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BREEDERS' DIRECTORY.

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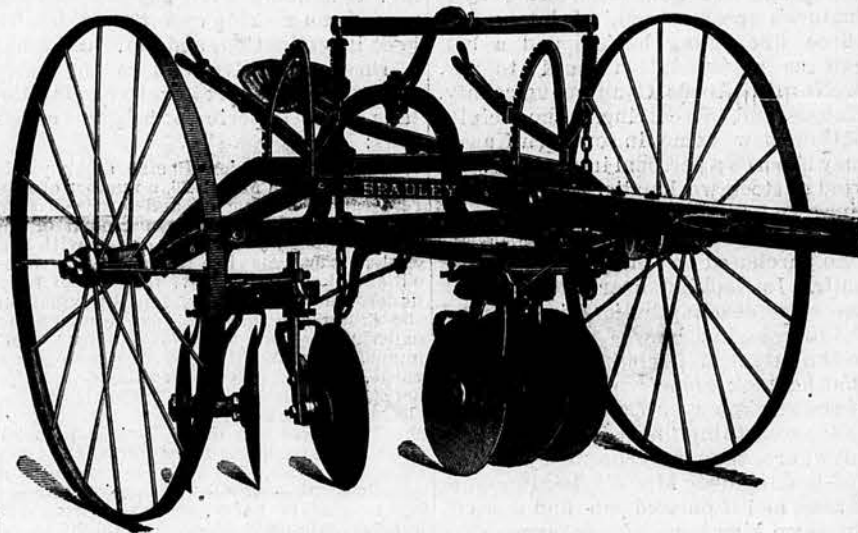
BERKSHIRES.—Wm. B. Sutton & Sons, Rutger Farm, Russell, Kansas. Choice February and March pigs. Young boars ready for service. Young sows bred. Good individuals and choicest breeding.

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ELLIS & STEWART Cameron, Mo., Large Berkshires Choice pigs of best families now ready to ship. Come or write. Satisf'n guarant'd.

SELECT HERD OF BERKSHIRES

Have for sale pigs from State fair winners. Can fill classes for show. Boars for fall service. A few choice sows bred. Address G. W. BERRY, Berryton, Shawnee Co., Kas.

S. McCULLOUGH, Ottawa, Kansas. Breeder of Pure-bred BERKSHIRE SWINE. Stock for sale at all times. Satisfaction guaranteed. Write for what you want.

T. A. HUBBARD Rome, Kansas, Breeder of POLAND-CHINAS and LARGE ENGLISH BERKSHIRES. Two hundred head. All ages. Fifty boars and forty-five sows ready for buyers.

W. E. GRESHAM, Burrton, Kansas, Breeder of POLAND-CHINAS. Won six prizes, including first blue ribbon west of Mississippi at World's Fair. Stock all ages for sale.

JAMES QUOROLO, Kearney, Mo. Large Berkshires, S. C. Brown Leghorns and Bronze Turkeys. On H. & St. Joe, 28 miles northeast of Kansas City.

J. R. KILLOUGH & SONS, Richmond, Kansas, Breeders of POLAND-CHINA SWINE. The very best strains. Nothing but first-class stock will be shipped to any. Come and see us or write.

HILLSDALE HERD

Short-horn cattle and Poland-China hogs, bred by C. C. KEYS, VERDON, NEB. Prince Byron 103613 heads the herd. Stock for sale at all times. Visitors welcome. A fine lot of young male pigs for sale. Farm two miles north of Verdon, Nebraska.

P. A. PEARSON Kinsley, Kansas, Breeder of Poland-China Swine. All ages for sale. Herd headed by Dandy Jim Jr. and Royalty Medium, a son of Free Trade.

R. S. COOK Wichita, Kas., Breeder of Poland-Chinas. Won seven prizes at World's Fair—more than any single breeder west of Ohio.

