from their proximity; but when they begin to decay offensive and unhealthy exhalations continually pass from them.

An agent of the government was sent to Texas, recently, to locate a cattle-fever line, that is a line which shall mark the boundary of the region in which cattle will communicate Texas fever to other cattle. Nothing is definitely known yet as to the location but it is believed that the line will be south of the Texas Pacific railroad.

If any of our readers want to prepare some of the very best manure for garden, or lawn, or vineyard, or flower bed, or other special purpose, make a rail or board pen square or round or any other form and of size to suit your taste or convenience, put in about a foot of stable manure, moisten it well, and cover it with six inches or so of leaf mold from the timber, or muck from a pond or swamp, then put in another layer of manure, and another layer of earth, and so continue as long as you wish. Cover to keep the sun and heavy rains out, but keep the compact moist all the time. The layers may be made as the manure is made, when there is no special hurry.

The mercantile failures in the United States for the quarter ending September 30, as reported by R. G. Dun & Co.'s mercantile agency, number 2,173, against 2,346 in the corresponding period in 1884. The liabilities show a remarkable decline, amounting to \$23,800,000 against \$56,600,000 in the third quarter of 1884. For the nine months last passed the failures show a slight increase in number over those of last year, but not the liabilities, being in number 8,161, compared with 7,856, for the first nine months of 1884, an increase of 311. The liabilities, however, were only \$87,000,000, compared with \$101,000,000 for the first nine months of 1884.

England has a postal telegraph—that is a telegraph connected with the postal service. A few days ago the rates were reduced one-half and the business began to increase at once, showing that many persons will use the telegraph rather than the mail oftentimes when the expense is not beyond their ability to pay. The dispatch announcing the change says: The post office authorities were not disappointed in their expectations of a rush of telegraph business on the granting of the sixpenny telegram, which went into effect to-day. The returns up to 5 p. m. show a largely increased business. The majority of the messages sent were kept down to the sixpenny rate. The public condensing them to the limit of twelve words.

The honey locust tree is recommended as a sure grower in western Kansas. The Santa Fe Railway company made some experiments in tree planting some years ago. Groves were planted at different points along the line, and a correspondent of the Ness county *News* refers to one of them thus: "At Speareville (a high dry exposed situation) the cottonwoods and box elders soon died. Gaps appearing in the rows of some of the other sorts and the great and long continued drouths of succeeding years caused the entire plantation to be abandoned. The fence was thrown down and the alleged grove became a browsing ground for stray cattle. Years passed; years of drouth and discouragement, hot winds and "hoppers," and the plantation was given up to a dense growth of weeds, while here and there buffalo sod covered the ground. In spite of all this there was one variety which outlived them all. Of the honey locusts not one had died—many of them, though standing in thick buffalo sod, had made a fair growth. Surely this is a sufficient test."

What Will the Weather Be?

The second number of *The Future*, Prof. Blake's paper, is before us. Our readers of four weeks ago remember that we made note of the first number and re-printed a few paragraphs from it. It is but fair to say that the predictions there made were, in the main at least, verified.

No. 2 contains a similar prognostication as to the weather during October inst. and November prox. The editor says:

My calculations at the time of this writing, September 23, do not show any extremes or extraordinary weather for October.

Storms and showers will be scattered over the greater part of North America in about the usual proportion for October; some localities receiving a little too much, while others will not have quite enough, but on the general average it will be about normal.

There will be some sharp frosts, and towards the end of the month some freezing weather in the northern States, but a large part of the month will produce very fair October weather, with a week or two of moderately warm weather. Taking the whole month together, it will be slightly cooler than the average for October.

People who intend putting in winter wheat should now get it in as soon as possible, so that it may get well rooted before the ground freezes, as there will be cold weather in November next that will freeze the ground, though not very deep, in most of the northern States; and wheat that is put in so late that it does not get well rooted before the ground freezes, stands a poor chance to live through the winter. This year the cold in November will be earlier and more severe than usual, but as most of October will be quite a favorable month for fall work, most people, by diligence, can be well prepared for winter before the early cold weather will seriously interfere. The frosts in November will extend nearly to the Gulf of Mexico, and people who are not forewarned and forearmed may be damaged by the frost injuring the sugar-cane. I do not, however, expect that the October frosts this year will be serious south of the Ohio river.

Prof. Blake says he will give "details fully for November" in the next number of *The Future*.

In the same article, prepared, as he says, September 23, he speaks of the reunion at Topeka, predicting bad weather, and it is good enough to go to record. He said: "I am sorry that the Soldiers' Reunion at Topeka, which begins September 29, could not have been held one week sooner or two weeks later, as the last few days of September and the first week in October will produce rain storms, some of which will be very apt to occur during the reunion, and be followed by frost, while later in the month there will be one or two weeks that will have no storms in Kansas, and not many in other States."

On Wednesday evening during the Fair, the weather was threatening—cloudy, indicating rain. Thursday morning it did rain, and the streets were so muddy that a great many old soldiers did not join in the procession on that account. But toward noon the clouds cleared away and the afternoon was pleasant. Saturday was cold and Sunday morning's frost killed a great many tender plants that ought not to have been left outdoors so long.

In an article devoted to the wheat crop of 1886, *The Future* says that it will be good, and he advises farmers to sow largely wherever they can do the work well. We quote a few extracts:

In America there will be only one spell of weather during the coming winter and spring that will be hard on the winter wheat, and after a full investigation I conclude that the damage from winter-killing will not exceed 5 per cent.; hence it will be as favorable as we could reasonably ask. As I have stated in another column, there will be some cold weather in November, but it will not be severe enough to hurt wheat unless it is put in very late. It is therefore advisable for all who can to put in

a large crop of wheat between now and November 1st. * * *

I would also advise farmers to put in winter wheat as far north as their experience shows it to be a profitable crop, with a favorable winter, with the intention to put in less spring wheat next year, for next season will not be favorable for spring wheat. * * *

I also conclude that in 1886 the wheat crop in England will be a very good one, at least the weather will be generally favorable for it. * * * In Russia, however, the reverse will be the case. There will be places in Russia where the wheat crop next year will be fair to good, but in a large part of Russia the weather will be such as to make the wheat crop of 1886 a comparative failure. As to the balance of Europe, I cannot speak definitely.

September Weather.

Prof. Snow, in his September weather report, among other facts, gives the following:

The entire absence of frost, which characterized this month, is not an exceptional feature for September in Kansas. Nine of the eighteen Septembers of our record have been equally favored. The average date of the first autumn "hoar frost" is October 1st, and of the first "killing" frost October 20th. The mean temperature of the month just closed was below the average. The rainfall was almost double the average, and nearly all of it occurred during the first week. The wind-velocity was twenty per cent below the average, and the cloudiness was nearly normal.

Mean Temperature—65.42 degrees, which is 0.99 deg. below the September mean. The highest temperature was 83 deg., on the 24th; the lowest was 49 deg., on the 2nd, giving a range of 39 deg. Mean temperature at 7 a. m., 59.43 deg.; at 2 p. m., 74.28 deg.; at 9 p. m. 64.00 deg.

Rainfall—5.41 inches, which is 1.97 inches above the September mean. Rain fell on eight days. There were 4 thunder showers. The entire rainfall for the 9 months of 1885 now completed has been 30.95 inches, which is 2.26 inches above the average for the same months in the preceding seventeen years.

Patents to Kansas People.

The following is a list of patents granted Kansas people for the week ending October 21, 1885; prepared from the official records of the Patent office by Mr. J. C. Higdon, solicitor of patents, Diamond building, Kansas City, Mo.:

Car axle-bearing—Peter Cool, of Manhattan.
Refrigerator—James Castell, of Blue Rapids.
Door shield—Myron Camp, of Sedgwick.
Gate spring—Kious & Morton, of Le Roy.
Automatic blotter—Alfred Ross, of Wichita.
SEPTEMBER 26TH.
Store service—Elwood Chapman, Emporia.
Steam cooker—Anderson & Sherman, Ellsworth.
Adding machine—Reuben F. Wilcox, Augusta.
Stock waterer—A. J. Balch, Halstead.
Fruit jar fastener—Jacob H. Cassidy, Lavenworth.
Medicine for diphtheria—John A. Ream, Barnes.
Double churn—Isaac Lantz, Lane.

Inquiries Answered.

HOVEN.—R. E., your cows ate too much clover. A cow should never be turned into growing clover when she is hungry. They eat too much, bloat and often die.

TO MEASURE HAY.—Common, well-cured hay in mow or stack runs at about 540 cubic feet to the ton. Multiply together the length, width and depth in feet, and divide by 540; or multiply the dimensions in yards and divide by 20.

Timothy and millet are heavier—about one-fifth. For these divide by 430 instead of by 540. There is no exact rule because of the ever varying density of hay even of the same kind. The width of a stack must be averaged.

The mortality statistics of cities show a marked difference in the death rates of white and colored people. It is argued by some economists that colored people increase so much faster than whites do that in the course of time the southern states will be wholly in possession and control of persons of negro descent. The death rate among the blacks is so much greater than that among the whites as to suggest whether, in the long run, it will not be found to fully offset their greater proportional increase. The *New Orleans Times-Democrat*, commenting on the mortality returns, gives some of the figures and its own conclusions. It is probable, that journal says, that the mortality now prevailing among the negroes in the United States, but particularly in the cities, from year to year is greater than that in any civilized country; and it must in the course of time, as the urban population of the south increases, and the negroes crowd into the towns, seriously affect their ratio of increase. This excessive mortality is noticeable among the negroes of the northern as well as the southern cities; but it is naturally more in the latter, growing higher in proportion to the percentage of the race to the total population. In Charleston the death rate among blacks is 45 to 23 for the whites; in New Orleans, 46 to 22; in Richmond, 32 to 19; in Baltimore, 38 to 23; in Washington, 32 to 17; in Louisville, 32 to 20. In Washington there are more than twice as many whites as negroes, and yet the latter constitute a large majority of the deaths. A circumstance which shows that much of this mortality is due to dissipation as well as bad sanitation is the fact that there is a large excess of male deaths, the number of male negro adults dying being, in many instances, as two to one compared with the females. That the negroes have apparently increased so fast, notwithstanding their losses, is due to the fact that the great bulk of population in the south live in the country districts.