CIRCLE U HERD POLAND-CHINA SWINE. W. H. Underwood, Hutchinson, Kansas. Graceful's Index 9289 S. 27089 O., sire Seldom Seen 2d 23045 O., dam Graceful L. 23768 O. He was the sire of the Kansas World's Fair winners that won first, third and fourth prizes.

RIVERSIDE HERD Poland-China Swine. For sale sows bred to farrow in March, April and May. Also young stock at reasonable figures at all times. Satisfaction guaranteed. Correspondence as well as inspection invited. J. V. RANDOLPH, [Established 1868.] Emporia, Kas.

Wholesale Prices! Thos. D. Hubbard, twenty years a wholesale merchant in New York city and Columbus, Ohio, having come to Kansas for his health, will supply at wholesale prices, Barbed Fence Wire, Wire Nails, Galvanized Chicken Fence Netting, Glazed Windows of all sizes for poultry houses, barns and other buildings, and all other requisites for breeders and farmers, free on board cars at St. Louis or at your own depot. For fuller information, address with stamp, THOS. D. HUBBARD, Kimball, Kansas.

FINE BLOODED Cattle, Sheep, Hogs, Poultry, Sporting Dogs. Send stamps for catalogues, 150 engravings. N. P. Boyer & Co., Coatesville, Pa.

The Stock Interest.

THOROUGHbred STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

OCTOBER 2—C. C. Keyt, Short-horn cattle and Poland-Chinas, Verdon, Neb.

THE CATTLE INDUSTRY.

In order that our readers may have something timely and authoritative on the outlook of the cattle industry in general and pure-bred stock in particular, our live stock and field man, Mr. Brush, has recently interviewed representative breeders of Kansas and Missouri, and their carefully-prepared views will be given in this department, commencing this week, and will continue for a few issues. Their practical views and the information given deserve careful reading.

The following is from J. M. Clay, Plattsburg, Clinton county, Missouri. The reputation of the breeders of Clinton county stands at the head of the most successful breeders west of the Mississippi. Among other things he states:

"Your late letter of inquiry at hand, and that my views on the questions asked by you may not be misunderstood, will say, at the outset, that I am not a Populist nor the son of one, but will give you my opinion on the 'Present conditions and future prospects of the cattle industry,' though I feel like saying at the same time 'ask me something easy.' My judgment is, that as long as a few men that are engaged in the great packing centers, whose purchases apparently set the price, and Coxey's army, with the thousands of unemployed all over the United States, have no money to buy beef, and as long as this Democratic administration that we Missourians have been praying for for thirty years opposes every measure that would increase the money of the country, and thereby, I think and hope, stimulate business enterprises, will these conditions exist and the cattle business remain as it is. From the best information that I have been able to obtain it is no longer an over-supply of cattle but the want of employment and the lack of money with which to buy. But, notwithstanding the above mentioned drawbacks, thoroughbred cattle of all the improved breeds have been selling better this spring than at any time since 1885, and there are very cogent reasons for it, enough I think to more than counterbalance the effects of the depression aforementioned. For instance, take the thoroughbred herds of Missouri, of which at least 75 per cent. of their aggregated numbers have gone to the butcher, and now men here in this section of the State that used to keep one hundred head of grade cows are hunting the country over to find a milch cow and are paying from \$40 to \$60 when they find them. Now, three years ago, this same cow would not bring more than \$15 or \$20. Because of the general decrease of the herds of well-bred cattle during the three years prior to 1894 there is now a better feeling here in this section of the State in regard to cattle, and especially thoroughbred stock. Another fact, and that is, the people here have been grading down instead of up the past few years, and the mistake is the more noticeable this spring, so much so that they are buying very liberally good thoroughbred bulls to grade up again. Now, in answer to your second inquiry, as to notes of comparison of breeds, I think a good Short-horn is the best all-round animal that walks, and especially is this my personal view where they are judiciously selected and bred with a view of beef, milk and butter. I have no fault to find with the individual breeder that claims his Herefords are rustlers, will thrive on sage brush and sand, or to the breeder of the blacks, that they thrive best on snow drifts and barbed wire fences. Experience teaches us that if ordinary good judgment be exercised in the selection of the original herd and ordinary attention be given in the breeding, followed up by good care, any of the breeds aforementioned are vastly superior to the 'scrub,' and the sooner we get at raising fewer accidentals and more better ones, will we realize what every

breeder ought to have, all things considered, and are entitled to for our time, labor and money expended. I have some reliable information concerning the condition of the Western and South-western range business, and one point especially from Texas that I will mention, and that is, that every one familiar with the outlook next year in that country predicts better prices for she stock and that the business will take on an impetus not known to the trade for the past twelve years. This to me means that those who save their cows and heifers will be, to use the old familiar expression, 'in luck.'

Mr. D. P. Norton, breeder of Short-horns at Council Grove, Morris county, Kansas, writes:

"My time being limited, and thinking that some of the other breeders more competent than I would thoroughly cover the import of your inquiries Nos. 1 and 2, I shall only state a few points in the way of a 'Stock Gossip' notice of my herd at this time. I am glad that you are spurring up the breeders to a realization of the importance of a more thorough acquaintance through your 'Stock Gossip' notices, and believe it of great benefit individually and collectively to the breeder and those who are desirous of improving their stock and reaching a higher standard. It is to a great extent the fault of the breeder in his neglecting to attend to these little details, and if he be desirous of raising the standard among those who raise cattle, especially the 'scrub,' he should leave no stone unturned in his efforts to benefit the future of the live stock industry. My herd came through the winter nicely and are now luxuriating upon 'nature's great spread.' I lately sold three fine young heifers and a bull calf as a foundation herd to Mr. McNown, of Leeds, Chautauqua county, Kansas, and those living in the vicinity of their new home in southern Kansas may learn on a personal inspection what kind of stock we handle. A few days since we had a pleasant call from H. H. White, of Neosho Rapids, Kas., who purchased one of our best yearling bulls. In looking over the herd he saw some yearling heifers just turned out to grass and he was taken by them to the extent of paying us \$50 for one that he took home with him. If any of the stockmen in Lyon county want to see something fine enough to show anywhere, they may profit by calling and looking over Mr. White's late purchases, and if pleased can find more of the same kind here on our farm. Our stock bull, Imp. Buccaneer, is proving himself an extraordinary good breeder and his get meets our ideal exactly. Good judges pronounce him one of the best in the West, and some few say that he is the best they ever saw. But every one has his ideal, so I'll leave that question for the future consideration of our visitors."

Benton Gabbert, the well-known Hereford breeder, of Dearborn, Platt county, Missouri, says:

"I have always felt that there should be a better understanding between the breeders of pure-bred stock and the feeders of ordinary bred, cross-bred and pure-bred cattle, and very cheerfully give my views in answer to your inquiries. Your first question, 'The present and the future outlook of the cattle business,' I will state is more encouraging than at any time for a number of years, and it affords much encouragement to the farmers who raise feeders, consequently should be encouraging to breeders of pure-bred bulls. On the other hand, the experiences of the past six months of the feeder solely has not been so good, as the margin between feeding steers and ripe steers was never so close and leaves but little or no profit for the feeder except in the by-product, hogs. If the hog market holds up, cattle feeding is as profitable as any other branch of the live stock business. We are gradually settling down to the gold basis of values, while cattle and the by-product, hogs, are holding their place in the decline remarkably well.

"Your second question, 'The effect of pure-bred stock crossed on natives,' has all in its favor and nothing against it. Every one engaged in the breeding

of cattle or any branch of the live stock industry should recognize that their aims are similar to those of any professional calling, and that there is always plenty of room at the top and always will be. The pure-bred bulls cannot possibly cover one-tenth of the field. Those securing pure-bred bulls and mating them properly will have steers that will always sell and be a source of pleasure and profit to those handling them.