St. Louis dealers in dairy products recently organized an association for the purpose of opposing the sale of bogus butter in that city. It will be uphill work. If the dairymen of the country should make an organized effort to prevent the sale of imitation butter under misleading names they might accomplish a great deal of good for their industry. The right to manufacture and sell a healthful article of food cannot be questioned. But the right to require honest markings in trade inheres in all legislatures. If a man makes oleomargarine and offers it for sale under that name, he violates no law and cannot be molested on that account. And dairymen can force the issue that far. They can compel manufacturers of imitations to give proper names to their products so that purchasers need not be deceived. What dairymen should insist upon is honesty in trade, to the extent of giving truthful names to the articles they deal in.

The salvation army is bringing reproach upon their religion. Howling on the public streets has not enough religion in it to commend the practice to the people of to-day. True religion is humble, and impels to deeds of kindness. It is modest and acts by deed rather than word.

Horticulture.

SEVERAL INTERESTING SUBJECTS.

PEAR BLIGHT.

The American Pomological Society held an interesting meeting a few weeks ago at Grand Rapids, Michigan. From a report of its proceedings, as published in the *Daily Democrat*, of that city, we take a few extracts on points of special interest.

Prof. Arthur, Botanist of the New York Agricultural Experiment Station, spoke on "Injurious Fungi," and this is what the report gives of his address:

"The experiments on which the address was based have been carried on at the Agricultural Experiment Station at Geneva, N. Y., during the last two years. The first work in this line of investigation was done by Prof. Burrill, of Illinois, who showed by many experiments that the disease may be introduced into healthy branches of the pear tree by transferring a minute particle of diseased tissue or the viscid substance accompanying the disease to the healthy branch. He also found that germs or bacteria were an invariable accompaniment of the disease. The experiments at Geneva corroborated this.

"The inoculation was soon found to be accurately conveyed when a drop of water was used which had been in contact with diseased pear wood and had taken up some of the germs as when the exudation or diseased tissues were used. The disease so introduced in healthy tissues showed itself by the blackening of the bark in about a week on an average. It was found to grow the best in the most succulent tissues, such as the tips of young shoots, and especially in unripe fruit. It progresses through the limbs most rapidly in the warmest weather, but is not killed by cold, being able to make a slow growth all winter.

"*Mode of Attack.*—Experiments to learn the manner in which the germs enter the pear tree were at first unsuccessful. Diseased branches tied into a tree of healthy growth did not communicate the disease. Apparatus arranged to draw air across diseased branches and then over healthy ones, gave no results. A potted pear tree was watered for over a month only with water filled with the germs of the disease and still remained healthy. An arrangement to permit a slow dripping of water containing the germs upon very young pear growth did, however succeed in conveying the disease to healthy tissues. It was observed the present spring that an English hawthorn had blighted badly. The short spurs on the sides of the limbs bear clusters of flowers and it was observed that these flowers on the blighted limbs had made no growth since the time of opening, although it was the latter part of June, and the unblighted limbs had the fruit two-thirds grown. The germs of the disease had evidently entered through the flowers a full month previous, and had only recently been conspicuous by the dying of the leaves. But many of the twigs were dead where there were no flowers; here the germs had evidently entered through the tenderest tissue of the growing tip and progressed downward, as was shown by the end leaves being driest and apparently longest dead.

"*Growth of the Germs Outside of the Tree.*—It had now been shown that the diseased germs enter the tree through the tenderest tissues at the ends of the branches and in the flowers, usually in early spring, but where the germs come from had not yet been discovered. The first trial was to learn if the germs would thrive outside the living tissues of the tree. A nutritive solution was made by boiling some cornmeal in water and using the colorless liquid. A particle of blighted pear twig was introduced into such a solution and in one to two days at ordinary room temperature the whole liquid was filled with the germs. It was also found that they would grow in hay tea, made by boiling hay in water, and in various other things, including barnyard manure, although not very vigorously in the last. It now became evident that the course of the disease is usually something like this: The germs in a diseased tree escape to the surface in the sticky exudation, they are washed free of the ground and multiply

indefinitely in decaying vegetable substances either beneath the trees or in marshy or wet places at a distance. Here they may pass the winter and even live for several years. They are borne into the air when dry by the winds, or are carried up by evaporation. Being so extremely minute they may be borne through the air for great distances and coming in contact with the moist surface of tender twigs or the centre of the flower, find entrance to the tree and again produce the disease.

"*Proof that a specific germ causes the disease.*—So far it has been assumed that the germs accompanying the disease are the cause of it. The attempt was now made to prove rigidly that such is actually true. It will be remembered that the disease was communicated by inoculating with the diseased juices washed out with water. It is evident, therefore, that the disease must be due to one of two things; either to the germs or to the juices which accompany them. This was done by a succession of cultures. A small drop of water containing pear blight germs was introduced into some corn meal solution in which all life had been killed by boiling it. The germs increased by growth and filled the liquid, the juices accompanying, not being living matter, did not increase but were diffused through the whole liquid, and so greatly diluted. A small drop of this culture was introduced into a fresh solution of corn meal; the germs multiplied and filled the liquid, while the very small part of the original diseased juice, which had been introduced with the germs, was again greatly diluted. Again a drop from this culture was transferred to a fresh preparation, and so on through six cultures. From the last culture a drop was put into growing pear tissues, three months from the time the germs were taken from the tree, to start the first culture, and the disease was produced in the usual form. By this means the germs had been kept alive by constant growth, while the juices accompanying them had been so enormously diluted as to be practically absent. The attempt was now made to show that the juices of the disease by themselves could not produce the disease. This was done by filtering out all germs from an infusion made by slicing up diseased twigs in water, by passing it through a fine porcelain jar, such as are used for electrical batteries. The juices thus obtained, free of all germs, in no case produced disease when inoculated into healthy tissues. The proof was therefore absolute that the germs only were the cause of the pear blight.

"It was now necessary to show whether any kind of germs would cause blight, or whether there is but one specific kind. For this purpose inoculations were made in pear trees as before, using the germs from rotting tomatoes, from various kinds of decay, etc. In no case was there any disease produced."

Prof. Green, of New York, spoke on "Hardiness of Fruits." He said:

"I am considerably interested in the hardiness of fruits. Therefore, I often ask myself by what process does a variety become hardy and how is it that we expect hardiness in a variety originated north, and do not expect it in a variety originated south? I gain an insight into this subject by considering the similarity between plants and animals. Should I ask you to specify the distinctive difference between the animal and vegetable kingdom, you would doubtless be puzzled in answering, for there are no functions of animal life differing from the functions of the plant life sufficiently to define definitely the dividing line.

"The question of a digestive apparatus does not distinguish animals from plants, as some animals appear to have no digestive apparatus while plants and trees may in a certain sense be said to digest that which nourishes them; neither can the difference between animals and plants be established on the grounds that plants, vines and trees only can be propagated by cuttings, buds and scions, for there are animals that can be cut in pieces, each of which develops into a perfectly-formed animal. It has been thought that the distinguishing feature is instinct. It may be that plants and trees are not possessed with instinct, but if they are not, what shall we say of the impulse that leads the vine to throw out its tendrils in the direction of a support, and twine itself about it with the greatest tenacity? Or what shall we say of the roots of a vine

that pushes out a long distance in the direction of a supply of food in shape of a manure heap, or for a supply of water far beneath it, or to one side? Or what shall we say of a vine planted in a dark cellar which escapes from its prison and rears its head with pride into the sunshine above? If these are not evidences of instinct what shall we call them?

"That plants have peculiarities similar to those of animals is apparent from the fact that there are organisms which scientific men are unable to determine whether they are plants or animals. The similarity between the habits of plants and animals teaches me that we may be aided in arriving at conclusions relating to the hardiness of fruits, by considering how animals are improved and made more hardy, also to improvement in other ways, and to treatment of diseases, as we have better physicians for animal than vegetable disorders. Therefore in answer to the question, 'Where do the plants come from that are found in the north, and how came they possessed with hardiness?' I ask from whence came man and the beasts of such northern lands, and by what process did they become possessed with hardiness?

"The birthplace of man and most animals was in a mild climate. Their march northward has been by slow stages, occupying many thousand years, during which they have accumulated and inherited hardiness enough to withstand the climate of the arctic regions. The birthplace of the majority of fruits was likewise in a mild climate, from whence they have migrated throughout the ages. While plants are deprived of the peculiar methods of locomotion possessed by animals, they make free use of others' wings and legs, and of lakes and streams.

"The seeds of fruits will usually remain in the stomachs of birds and beasts several days and finally be deposited several hundred miles distant from their birthplace without loss of vitality. Plants have thus and by other methods migrated north and south. Those plants best adapted to a northern climate that rove south perish under the scorching sun of the tropics, but such as migrate north become more hardy as they progress northward. The gradual increased exposure is met by the response invariably given by plants and animals when placed in a perilous position, which is, to fortify themselves against disaster. Thus the parent accumulates hardiness by gradually increased exposure. The offspring inherits the hardiness of the parent and acquires more hardiness from further exposure, until in the course of ages the hardiest varieties are obtained.