"Now as to your third question, 'What breed, etc.,' will say that I selected the Hereford as my favorite breed and now have a herd that makes me money and consequently happy. I use the knife liberally, as I prefer a good steer to a sorry-like bull, and I therefore make my patrons my best advertising agents. I paid long prices for my foundation stock and have selected sires from the Dauphin, Winter, De Cote and Anxiety strains. My stock bull, Quaker, sired by Anxiety 4th, has been used now on the herd three years. His calves are all that could be desired. As all judicious breeders understand, I could now part with him if he were to fall into good hands. I have a few very top young bulls ready for service that I could spare and I am willing to let them go at gold level prices." W. P. B.

Experiments With Hog Cholera.

Some interesting experiments with hog cholera have been made by E. M. Crummer, of Belleville, Republic county. The test was made under the personal supervision of representative stockmen and citizens of that county, who endorse the statements made by Mr. Crummer, who has for several years been making careful and intelligent investigations and believes he has a sure preventive and in the early stages a positive restorative. The details of the experiment he gives as follows:

"I met at the Union Pacific stock yards in Belleville, on March 26, a number of representative stockmen, and proceeded to carry out the proposed experiment of infecting a herd of healthy shoats with hog cholera and carrying them through without shrinkage in weight. In order to fully understand the situation, I might explain in the first place that the yard in which the experiment took place was a private yard immediately adjoining the regular shipping yards, and which is used by the local shippers in connection with the main yards. On March 10 I had purchased three shoats that had never had the disease, and placed them in the same yard in which at the time there were three very sick shoats and one dead one, it having died of cholera, belonging to another party, and which were left in there with mine about forty-eight hours before they were taken out. The yard itself was thoroughly infected; hogs having the disease had been in and out of the yard almost continuously for weeks, so that part of the experiment was really under way before the public test was commenced. On Saturday, the 24th of March, eighteen head more of fresh, healthy shoats were put in the yard, which averaged fairly well with the three already in. On Monday following, March 26, in the presence of a number of our hog men, I having just obtained four cholera hogs from an adjacent sick herd, put the two sick ones in with the healthy shoats, and the other two having just died of cholera an hour or two previous, I cut up and threw them in for the healthy shoats to eat, which they proceeded to do forthwith. My object in doing this was to thoroughly infect them in a way that would be beyond any dispute and at the same time by commencing treatment at the incipency of the disease hold them up through the attack and prevent shrinkage in the weight of the herd by preventing or hindering the development of the disease. The twenty-one head were weighed up carefully by the stockmen present. The aggregate weight of the twenty-one head was 2,890 pounds, or an average of about 114 pounds. I commenced treatment immediately on both bunches when I put them in the affected yard. On the third day after their repast on the cholera shoats I noticed some little cholera coughing. On the fifth day one of the original sick ones died, it having been off its feed and the disease having developed into the extreme constipation which showed a tallowy mucus in the hard dry droppings, and which denotes the fatal form of cholera. The seventh day coughing had increased considerably in the herd and one was considerably off, did not care to eat and persisted in going off and lying down on his stomach with his nose in the litter. The eighth day the first prostration; same pig was taken with vomiting and scouring, the evacuations being of a grayish-green color and half fluid. Ninth day one shoat off his feed and would stand and paw up the bedding with his fore foot, lay on his stomach and shiver. Tenth day, three more scouring. Eleventh day, two more off their feed but not coughing. Twelfth day, three more scouring and two more off their feed. Thirteenth day, four more scouring. Fifteenth day, one more off his feed but not scouring. Sixteenth day,

one more scouring. Nineteenth day, two more slightly off their feed. Twentieth day, one more slightly off, but only remained away from one feed.

"The scouring usually continued about two days, sometimes three, when the appetite would gradually return, and altogether they would usually remain five or six days unable to take full rations; the worst ones were off a week or more before taking their feed with a relish. On the sixteenth day I moved the ones that were convalescent into new pens near by and unfortunately lost one of the best ones through their fighting and worrying him after he had fully recovered from the cholera, which he had quite mildly. Two died from the disease, one from excessive scouring and the accidental exposure to a cold rain; the other developed the fatal form showing the hard, bloody stools with the tallowy mucus.