"This natural process is too slow for short-lived man, who seeks to hasten it by long leaps. Instead of occupying ages to remove a seedling from New Jersey to Minnesota he ships by express at the rate of forty miles an hour. The change of climate is too sudden and violent, and the result is that, like many other good things, the petted variety dies young.

"Man seeks with more wisdom to import a variety to our northland that through long generations of gradually increased exposure has become hardy in foreign climates. While this meets with partial success we must remember that the inherited peculiarities of such imported varieties are not such as varieties inherit on our own soil. Therefore from our native stock must we look for our best success."

Mr. L. A. Goodman, of Missouri, read a very instructive paper on "Lessons of the World's Fair." He said substantially: Care in the collecting and handling of fruits and a good cold storage to hold them in. We learn that those fruits with perfect markings of the variety, good size, color, quality, freedom from insect marks, scabs and rusts, nicely arranged and correctly named, are the ones that received the premiums. We think that steps should be taken to give certain rules in judging all kinds of fruits, points of comparison, and a certain number of points for decision; a scale, rather, should be given, and then the judges can work to better advantage and to better satisfaction. Flat tables used for the display, and a plate of apples or pears should contain no more than five speci-

mens, as that makes a complete pyramid. A glass or partly glass conservatory is believed to be the best for a good display, one where the light comes down from above, and the sides show to best advantage. Judges deciding do not always give the points needed. A change in our premium list, so that our premiums will give a little better idea of what it is given for. The necessity of this change is seen in every decision, and steps should be taken by our Society in this matter.

Here is a very brief outline of Prof. Cook's lecture on "Economic Entomology." The lecturer had displayed on the stage five charts illustrating the different kinds of insects and their growth from the egg and larvae to the perfect insect. The major part of the insects which are so destructive to plant life work either entirely, at night or are so hidden in the soil that the husbandman is not able to discover them. Every vegetable or fruit tree feeds a great number of different kinds of insects. The lecturer showed by statistics how much the country loses every year by the ravages of insects. The known amount of damage in money done last year was \$2,000,000, and the unknown damage was probably as much more. The number of species of destructive insects is increasing every year and the problem of warring against them is becoming more and more important. A large number of these insect pests are very formidable, because as a rule they have no bird foes in this country. A study of insect life shows that they change their tastes and habits and in time they leave one plant and attack another. As soon as they destroy one kind of vegetable or fruit they feed on some other. This shows that eternal vigilance is the price of good harvests. A few years ago California was absolutely free from injurious insects, while now that state is infested as much as any other. All insects have their foes and the reason why these scourges come often in epidemics and stop as suddenly is that these foes to insect life are working all the time. A knowledge of these insect foes, both natural and artificial, is absolutely necessary to the farmer and fruit-grower. A knowledge of the habits and life of insects is also necessary so that the best means of exterminating the pests can be learned. Experimenting on the different ways of getting rid of insects should be encouraged and money should be expended in carrying on experiments. Economic Entomology should be studied by all persons who expect to succeed in fruit-growing and farming.

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In the Dairy.

Something About Feeding Calves.

In experimenting with feeding calves of different breeds, Prof. Henry gives a series of tables showing the progress made, and states that the younger the calf the greater the proportionate gain. To ascertain the value of the milk fed it is assumed that each pound of growth is worth 4 cents, and that hay is worth \$8, oil meal \$25, bran \$12, and ensilage \$3 per ton, and oats 32 cents per bushel or a cent a pound. Two of the calves were sold before the expiration of the trial, so that the average period is, in fact, twenty-one weeks instead of twenty-two. The average return from the six calves for the whole period of the twenty-one weeks, after allowing for all other food articles consumed at the prices before named, is 48 cents per 100 quarts of skim milk, or about 24 cents per 100 pounds. Whether the assumptions that lead to the above conclusions are correct or not, each reader can easily settle in his own mind; the prices allowed for the food articles are certainly high enough, and a gain of 100 pounds in the weight of a calf would seem low enough at \$4. If the value of these several articles is reduced, then the value of the skim milk rises proportionately. I am confident from experiments made that 100 pounds of growth cannot be made for \$4 when the calf is allowed to suck the cow. Twenty-four cents for 100 pounds may not seem a very high price for skim milk, yet with the present prices for cheese, full milk at the factory can scarcely realize over 50 cents per 100 pounds to the producer. These six calves together gained 1,544 pounds, or over three-fourths of a ton, in twenty-one weeks, being an average of over twelve pounds each per week. The first three of the calves stood in a basement barn, where it seldom froze during the coldest weather. The last three stood in a barn only partly occupied by stock, and where it froze almost as hard as out of doors. The conditions were certainly no better than the average farmer can give to young stock.

We have had both good and poor results from feeding skim milk, and as a summary of experience offer the following hints:

Feed skim milk lightly. Eight to nine quarts in three feeds is sufficient to make a thrifty calf gain from twelve to fourteen pounds a week.

More calves are killed by overfeeding than underfeeding.

Feed three times a day if you wish good results.

Never let the milk go into the calf's stomach colder than 98 degrees F. Use a thermometer regularly in determining the warmth of the milk.

Make lime water by putting a piece of lime the size of a hen's egg into a jug of water and shaking. When the water is clear it is ready for use. Keep the jug corked tight at all times. A tablespoonful of the clear lime water may be given with each feed if the calf shows any signs of scours. If scouring occurs reduce the amount of milk at once. An egg stirred in the milk and parched flour are both excellent remedies. Overfeeding, not feeding often enough, irregularity and cold milk are the principal causes of scouring.

Teach the calf to eat whole oats by the time it is three weeks or a month old by slipping a few small handfuls into its mouth just after it has drunk its milk. When it has learned to eat them keep a supply before it in a little box. If you haven't oats enough for the horses and calves both, let the horses go without rather than the calves. Don't

waste time grinding the oats. Bran, oil meal and other articles are good, but oats is the most satisfactory of all. I never knew of a calf eating too many. While young keep each calf tied by itself, and if the flies are troublesome darken the stable. Don't put the young things out into the hot sun with the idea that the little grass they may eat will compensate for the blood sucked by the myriads of flies that pester them. We have had less trouble and better results with winter calves than with those that come in the spring.

Dismiss all prejudice that a skim milk calf must be a stunted, unsightly thing. We are making as great advancement in calf rearing as in butter or cheese-making, and old ideas must be put away.

Coarse Fodder for Cows in Autumn.

Here are some practical ideas taken from one of our exchanges, but we do not know what one is entitled to credit:

There is usually quite an amount of coarse fodder on the farm that must be fed out at some time. This coarse fodder is not convenient to store and keep on account of its bulk and unwieldiness. Corn fodder is especially noticeable in this respect. It is too bulky and unhandy to store away in the barn to be fed along through the winter like hay. It occupies too much space and causes too much trouble in the handling.

Such fodder had much better be stacked in the yard and fed in autumn. Something must be fed at this time, and corn fodder can never be fed more conveniently than in the yard in autumn. Corn fodder can be stacked in long ricks so that it will take but little damage from the weather. For ordinary-sized corn the stack should be about ten feet wide so that two tiers may be laid butts out and tops lapping just enough to bind the whole together. The middle may be kept sufficiently full by laying in bundles lengthwise of the stack. In topping out the stack, the bundles should be laid lengthwise in the middle of the stack until it is raised up to a good fair pitch in the center; after the bundles are again laid crosswise but now at an angle usually called high pitch. Two or three tiers should be laid in this way, the tops of the last tiers coming together at the ridge, where they should be tied in pairs, thus forming a kind of thatched roof. Corn fodder can be easily handled in this way, while it is a very difficult and tedious job to get them up into a loft or on to a bay pretty well filled up with hay.

A section of the rick can be fed down at a time, so that not much injury can occur to the fodder while being fed out.

Cattle seem to relish good bright corn fodder in autumn much better than they do the best hay. We know of nothing in the way of fodder that is better for milch cows in autumn—just as they come from grass, than bright, well-cured corn fodder, with once in a while a "nubbin" left on, as is usually the case. Cows are inclined to shrink a little in their milk at this season of the year at the best, but this will keep them up in milk much better than hay will.

But because corn fodder is fed in the yard, it should not be wasted. If scattered about on the ground and in the fence corners, as we often see it, much of its value as a fodder is lost. It is trodden down, fouled over, and rendered unfit for food before it is half eaten. The bullies of the herd will drive the weaker members over and through the piles, snatching a mouthful and dragging an armful out and tramping it down into the mud at the same time.

Racks ought to be provided for all yard feeding. If these are used no more



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waste will occur in yard feeding than in feeding in the stable. Long racks may be so constructed and placed as to form divisions of the yards, and thus separate the herds, keeping the weaker and more timid ones by themselves, where they will stand a fair show. Cows heavy with calf ought surely to be separated from the rest of the herd.



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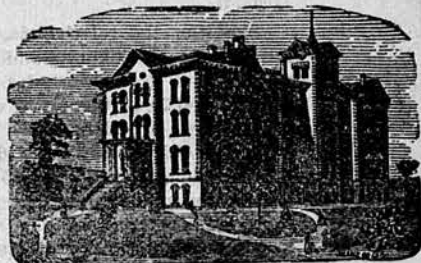
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This, That and the Other.

Steaming white wood and submitting it to an end pressure renders it so tough, it is said, as to require a cold chisel to split it.

Brandy used to be the drink *par excellence* of the Southerner. It was displaced by whisky; and now whisky is giving way to wine, ale and beer.

A Russian inventor has devised means of so impregnating wood with a certain chemical that matches made from it can be used several times over.

Claims to the number of a dozen or so fell recently from a clear sky at Mankato, Minn., the velocity of their descent shattering the shells. The claims were alive and about four inches in length. The phenomenon, it is said, was witnessed by several trustworthy men.