"The change from commencement of improvement for three or four days was carefully watched and very little food given during this time. Full feed was given until time of prostrations. The herd was weighed again and inspected on Wednesday, the 25th day of April, thirty days after the feeding of the cholera hogs and thirty-two days after the last lot was placed in the infected yard. The eighteen head remaining of the twenty-one weighed 2,525 pounds, a gain of 135 pounds over the twenty-one head at the commencement. The one that was killed would weigh fully 130 pounds or more, so it would really make 265 pounds that the herd gained during the thirty days, without taking into consideration the two that died of cholera and which were average shoats, so that the total gain during the experiment would be about 490 pounds. The herd developed all phases of the disease, but of course in a mild form, except in case of the two fatal cases.

"What I want to impress on our hog men is, the importance of commencing treatment in time. If I had postponed treatment until the eighth day after I put them in the infected yard I would probably have lost one-third or one-half of them at least and sustained a great shrinkage in weight.

"The shoats, after having undergone the disease so recently, are all now apparently making a rapid gain in flesh.

"Having conducted this experiment successfully under conditions much harder than any farmer need encounter, isolated as hogs usually are on a farm, I submit the question, 'If I can carry them through an outbreak of cholera when placed from two to four weeks in contact with the germs in yards swarming with cholera microbes by commencing in time, why cannot any hog man do the same by taking every chance in their favor?' By the way of explanation I will say that the twenty-one head of shoats consumed during the course of the treatment about \$8 worth of the remedy, but for fear that the publication of this report may cause parties who may be losing hogs from cholera to come or send for the medicine and meet with disappointment, I will state here that the remedy will not be furnished to any one who allows his hogs to commence dying with cholera before ordering, simply because not one man in twenty will be able to control the disease when it gets into the blood, and after about one week's care they see their hogs still continue to die and they throw up their hands and say: 'Well, if they are bound to die let them die.' Whereas, it is comparatively easy to prevent it or check it before any scouring begins. The remedy will only be furnished as a preventive, but all so using it, who through carelessness or accident should have an attack come on, will be able to obtain the remedy and all information as to the management of it."

Of Interest to Horsemen.

MINDEN MINES, MO., March 19, 1894.

The Lawrence-Williams Co., Cleveland, O.:

Yours of the 15th ult. at hand. Will say that I am pleased to hear from you in regard to the great remedy, Gombault's Caustic Balsam, which is ahead of anything yet introduced for the ailments it is recommended. I had a mare that had the fistula on both sides of her withers very bad. I applied the Balsam as directed and it completely cured her in about one month, and this was the third time it broke out. It has now been over a year and no symptoms of returning. One of my neighbors had a horse that had fistula on both sides the same as my mare, and I cured him in about three weeks. Another neighbor had a steer with a big jaw. I let him have some of the Balsam and it completely took it away and a permanent cure was the result. Another neighbor had two horses that had blood spavin on hocks. He applied the Balsam and it was a permanent cure. And as for a failure, I have not had a single one and can safely recommend it to the public for any lumps, or swellings of any kind on cattle or horses. One bad case of poll-evil was cured by the use of the Balsam. You are at liberty to use this testimony as you see best. S. F. PRKE.

"Among the Ozarks,"

The Land of Big Red Apples, is an attractive and interesting book, handsomely illustrated with views of south Missouri scenery including the famous Olden fruit farm of 3,000 acres in Howell county. It pertains to fruit-raising in that great fruit belt of America, the southern slope of the Ozarks, and will prove of great value, not only to fruit-growers, but to every farmer and home-seeker looking for a farm and a home. Mailed free. Address, J. E. LOOKWOOD, Kansas City, Mo.

Agricultural Matters.

More About Alfalfa.