An Indian headstone, about the size of a large water-pitcher, and similar in shape, except that the top is oval, was found in the Housatonic river lately by a resident of Brookfield, Conn. On the oval shape part are wrought two distinct hieroglyphics. On the sides of the stone are also curious carvings. Experts pronounce it one of the finest specimens of Indian headstones in the country.

A Chinese Viceroy has propounded a new earthquake theory. In a memorial to the throne this high official attributes an earthquake of last January to the mildness of the winter, which caused an excess of "yang," or male element of nature; although the shock was in a measure due to local officials who neglected their duties, and thus failed to gain the harmonizing influences of Heaven.

Regarding the relative degrees of hardness, shellbark hickory stands highest, and, calling that 100, white oak is 84, white ash 77, dogwood 75, scrub oak 73, white hazel 72, apple 70, red oak 69, beech 65, black walnut 65, yellow oak 60, white elm 58, hard maple 56, wild cedar 55, yellow pine 54. Ironwood, hornbeam, almond, hard beech, teak and thorn are of notable hardness, and, of course, very serviceable where that quality is essential.

Professional beauty on the Pacific coast finds lucrative employment as a pretended illustration of the merits of a patent medicine. A wonderfully lovely young woman travels in the chariot of a vendor of medicine, which, he declares, causes the perfection of her complexion. He sells a tonic, too, to which he attributes the abundance of her hair, and drugs for the increase or reduction of flesh to her standard.

The champion family for elaborate names is to be found near Hardee, Ark. The father's name is Elisha Shirley, his wife's name is Harriet Susannah Maria Jane Shirley, and their oldest daughter, 15 years old, is called Ann Elizabeth Dixie Shirley. Then comes Benjamin Kirby Smith General Hardee Shirley, aged 13; Robert Enos Napoleon Bonaparte Lee Wilkes Booth Shirley, who is 9 years old; John Thomas Emanuel Forrest Champion Gatewood Shirley is 7 years old, while Joseph Wheeler Zollcoffer Stone-wall Jack or Sam Hildebrand Sterling Price Shirley is 5 years old. The family ends with Mary Virginia South Carolina Florida Georgia Alabama Louisiana Shirley, who is 3 years old. Surely it would be hard to beat this.

Are You Going South?

If so, it is of great importance to you to be fully informed as to the cheapest, most direct and most pleasant route. You will wish to purchase your ticket via the route that will subject you to no delays and by which through trains are run. Before you start you should provide yourself with a map and time table of the Kansas City, Fort Scott & Gulf Railroad (Memphis Short Route South). The only direct route from and via Kansas City to all points in Eastern and Southern Kansas, Southwest Missouri and Texas. Practically the only route from the West to all Southern cities. Entire trains with Pullman Palace Sleeping Cars and free Reclining Chair Cars, Kansas City to Memphis; through Sleeping Car Kansas City to New Orleans. This is the direct route, and many miles the shortest line to Little Rock, Hot Springs, Eureka Springs, Fort Smith, Van Buren, Fayetteville and all points in Arkansas. Send for a large map. Send for a copy of the "Missouri and Kansas Farmer," an eight-page paper, containing full and reliable information in relation to the great States of Missouri and Kansas. Issued monthly and mailed free.

Address, J. E. LOCKWOOD,
G. P. & T. A., Kansas City.

THE MARKETS.

By Telegraph, October 5, 1885.

LIVE STOCK MARKETS.

New York.

BEEVES—Receipts 3,150. Market had a firmer tone and fairly active trade in the morning, but some late arrivals had to be sold at easier prices. For to prime native steers sold at 4 00-4 75, extra native steers 3 50-4 00, and Colorado steers at 3 85-4 67 1/2; general sales were at 5 00-6 00 per 100 lbs. for native steers and 4 00-4 40 for Colorado stock.

SHEEP—Receipts 1,700. Shade stronger for good stock and a good clearance. Extremes, 3 00-4 50 per 100 lbs. for sheep, and 4 50-6 25 for lambs.

HOGS—Receipts 16,100. No important changes.

St. Louis.

CATTLE—Receipts 2,300. Shipments 500. Market steady with an active butcher demand. Native butchering stock 2 25-4 00, stockers and feeders 2 50-3 75, grass Texans 2 50-3 50, Indian steers 2 60-3 80.

HOGS—Receipts 3,200. Shipments 3,200. Market active and lower. Packing 4 00-4 80, Yorkers 4 10-4 15 butchers 4 50-4 20.

SHEEP—Receipts 800. Shipments 1,400. Firm and active for good muttons. Common to fair 1 75-2 50, good to choice muttons 2 60-3 25, fancy 3 75, Texans 1 75-3 00, lambs 2 50-3 75.

Chicago.

CATTLE—Receipts 900. Native steady. Western 10c lower. Export steers 5 75-6 00, good to choice shipping steers 5 25-5 50, common to fair 4 00-4 50, native cows 2 15-3 50, native stockers and feeders 2 75-4 10. Texas 2 90-3 40.

HOGS—Receipts 23,000. 50c lower. Range and mixed 3 55-3 65, packing and shipping 3 65-4 00, light weights 3 45-4 15.

SHEEP—Receipts 3,000. Unchanged. Common 2 50-2 75, fair to good 3 00-3 40, choice 3 75-4 00.

Kansas City.

CATTLE—Receipts since Saturday 4,353. The offerings to day were larger than for some days, and the market steady for good, while common were weak. Texas 2 10-3 40.

HOGS—Receipts since Saturday 4,607. The market to day opened weak, with values 5-10c lower. Extreme range of sales 3 40-3 90, bulk at 3 60-3 90.

SHEEP—Receipts —. Market quiet. Sales: 123 natives av. 94 lbs. at 3 00.

PRODUCE MARKETS.

St. Louis.

WHEAT—Generally higher but unsettled. No. 2 red, cash 94-94 1/2c.

CORN—Slow but steady. No. 2 mixed, cash 40 1/2-41 1/2c.

OATS—No. 2 mixed, cash 24-25c.

RYE—Dull at 57 1/2-7 1/2c.

Chicago.

WHEAT—October 84 1/2-85 1/2c, November 86 1/2-87c.

CORN—There was a fair shipping and moderate speculative business, prices ruling a shade higher and closing firm. Cash 42c, October 41 1/2-41 3/4c.

OATS—Ruled firm and a shade higher. Cash 2 3/4-25c.

RYE—Steady. No. 2 at 59c.

BARLEY—Quiet. No. 2, 69-70c.

FLAXSEED—Lower, at 1 29 1/2c for No. 1.

Kansas City.

WHEAT—Receipts in regular elevators since last report 7,413 bus, withdrawals 2,588 bus, leaving stock in store as reported to the Board of Trade to-day, 734,776 bus. There was a quiet market on 'change to day. No. 2 red was nominal, except for December, which sold at 80 1/2c. Saturday's asking price. No. 2 red, No. 2 and No. 3 soft were nominal.

CORN—No. 2 corn: October, first half no bids, 32 1/2c asked; the "year," 25c bid 25 1/2c asked.

OATS—No. 2 cash, no bids. 23 1/2c asked.

RYE—No. 2 cash, 47 1/2c bid, 48 1/2c asked.

BUTTER—Receipts fair and mostly of poor quality; market dull except for choice. We quote: Creamery, fancy, 22c; good 18c; fine dairy in single package 10s, 14-15c; storepacked, in single package 10s, 10c; common, 5-6c.

EGG—Receipts light and market steady at 15c per doz fresh candled.

CHEESE—We quote: Full cream, 11c; part skim 8 1/2c; Young America 11c.

APPLES—Dead dull and market glutted. 150a 200 per bush; or best, common to medium 75a 150. P. O. T. E. S. New Irish potatoes, home grown in ear load lots 35-37c per bush. Sweet potatoes, red, 5c per bush; yellow, per bush, 60-75c.

WOOL—Mules unwashed, heavy fleec 15a 17; light 14c, 19a 21c; medium, 19a 21c; med in comb, 21c; coarse combing 17a 19; low and carpet, 1a 15c. Kansas and Nebraska, heavy fleec, 3a 15c; light fleec, 9a 10c; medium, 18-20c. Tub washed, choice, 3a 32c; medium, 26-28c; dingy and low, 23-24c.

HAY—Receipts 11 cars. Best firm; low grades very dull. We quote: Fancy small baled, 7 10c; large baled, 6 10c; medium small, 4 25; large, 2 25; common, 7 30.

OIL—PAKE—100 lbs. 1 25, per ton 24 00, free on board cars.

FLAXSEED—We quote at 1 05-1 08 per bus. upon the basis of pure.

CASTOR BEANS—Quoted at 1 60-1 65 per bus.

BROOM CORN—We quote: Hurl 45c, self working 3 1/2-4c, common 1 1/2-2c, crooked 3 1/2-4c.

BROOM CORN!

Correspond with us before making other disposition of your Corn. We make liberal advances on all consignments. Commission, \$5.00 per ton. Wire us for quotations whenever necessary, at our expense.

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THE BEST WATERPROOF RIDING COAT.
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C. DAWES, GEN'L PASS. AGT., K. C. & ST. J. & C. B. AND H. & ST. J., ST. JOSEPH.

Tell your neighbors to try the KANSAS FARMER the balance of the year 1885 for 25 cents.

THE STRAY LIST.

HOW TO POST A STRAY.

FEES, FINES AND PENALTIES FOR NOT POSTING.

BY AN ACT of the Legislature, approved February 7, 1885, section 1, when the appraised value of a stray exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisal, to forward by mail, notice containing a complete description of said strays, the day on which they were taken up, their appraisals, value, and the name and residence of the taker-up, to the Kansas Farmer, together with the sum of fifty cents for each animal contained in said notice.