The interest in this forage plant is unabated, and to those unacquainted with it the accounts of those who produce it seem as incredible as once seemed the marvelous stories of those who had returned from California. But while comparatively new to us, alfalfa is not new to agriculture. The Nebraska Experiment Station has dug up some quaint old accounts of it which are valuable for the information they contain as well as for the forms of expression used in the statements. The latest Nebraska bulletin says:

THE VALUE OF ALFALFA.

Alfalfa, coming to us by way of the east, was known to Roman writers. Hartlib, an English writer, who urges its value for English farmers in a work published in 1651, quotes Columella, of Roman times, and says: "For the ancients used diverse plants which we know not; as the *Cystisus-tree*, so much commended for cattle; as also their *Medick* (alfalfa) fodder, which Columella said endureth ten years, and may be mowen four years, seven times in a year. One acre he esteemeth enough for three horses. This fodder is accounted very sweet and healthful, whereas the plants which are usually called *Medicæes* with us are annual plants and have no such properties." (Hartlib's Husbandry, London, 1651.)

The same author continues: "Queries sent to France about the seed called *La Lucerne* (alfalfa):

"When one N. N. was last in France, being in discourse with Doctor D. concerning *Saint-Foine*, he was then told by Doctor D. that (for the improvement of barren grounds) there was (in those parts of France about Paris) another seed that did farre excell that of *Saint-Foine* and that the name of that more excellent seed was *La Lucerne*. I am desired by a friend of mine (to whom N. N. related this passage of Doctor D.) that by your kindness he may be spoken to of this *La Lucerne* and his directions desired where the said seed is to be had, for what price, how much is usually sowed upon an English acre, what time of the yeare it is sowen, whether it be sowen alone; or with any other ordinary corn, and with what corn, and with what kind of land it best agrees with, and finally, what other particulars he can direct more than is here set down?"

"More queries concerning *Lucerne*: "I desire further to know what kinds of wet grounds are best for it, whether moorish or clayey, whether poore or rich, whether it must be sowen yearly, or whether it will continue over a year in the ground, and if more than a year, then how many years it will continue without being new sown, whether it be only good for meadows or for pasture, and if for pasture, then whether sheep or cattle be suffered to go upon it, or whether it be carried off greane as the clover-grasse is in Flanders?"

"Lastly, for what cattle it is most proper." (Hartlib's Husbandry, London, England, 1651, pp. 112, 113.)

These questions, asked nearly two and a half centuries ago by the English farmers, are the very questions, almost *seriatim*, which are being asked through the press to-day and in letters by the score, addressed to the experiment station. The answers are to be found in a perusal of bulletins and replies published through the press.

POINTS FROM HARTLIB.

1. It must be sown on rich soil, not too stiff or clayey, of medium moisture.
2. The ground must be plowed three times; first in the fall and twice in the spring.
3. The land must not be freshly manured.
4. The seed must not be sown until all danger of cold weather is past.
5. Sow about as much as one-sixth of corn (wheat).
6. Weeds must be kept down until the plants are well rooted.
7. Cut for hay when it begins to bloom.
8. In warm countries (Italy and Spain) it may be cut from five to eight times in a season, but in England probably twice.
9. It is good for all kinds of cattle,

sheep and other animals, but it especially "agreeth with horses." "Lean beasts soon grow fat with it, and to milch-beasts it procureth abundance of milke, but must not be fed alone as it is too strong a food, filleth them too suddenly with blood as to greatly endanger their health."

10. He advises not to pasture it until late in the season, or even all winter. The hay will keep three years, and one acre will keep three horses.

To this we append the table of Prof. Henry in "Special Report on Cattle Diseases and Feeding," from Bureau of Animal Industry, showing the nutritive ratios of several well-known feeds, as well as alfalfa:

	Number analyses.	Ratio.
Corn fodder.....	35	1:11.8
Corn stover.....	60	1:17.7
Hay, mixed grasses.....	11	1:12.5
Alfalfa.....	21	1:5.4
Cow pea hay.....	8	1:5.1
Wheat straw.....	7	1:65.7
Wheat bran (roller).....	7	1:4
Wheat bran (old process).....	9	1:5.3
Hungarian grass.....	12	1:10.8
Timothy.....	68	1:15.5
Red clover hay.....	38	1:5.9
Alsike.....	8	1:5.9
Rye straw.....	12	1:69.1
Wheat bran (all analy.).....	88	1:4.2
Wheat shorts.....	12	1:4.5

The extremes in the above table are furnished by wheat and rye straw, which give the poorest nutritive value, and wheat bran as the best, with alfalfa and cow peas close after it in rank.

Le Clerc's Wheat Again.

EDITOR KANSAS FARMER:—Have just been reading the FARMER of April 25, where Joseph Le Clerc gives a

improvements going on on the farm and the rise of farm values is the best proof of a profit. H. KERN.

Palco, Kas., May 13, 1894.

Government Crop Report for May.

Wheat.—The May report of the Statistician of the Department of Agriculture, after consolidating the returns, places the condition of winter wheat at 81.4 as against 86.7 the previous month, being a falling off of 5.3 points. In 1893, at the same date, the condition was 75.3, a little over two points lower than the previous month.

The averages for the principal States are: Ohio, 90; Michigan, 83; Indiana, 90; Illinois, 89; Missouri, 83; Kansas, 75; Nebraska, 59, and California, 52. While the improvement during most of April has been considerable in most of the States, the effect of the cold weather in March is shown to have been more serious than reported at that time. The advices from our correspondents in the States of Kansas and Nebraska indicate that the damage from the cold weather has been augmented by drought and high winds, and much of the area has been abandoned and plowed up and put in other grain. In California the long-continued drought, accompanied a great portion of the time by high winds, has proven very disastrous to the crop, and in many places it is said to be an entire failure in consequence. In other States the plant is doing very well considering the setback caused by the cold weather.

Winter Rye.—Winter rye, like win-

Physicians,

the world over, endorse it; babies and children like the taste of it. Weak mothers respond readily to its nourishing powers.

Scott's Emulsion

the Cream of Cod-liver Oil, is the life of the blood, the maker of sound flesh, solid bones and lung tissue, and the *very essence of nourishment.*

Don't be deceived by Substitutes!

Prepared by Scott & Bowne, N. Y. All Druggists

per cent., and in 1891 68.8 per cent. only had been broken.

Meadows.—Meadows enter the present season with an average condition of 91.7. The drought of last year and the sudden freeze of last March are the main causes of impairment. Last year the average condition of meadows and mowing lands May 1 was 89.2, and in 1892 89.6.

Spring Pastures.—The average condition of pastures is 92.7. This is 5.5 points higher than in May last year, and 5.3 higher than in 1892.

Cotton.—The cotton report as consolidated by the Statistician of the Department of Agriculture for the month of May, relates to the progress of cotton-planting and contemplated acreage. The proportion of the proposed acreage already planted on the 1st of May was 81.6 per cent., against 85.3 per cent. last year, which is a little over four points lower than the amount usually planted at that date. The returned estimates by States are as follows: Virginia, 45; North Carolina, 74; South Carolina, 88; Georgia, 86; Florida, 95; Alabama, 83; Mississippi, 83; Louisiana, 81; Texas, 84; Arkansas 61; Tennessee, 65. The delay in Virginia, Tennessee, Arkansas and Louisiana was caused by the continued cold weather, while in Texas planting was retarded by both the late cold and continued dry weather. Germination has been slow and growth of plant backward owing to these facts.

Some indication has been given as to the contemplated acreage, by our correspondents, as compared with that of last year. The figures relating thereto are given only to indicate what the correspondents believe to be the intentions as to acreage. The reported indication points to an acreage of 1.9 per cent. less than last year. The percentages by States are as follows: Virginia, 93; North Carolina, 94; South Carolina, 98; Georgia, 98; Florida, 89; Alabama, 98; Mississippi, 98; Louisiana, 94; Texas, 104; Arkansas, 95; Tennessee, 95. The general average being 98.6.