And such notice shall be published in the Farmer in three successive issues of the paper. It is made the duty of the proprietors of the Kansas Farmer to send the paper, free of cost, to every County Clerk in the State, to be kept on file in his office for the inspection of all persons interested in strays. A penalty of from \$5.00 to \$50.00 is affixed to any failure of a Justice of the Peace, a County Clerk, or the proprietors of the Kansas Farmer for a violation of this law.

Broken animals can be taken up at any time in the year.

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

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

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

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

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

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

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

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

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

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

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

Strays for week ending Sept 23, 1885

Ford county--Sam'l Gallagher, Jr., clerk.

MARE--Taken up by Thos. J. McGuire, of Cimarron, Mo., July 24, 1885, one roan-sorrel mare, left eye out, white hind feet, 9 or 10 years old, branded M. S. T. on left thigh, indelible brand on left shoulder.

HORSE--By same, one dark bay horse, black mane and tail, white face, white hind feet, 18 to 20 years old.

Graham county--H. J. Harwi, clerk.

PONY--Taken up by N. D. Minor of Wild Horse, August 25, 1885, one brown mare pony, Texas brands on left shoulder and both hips, weight about 700 pounds; valued at \$35.

Harper county--E. S. Rice, clerk.

MULE--Taken up by Frank Dave, in Anthony tp., September 10, 1885, one bay horse mule, 12 hands high, branded H on left hip.

Strays for week ending Sept. 30, 1885.

Sedgwick county--E. P. Ford, clerk.

SEVEN CATTLE--Taken up by Jasper Selver, of Atchison tp., seven head of cattle, viz: Two red cows with left horns bent down, crop off left ear of one of them; five of the number are yearling heifers, of which we are red and three are red with some white about the head; the seven head valued at \$100.

MARE--Taken up by Wm. Davis, of Salem tp., one brown mare, 6 years old, white in forehead, 14½ hands high, no brands; valued at \$10.

PONY--Taken up by John Ferman, of Illinois tp., one bay mare pony, about 7 years old, branded with H on right hip and indelible brand on left hip; valued at \$30.

Crawford county--Geo. E. Cole, clerk.

MARE--Taken up by W. H. Crook, of Crawford tp., September 5, 1885, one bay mare 15 hands high, small white spot on forehead, left hind foot white, small white mark on right hind foot, blemish on inside of right hind leg; valued at \$50.

Strays for week ending Oct. 7, 1885.

Lyon county--Roland Laki, clerk.

MARE--Taken up by E. J. Briley, in Emporia tp., one bay mare, 3 years old, small white spot in forehead, white on both hind feet; valued at \$40.

HORSE--Taken up by John Q. Head, in Jackson tp., one red horse, 9 years old, some tr. sh. saddle marks, no other marks or brands; valued at \$40.

Barbour county--R. J. Taliaferro, clerk.

PONY--Taken up by W. A. Edick, of Sun City tp., September 21, 1885, one dun mare pony 14½ hands high, 3 years old, both fore feet and right hind foot white, white stripe in face, brown stripe on back, no marks or brands; valued at \$40.

Osage county--C. A. Cottrell, clerk.

HORSE--Taken up by N. E. Young, of Agency tp., (P. O. Quenchen), September 3, 1885, one dark bay horse, 13½ hands high, star in face, harness marks, black mane and tail; valued at \$20.

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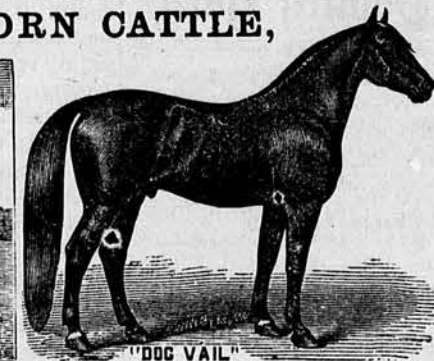
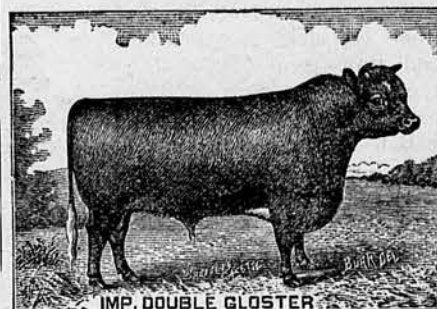
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BLUE VALLEY HERD and STUD OF SHORT-HORN CATTLE,



Such as Cruickshanks, Roses of Sharons, Young Marys, Phyllises, Josephines, and other good sorts. Also

Roadster, Draft & General-Purpose Horses, Mares & Mules.

Stock always in fine condition and for sale at reasonable prices. Correspondence and inspection invited. Call at the Blue Valley Bank, Manhattan, Kansas.

WM. P. HIGINBOTHAM, Proprietor.

HOLSTEIN-FRIESIANS

ALL AGES AND BOTH SEXES HOME-BRED AND IMPORTED.

Cows and Heifers Bred to Best Netherland and Aaggie Bulls.

The Average Records of a Herd are the True Test of Its Merit.

The Following Milk and Butter Records Have All Been Made by Animals Now in Our Herd:

MILK RECORDS:

Five Cows have averaged over 19,000 lbs. in a year. Ten Cows have averaged over 18,000 lbs. in a year.

We know of but 23 Cows that have made yearly records exceeding 16,000 lbs. and 14 of them are now in our Herd and have averaged over 17,500 lbs.

Twenty five have averaged over 16,000 lbs. in a year. Sixty-three, the entire number in the Herd that have made yearly records, including 14 three year olds and 21 two year olds, have averaged 12,785 lbs. 5 ozs. in a year.

BUTTER RECORDS:

Five Cows have averaged 20 lbs. 7 ozs. in a week. Nine Cows have averaged 19 lbs. 3 ozs. in a week. Fifteen Cows have averaged 17 lbs. 6 ozs. in a week. Six three year olds have averaged 14 lbs. 3 ozs. in a week. Six two year olds have averaged 13 lbs. 2 ozs. in a week. Sixteen two year olds (entire number tested) have averaged 10 lbs. 8 10 ozs. in a week. The entire original imported Netherland

The Poultry Yard.

Poultry for Different Purposes.

(Concluded.)

The best flavored flesh and the richest eggs are those of the Game fowl, of which there are many varieties. The Black-Reds are the best for ordinary use; the others, as the Duckwinged varieties, the Piles, Spangled White, Gray, and others, being more desirable to the fancier. This variety approaches nearer to the Indian jungle fowl than any other of the domestic breeds, and is a direct descendant from it. The hens are good mothers, lay a moderate number of small but richly-flavored eggs, and the cocks are the most courageous and combative of all fowls. The Games cannot be kept in an enclosure without a high fence, and are active foragers.

Houdans and Crevecoeurs are highly considered by some fanciers as profitable fowls. They are somewhat grotesque in appearance. These are certainly the most popular fowls in France, and with the care given to them by the French women, produce immense quantities of eggs, which supply, not only the native consumption, which is very great, but many millions of dozens for exportation. The Houdans have a mixed or mottled plumage of black and white and possess a fifth toe; the Crevecoeurs are black; both are crested and have horn-shaped or antler-like combs. The former breed deserves more notice for family or farm use than it has yet received.

The most popular fowl in England is the Dorking, of which there are the Colored, the Gray and the White varieties. These fowls have a fifth toe, but scarcely any other peculiarity for which they are more noteworthy than for this. They are too tender for our climate, lay few eggs, are persistent sitters, but are fine table fowls. If kept in the expectation of profit, except for sale by breeders, they will bring only disappointment.

There are circumstances in which fowls of unusually handsome or odd appearance will be desirable for these qualities, as well as for what eggs they may produce. Of these the Hamburgs—Black, Golden-Penciled, Golden-Spangled, Silver-Penciled, Silver-Spangled, and White; and the Polish—White-Crested Black, White-Crested White, Golden, Silver, Bearded Golden, Bearded Silver and Bearded White may be chosen. The Hamburgs are good layers, have rose combs square in front, flat on the top and covered with small points with a terminal spike inclining a little upward. They are neat, "natty" fowls, and a well-kept flock of them has a beautiful appearance in the yard or upon a grassy lawn. The Polish are the oldest known variety in Europe, and with their conspicuous crests are attractive to some persons. The White-Crested Black and the Black-Crested White are, perhaps, more curious than useful, as they have been bred for the peculiarities which give them their names more than for profit. A young brood of these fowls, well feathered as they are, with full crests or top knots, are quaint and curious enough to make them the delight of the children. Some of the Polish fowls that have not been spoiled in breeding are reputed to be good layers.

There is nothing more encouraging to the natural kindly affection of children than the possession and rearing of pets. And there are no more attractive pets than a pair of Bantams with a brood of wee things no larger than a wren or tom-tit. For useful purposes, these small fowls are not worth consideration; but the idea of confining ourselves

wholly to what will pay in a money sense, is somewhat degrading to our better natures. It pays to be happy, to enjoy recreation; to cultivate kindly feelings, and especially to provide pleasures and amusement for our children. In the way of poultry, nothing else will please a child so much as the gift of a few Bantams or other attractive fowls, as the Sultans; and there is abundant choice of varieties of these. The Sebright and Game Bantams are beautiful birds, Liliputian in size, and very small copies of larger varieties in many cases. The most unique of all, perhaps, is the Japanese Bantam, a rare variety in this country, with white and black plumage and all the quaint appearance of the usual Japanese productions. The Sultans are also rare fowls, having been brought hither from Constantinople a few years ago.

For eggs alone, one should choose White Leghorns, if that color is desired; for black fowls, the Black Spanish, and for handsome plumage and eggs, the Brown Leghorns; for eggs and flesh, the Light Brahma first and the Plymouth Rock next. For brood fowls as foster-mothers for non-sitting breeds, the Cochins or Games are admirable. For a small yard where beauty is the first consideration, and a few but sufficient eggs are desired for family use, the Hamburgs of the different varieties, or the French or Polish fowls and Games will be found suitable; while for ornament alone and for young folk's pets, the silky White-Crested Sultans, or one of the many varieties of the Bantams may be procured. As to the common, old-fashioned, mixed-up, mongrel, "barn-door fowl," that ought to be consigned to oblivion as an unprofitable nuisance.—*Rural New-Yorker*.

Ask your Druggist for a free Trial Bottle of Dr. King's New Discovery for Consumption.

Wanted.

Ten thousand new subscribers to try the KANSAS FARMER the balance of 1885 for 25 cents.

2806 Lbs. Wgt
of two OHIO IMPROVED
CHESTER HOGS
Send for description of this
famous breed. Also Pigs,
L. B. SILVER, Cleveland, O.

S. V. WALTON & SON,
Box 207, Wellington, Kansas,
—Breeder of—

IMPROVED POLAND-CHINA HOGS
Of the Highest Type.
All well pedigreed. Correspondence solicited.

POLAND-CHINAS Our Breeding Stock is
FIRST CLASS
Contains the
Best of the
Polish Families
of the day
for people and prices
asked.
Wm. & J. P. Sisson, Galesburg, Ill.

<p>If you want A YOUNG SOW, Bred to our crack Boars;</p> <p>If you want A YOUNG BOAR Pig;</p> <p>If you want A YOUNG SOW Pig;</p> <p>If you want to place an order for A SPRING PIG;</p>	<p>POLAND-CHINA SWINE.</p>	<p>If you want A SETTING OF Plymouth Rock Eggs, at \$1.50;</p> <p>If you want a Thoroughbred SHORT-HORN BULL, From \$100 to \$125.</p> <p>Write to MILLER BROS., Junction City, Box 298. - Kas</p>
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EXCELSIOR HERD OF
POLAND-CHINAS and ENGLISH BERKSHIRES.
D. H. WEBSTER, Austin, Cass Co., Mo.

My herd is made up of individuals from noted and popular families. Are all recorded. Single rates by express. Choice Pigs for sale. Prices low. I also breed from premium stock, Plymouth Rocks, Langshans, Mammoth Bronze Turkeys, Toulouse Geese and Imperial Pekin Ducks. Fowls for sale. Eggs in season. Send for Circular, and mention KANSAS FARMER.

Manhattan Herd of Berkshires



SOVEREIGN DUKE 3819. -- (From Life, by Lou Burk.)

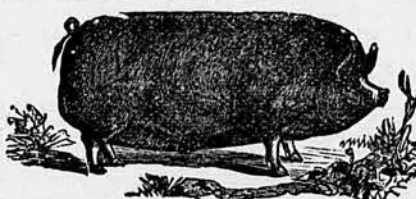
SOVEREIGN DUKE 3819, at head of famous Manhattan Herd. Among many other honors, elsewhere, this splendid sire won five blue ribbons during two successive years at the great St. Louis fair, including sweepstakes as best boar of any age or breed, each year—a record never attained by any other boar.

At the St. Louis and other leading fairs of 1882, the Manhattan Herd sustained its well-earned prize-winning reputation of former years by winning a majority, over all competitors, of the premiums competed for, being 13 sweepstakes and 24 prizes for that year.

Until the present time I have been unable to supply the demand from some fifteen States and Territories for my swine, but I now have about 20 very choice young Boars and Sows old enough to use, that I will sell at prices to suit the times as well as Spring Pigs, now ready to ship.

A case of Cholera has never occurred in my Herd, which has come through the spring and summer in very thrifty condition. Twelve different families of Sows and five noted Boars in use. Satisfaction guaranteed. Send for Catalogue to

A. W. ROLLINS, Manhattan, Kansas.



ABILENE HERD —OF— BERKSHIRES FOR 1885.

COMPRISING the choicest strains of blood bred to perfection, including ten different families known to fame, such as the Sallie Sweet Seventeen, Cassanara and Gipsy families. At the head of my herd stands

EARL OF CARLISLE 10459,

A son of Imp. Royal Carlisle 3433 and Imp. Fashion, and Duke of Wellington 12392, winner of second prize at St. Louis Fair in 1884, under one year old. My pigs this spring are very fine, from five different boars. I never have had a case of disease in my herd of any kind. Have some choice Boars now ready for service, also one young SHORT HORN BULL—fine individual and fashionably bred.

I would always prefer parties to

Come and See My Stock Before Purchasing,

But orders trusted to me will receive my own personal attention and will be filled with care, for I will not send out stock that I would be ashamed to keep myself. Catalogues will be ready soon. Correspondence solicited. Come and see or address

JAMES ELLIOTT, Abilene, Kansas.

TIMBER LINE HERD OF HOLSTEIN CATTLE and POLAND-CHINA HOGS.

HOLSTEINS.

We are now ready to supply the Western trade with Holstein Cattle—Bulls, Cows and Calves. Also Grade cows (bred or unbred) and Calves. By carload or single animal. We claim that we have the best herd west of Missouri, both in points and record. Our prices are reasonable. We are glad to have persons call and see for themselves. We invite correspondence.

POLAND-CHINAS.

We also have an extra lot of Poland-China Hogs, from a sucking Pig to a four-year-old Sow. Our Hogs are made up of the best blood that money can buy, and to prove our claims we will sell by measure, giving points; and we guarantee all stock to breed, or to be replaced by animals that will breed. Please ask for what you want.

W. J. ESTES & SONS, ANDOVER, KANSAS.

TRUEDELL & PERDUE,



Owned by TRUEDELL & PERDUE, Lyons, Rice Co., Kansas.

Breeders of Thoroughbred Poland-China Swine, Lyons, Rice Co., Kas. Our herd carries the blood of the most noted strains, headed by three of the best sows west of the Mississippi river. 100 choice show pigs now for sale; also sows bred, and burs ready for service. Stock recorded in the American Poland-China record. Correspondence promptly answered. Prices reasonable and satisfaction guaranteed.

OTTAWA HERD OF Poland-China and Duroc Jersey Red Hogs.



E. L. WHIPPLE, Prop'r, Ottawa, Kas.

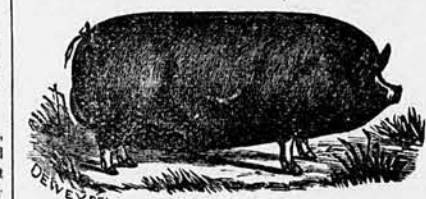
I have for sale a fine lot of young pigs sired by Jayhawk 2639, Ottawa King 2885 (the champion hog of Franklin county), and Buckeye Boy 2d 2219, Ben Butler 2977, Leek's Gilt-Edge 2887, which are very fine breeders of fashionable strains. My sows are all first-class and of popular strains. I also have an extra fine lot of Duroc Jersey Red pigs for sale from sires and dams that have never been beaten in the show ring in four counties in Kansas. I have hogs of all ages in pairs or trio of no kin, for sale. Herd has taken over twenty prizes this last year. My herd has never had any disease. Stock all eligible or recorded in Central Record. Please call and see stock, or write and give description of what you want. Inquiries promptly answered. Farm, three miles southeast of Ottawa, Kas.



Chester White, Berkshire and Poland-China Pigs, fine Setter Dogs, Scotch Collies, Fox Hounds and Beagles, Sheep and Poultry, bred and for sale by W. GIBBONS & Co., West Chester, Chester Co., Pa. Send stamp for Circular and Price List.

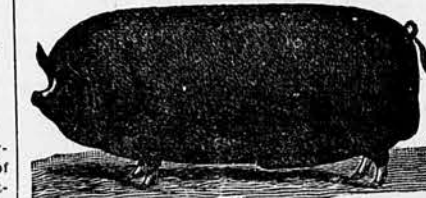
PLEASANT VALLEY HERD

Pure-bred Berkshire Swine.



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

PURE-BRED Berkshire and Small Yorkshire SWINE.



We are breeding 25 of the best selected sows of the above named swine to be found in the country, direct descendants from Imported Sires and Dams. We are prepared to fill orders for either breed, of both sexes, at the very lowest prices.

We have tried Small Yorkshires thoroughly, and are satisfied that they cannot be excelled as a profitable hog to raise. They are very docile and mature rapidly. Send for prices and catalogue to

WM. BOOTH & SON, Winchester, Jefferson Co., Kas.

The Veterinarian.

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

SCOURS—CHOLERA.—I have a calf that has been sick three weeks with the scours. I have given him flaxseed tea and mullein boiled in milk, and nothing seemed to do him any good. He passes the milk just as he drinks it. My chickens are sick with what appears to me to be the cholera. [It is Indigestion, and the character of the milk may be the cause. Does the cow eat anything but grass? Give a decoction of oak bark, and a little ginger. For chicken cholera, clean up the houses, after removing the affected birds, and administer every three hours the following: Rhubarb, 5 grains; cayenne pepper, 2 grains; laudanum, 10 drops.]

GLANDERS.—What are the early and later symptoms of glanders in a horse? In what way is it contagious? [The symptoms of glanders vary considerably, and in sub-acute or chronic forms the same conditions apparently remain for months; and in some cases for years. Enough for you at this writing is to say that a discharge from one or both nostrils, ulceration of the Schneiderian membrane (which is the pink membrane on the septum of the nostrils), and one or two hard, knotty tumors under the throat between the wings of the lower jaw, are sufficient, as a rule, to condemn an animal. It is contagious by any means which conveys the virus from the diseased to the susceptible parts of healthy animal bodies. One could write a volume on this subject, but in brief I have answered all you ask.]

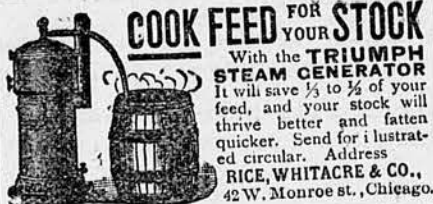
HOLLOW-HORN.—Would like to know what caused the death of a cow that was fresh last winter, did well until last June, when she became dainty, unthrifty, and the flow of milk decreased and finally failed altogether. One front teat was caked and yielded clotty milk, and the cow seemed stupid. Four weeks ago she broke into a corn-field, ate green corn, and afterwards scoured to some extent; was served by a male, and subsequently became weak in the ankles, and when reclining would throw her head to one side and moan and bawl piteously. Three days previous to her demise, while drinking water, there was a copious discharge of pus from the nostrils, and she ate but little thereafter. A post mortem examination showed that both horns were hollow and pithless, and also a vacuum in the top of the head, and an unusual quantity of dark blood concentrated in the udder. Mr. N. bored the animal's horns and split her tail, as he was inclined to believe the cow was afflicted with hollow-horn, but now avers that he is involved in doubt as to the cause of her death. [The symptoms described in this case are so numerous and indicative of a number of diseases, that we find it impossible to give an opinion. We suppose, however, that before the cow lay down and moaned and bawled piteously, the scientific operation of boring the horn and pouring in some irritating mixture had been performed. We cannot find words strong enough to condemn this barbarous and totally useless operation, for where it does not outright destroy the cow's life, it causes

an amount of excruciating pain that is wholly unnecessary. We do not think that we would be going too far by insinuating that the man who performs such an operation has a vacuum in his head quite as great as that described in the head of the cow. We do not exactly know the cause of cow's illness, but the cause of her death is plainly evident to any one.

We propose to make the "old reliable" KANSAS FARMER so valuable that no wide-awake farmer can afford to keep house without it. Try it the remainder of 1885.



Water Wheels, Millstones and PORTABLE MILLS
A. A. DeLoach & Bro., Atlanta, Ga.
Prices wonderfully low. Send for large catalogue. Mention this paper.



COOK FEED YOUR STOCK
With the TRIUMPH STEAM GENERATOR
It will save 1/2 to 2/3 of your feed, and your stock will thrive better and fatten quicker. Send for illustrated circular. Address
RICE, WHITACRE & CO.,
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Best feed and cheap; the BEST FEED COOKER; in only 10 minutes, it will cook 100 lbs. of corn, and save one-half the cost of pork. Send for circular.
D. R. SPERRY & CO.,
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CORN MILL.
Best Corn and Cob Grinder in the World.
ENGINES AND BOILERS OF ALL SIZES.
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CORN, WHEAT & FEED, FLOUR MILL MACHINERY.
Send for descriptive Circular. Address plainly
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THE \$200 Saw Mill
Original
1500 to 4000 FEET of lumber can be cut in a day. Built in a first-class manner. The Best Mill made. Many hundreds of these in use, giving universal satisfaction. We have the best Mills of larger sizes, Portable and Stationary. Send for circular I.
LANE & BODLEY CO.,
Cor. John and Water Sts., Cincinnati, O.



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For Any Kind of SMALL GRAIN.
Also Manufacturers of
General Flour Mill Machinery,
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Near Highland House Inclined Plane,
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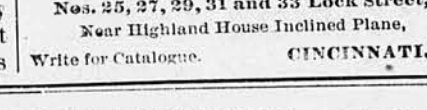
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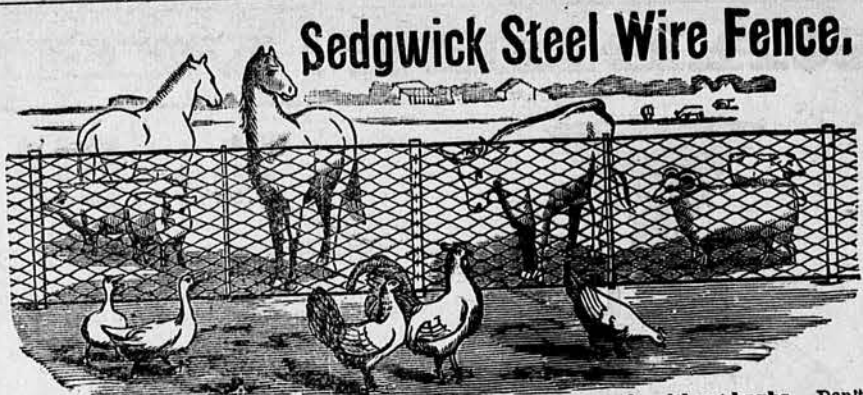
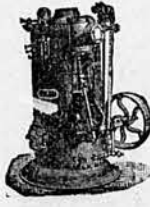
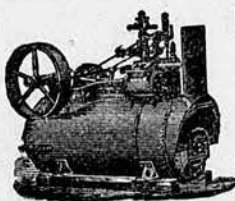
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UPRIGHT AND HORIZONTAL,
3 TO 10 HORSE POWER.

OVER 3,000 IN SUCCESSFUL OPERATION.

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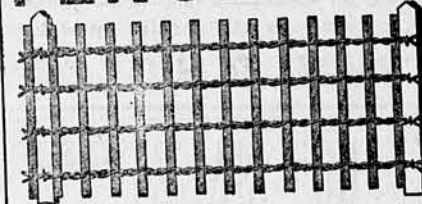
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Is the best general purpose wire fence in use. It is a strong net-work without barbs. Don't injure stock. It will turn dogs, pigs, sheep, and poultry, as well as horses and cattle. The best fence for Farms, Gardens, Stock ranges, and Railroads. Very neat, pretty styles for Lawns, Parks, School lots, and Cemeteries. Covered with rust-proof paint, or made of galvanized wire, as preferred. It will last a life-time. It is better than boards or barbed wire in every respect. Give it a fair trial; it will wear itself into favor. The Sedgwick Gates made of wrought iron pipe and steel wire, defy all competition in lightness, neatness, strength, and durability. We make the best, cheapest, and easiest working all-iron automatic or self-opening gate, and the nearest cheap iron fences now made. The Best folding poultry coop is a late and useful invention. The best Wire Stretcher, Cutting Pliers, and Post Augers. We also manufacture Russell's excellent Wind Engines for pumping, and Geared Engines for grinding, etc. For prices and particulars ask Hardware Dealers, or address, mentioning paper.

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FENCES FOR FARMERS AND LAND-OWNERS.



Prettiest, Cheapest, and Most Durable. Can be made any size on our Standard Fence-Making Machine. Any farmer having 250 rods of fence to build can make a machine pay for itself. Owners of machine can then make from \$10 to \$25 a day selling fence to his neighbors and have a manufacturing business at home. Exclusive territory free. Agents that sell machines make from \$50 to \$100 a week. Illus. catalogue, terms, &c., free. **STANDARD MFG. CO., Cincinnati, O.**

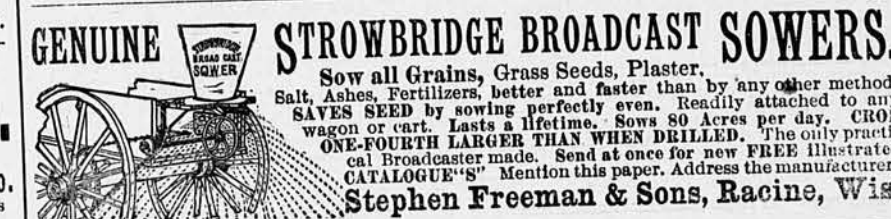


TOLL YOUR OWN CRIST!!
"MANVEL" WIND ENGINE
SIMPLE, DURABLE, SELF-REGULATING, NOISELESS.
STOCKMEN AND FARMERS CAN
HARNESS THE WIND
AND GRIND ALL THEIR GRAIN with a machine without a cog, friction clutch, or ratchet and at the same time Pumps all their water for Stock. FULL LINE OF PUMPS, TANKS, IRON PIPES & FITTINGS kept on hand. Parties requiring a Wind Mill should examine this machine, built for service, and write, stating the kind and amount of work they want done, to

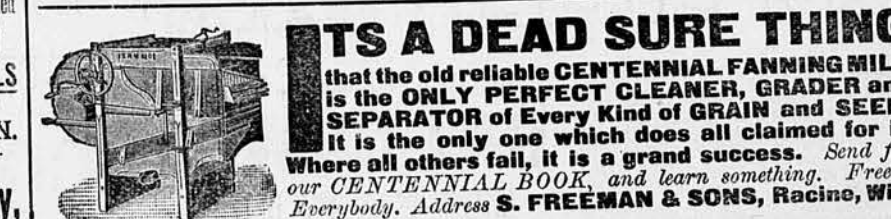
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ADAMS WIND MILLS
—ARE BACKED BY A—
SPLENDID TWELVE YEARS RECORD
TIME-TRIED. — STORM-TESTED.
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READY MADE WIND MILL TOWERS,
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BRASS PUMP-CYLINDERS, &c.
Pamphlets, Circulars and Testimonial Sheets, Mailed Free.
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GENUINE STROWBRIDGE BROADCAST SOWERS.
Sow all Grains, Grass Seeds, Plaster, Salt, Ashes, Fertilizers, better and faster than by any other method. SAVES SEED by sowing perfectly even. Readily attached to any wagon or cart. Lasts a lifetime. Sows 80 Acres per day. CROP ONE-FOURTH LARGER THAN WHEN DRILLED. The only practical Broadcast made. Send at once for new FREE illustrated CATALOGUE "S". Mention this paper. Address the manufacturers
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IT'S A DEAD SURE THING
that the old reliable CENTENNIAL FANNING MILL is the ONLY PERFECT CLEANER, GRADER and SEPARATOR of Every Kind of GRAIN and SEED. It is the only one which does all claimed for it. Where all others fail, it is a grand success. Send for our CENTENNIAL BOOK, and learn something. Free to Everybody. Address **S. FREEMAN & SONS, Racine, Wis.**



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The DIAMOND FEED MILL

Is Far Superior to Any Other in Market!

This is not mere "advertising" talk, but we are ready to prove it by any practical test, or to give a dozen sound reasons for our claim, to any one interested who will.

DROP US A POSTAL CARD FOR FULL INFORMATION:

WAGONS, CARRIAGES AND FARM MACHINERY.

Branch House and Sole General Depot for

The Garden City Plows, the Schuttler Wagon, the Watertown Spring Wagons, BUGGIES OF EVERY STYLE AND GRADE.

Also General Agents for the Leading Farm Machinery, such as EAGLE CORN-SHELLERS, HORSE-POWERS and FEED-CUTTERS, OTTAWA (CYLINDER) POWER SHELLERS, DICKEY FAN MILLS,

The Bradley Combined Lister-Drill for 1886.

Ask your Dealer for B. W. & CO.'S GOODS, or write to us for full information and prices. All goods sold under our own name and guarantee.

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"For Sale," "Wanted," and small advertisements for short time, will be charged two cents per word for each insertion. Initials or a number counted as one word. Cash with the order.

FOR EXCHANGE—We make a specialty of exchanging farms, lands, city and town property, or stock of general merchandise, hardware and other business interests. J. Stone & Co., 104 East Seventh street, Topeka.

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FOR SALE—Our entire herd of choice bred Short-horn Cattle of the Young Mary, Flora and Arabella families. Price low and terms liberal. Address (and mention this paper) E. C. Evans & Son, Sedalia, Mo.

FOR SALE—One Percheron-Norman Stallion, full-blood, and two Percheron-Norman Grads. Call on or address J. D. Webb, Hillsboro, Kas.

FOR SALE—Seven hundred Merino Sheep. Will be sold in lots to suit purchasers. Said sheep are free from disease. Address J. C. Dwell, attorney at law, Florence, Kas.

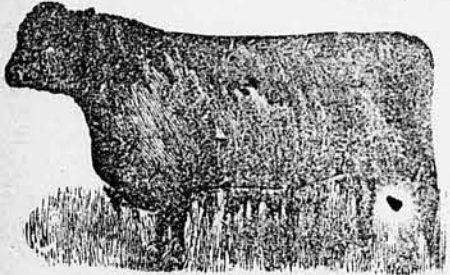
HAVING NO FURTHER USE for "Jumbo 148" (3-year old) and "Black Hawk 1799" (2-year old) A. P. C. Record, we will sell them. They are both "sweepstakes" horses and first class pig-getters. Write for prices. Truesdell & Ferlie, Lyons, Rice Co., Kas.

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JOINT PUBLIC SALE!



33 Head of Imported, Pedigree
GALLOWAY
BULLS, COWS and HEIFERS,
At Riverview Park, Kansas City,
FRIDAY, OCTOBER 30, '85,
(During the Fat Stock Show.)

Property of Ed. K. Rea, Carrollton, Mo., and Walter C. Weedon & Co., Kansas City, Mo.

These cattle are a vigorous lot of Breeding Stock. They are all recorded in the Scotch and American Herd Book, and embrace some of the choicest Galloway blood. Among the bulls is the celebrated prize-winner "Vindicator" or "Loneburn" (1907), 1876, descended from a grand line of prize-winning ancestors. The cow "Fanny of Arkhill" (6444) 2286, won first prize at Moffat, N. H., in 1882, and a calf at foot. Let the Galloway stock be seen at Montgomery, which won the grand sweepstakes on the block at New Orleans. TERMS:—Cash, or approved bankable paper, four months, at 8 per cent. Address—

COL. S. A. SAWYER,
Auctioneer,

WALTER C. WEEDON & Co.,
Live Stock Exchange, Kansas City.

CLOSING OUT SALE!

THE WHOLE STOCK OF

Clydesdale Horses and Mares, Galloway and Polled Angus Cattle, MACHINERY, FARM IMPLEMENTS, ETC.,

Formerly belonging to THE CLYDESDALE HORSE COMPANY, will be sold at Public Sale, commencing October 14, 1885, and continuing for three days. The lot to be sold comprises about 70 Imported Clydesdale Horses and Mares, among which are many prize-winners; 50 head of Galloway and Polled Angus Cattle, and about 80 head of Grade Cattle. Sale to take place at Rockford Farm, Cedar Rapids, Linn county, Iowa, formerly occupied by the said Clydesdale Horse Company.

The Horses and Mares to be sold on first day of sale, the Cattle on the second, and the Machinery, Implements, etc., on third.

TERMS:—Seven per cent discount for cash, or half cash and balance April 1, 1886, with 8 per cent. interest and approved security.
Please send for Catalogue.

Rockford Farm
Will be sold at private sale, terms to suit purchaser.
MASON P. MILLS, Trustee.

PUBLIC SALE!

I Will Sell at Public Auction,
WEDNESDAY, OCTOBER 21, 1885,

At my residence, one mile north of SEDALIA, MO., the following described property: Ninety head of Cows and Heifers, ten head of Steers, forty Calves, five Brood Mares, four Work Horses, one span of Mules, one fine Buggy and Saddle Horse, the well-known Saddle and Harness Stallion Drennen the Third; two Short-horn Bulls, viz: Sky Lad, No. 42539, A. H. B., calved August 1, 1879; Waldo, No. 4218, calved October 1882; forty head of Fat Hogs, eighty head of Merino Sheep, one Pigeon, one Family Carriage, and a large lot of Farm Implements. Will also offer at same time and place, at private sale, ten head of well-bred Short-horn Bulls, belonging to the best families in the country.

Many of the Cows offered are high-grade, and all of them have been bred to the best Short-horn Bulls. The Calves and Heifers are nearly all from high-grade cows, and by well-bred Short-horn Bulls. About half the Calves are males.

Sale to commence promptly at 10 o'clock a. m.

TERMS:—A credit of nine months will be given on all sums to exceed \$50 with interest at 6 per cent. from date.

FRANK SPAYCROFT, Sedalia, Mo.

REPRESENTATIVE SHORT-HORNS!

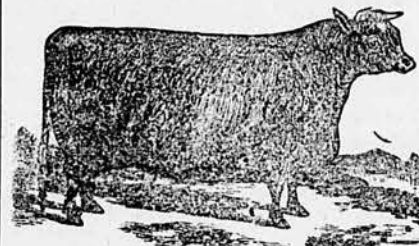
On Tuesday and Wednesday, November 3 and 4,
(DURING THE FAT STOCK SHOW.)

The Inter-State Breeders' Association

Will make, at Riverview Park,

KANSAS CITY, MISSOURI,

Its Second Annual Public Sale of about



One Hundred Head
—OF—
TYPICAL SHORT-HORNS!

These will be selections of approved animals, male and female, from tops of the Best Herds in Missouri and Kansas, and representing the most popular families in existence. No inferior, unsound or non-breeding cattle will be offered; and parties wanting one or more to top their herds will find this their opportunity. Among the herds that will contribute specimen animals to this magnificent offering will be those of such well-known breeders as

S. C. Duncan, L. Miller, Robt. Bass, W. T. Hearne, Dr. H. M. Gilbert, Samuel Steinmetz, Hon. H. C. Ireland, A. H. Lackey, Dr. W. H. H. Cundiff, R. W. Owen, J. H. Wagner, S. M. Hudson, J. W. Hutchins, W. A. Powell, C. S. Eicholtz and others.

On the day following (THURSDAY, NOVEMBER 5,) at 1 o'clock p. m.,

MAJ. S. E. WARD & SON, OF WESTPORT, MO.,

Will offer from their Noted

WALNUT GROVE HERD,

A Lot of THIRTY HEAD OF CHOICE ANIMALS, consisting of Twenty-two Cows and Heifers and Eight Young Bulls of the HIGHEST BATES BREEDING.

The get of such renowned sires as Oxford of Vinewood 3d (33427) and Barrington Belle Duke (49958), and others of the most distinguished Short-horn ancestry. These will not be culls, but such animals as any Short-horn breeder may be proud to possess, of the following families: Kirklevington, Wild Rye, Boan Duchess, Hudson Duchess, Pure Orange, Rose of Sharon, Young Mary, London Duchess and Phyllis. The females will be bred to the Duke of Cornwall, a pure Bates Bull, or have calves by their sides by Duke of Cornwall or Barrington Belle Duke, and the bulls in robust vigor. Inspection is invited and in ending purchasers can, before the sale, see these cattle as kept and bred, on the farm four miles south of Kansas City.

Catalogues and full information furnished on application to

S. E. WARD & SON, Westport, Mo.

The stock of both these sales will be at Riverview Park for inspection by the public on and after Monday, November 2. For Catalogues address

L. P. MUIR,
Auctioneer.

W. L. HARDING, Sec'y,
1201 Union Ave., Kansas City, Mo.

GREAT PUBLIC SALE OF 100 Head of Blooded Stock

AT PARSONS, LABETTE CO., KANSAS,
Wednesday, October 21, 1885.

Forty head of SHORT-HORN CATTLE; twelve head of HOLSTEIN CATTLE—Cows, Bulls and Heifers; nine head of Imported ENGLISH DRAFT HORSES (three Stallions)—five of the Mares safe in foal; forty head of POLAND-CHINA HOGS, for breeding purposes—most of them Registered.

TERMS OF SALE:—A credit of six months, without interest, if paid when due; if not paid when due, 12 per cent. from date of note. Note to have two indorsers.

WILSON & MOORE, Parsons, Kas.

COL. S. A. SAWYER, Auctioneer.