CHANGES IN CROP AREA.

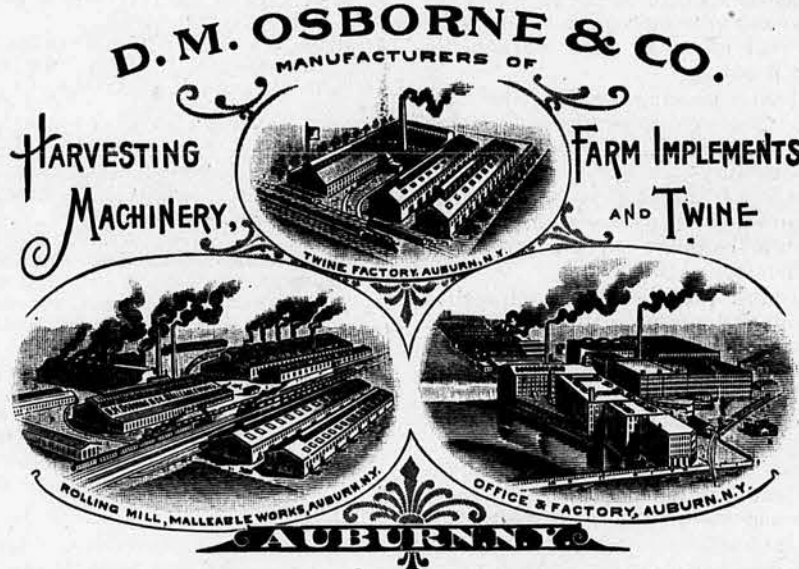
Returns show a tendency to increase the area of potatoes in the East, and of corn in the South and West. Corn will, in a large measure, take the place of oats killed by the March freeze. The area of spring wheat will be somewhat reduced, owing to the low prices of the past year. A larger area of flax may be expected. The movement toward diversification of production in the South is continuing. Permanent changes in the proportions of staple crops in that section, however, will be made only by slow degrees, as, in fact, will permanent changes anywhere.

A Practical Veterinary Surgeon.

H. M. Benham, D. V. S., of Mitchell, Ind., writes: "Every breeder should have the Perfect Impregnator, bought of Specialty Manufacturing Co., Carrollton, Mo."

Leasing Oklahoma School Lands.

All persons wanting to lease school land in Oklahoma will be rewarded by sending for a free sample copy of the HOME, FIELD AND FORUM, Guthrie, Okla., the leading agricultural paper of Oklahoma Territory.



We show herewith a cut of the immense factories of D. M. Osborne & Co., of Auburn, N. Y., who have been established for nearly forty years at the above place in the manufacture of agricultural implements. Their plant is one of the largest and most complete of its kind in the world. There is not any material used in their machines but what is manufactured under their own roof. They are the only concern engaged in the manufacture of implements who manufacture all their material. It is very evident that a manufacturer doing this is bound to turn out better and more durable implements. This firm employs an army of 2,000 men. Their implements are sold throughout the world and are considered by farmers that have used them to be very superior. This firm have branch houses and depots at all of the principal points in the United States, where their implements and repairs for same can be obtained without delay. The repair feature of their business they make a specialty

of, realizing that when a farmer has an accident in the harvest field he must have repairs quickly. This firm have also local agents distributed throughout the country, and it will be to the interest of all farmers intending to purchase mowers, reapers, self-binders, hay rakes, peg-tooth harrows, disc harrows, hay tedders, spring-tooth harrows, binder twine and machine oil to investigate the goods manufactured by D. M. Osborne & Co. before purchasing elsewhere. If they have no local agent near you it would be well to address them at any of the places named in their advertisement which appears in this paper from time to time. This firm are offering free to farmers who guess nearest to the total 1894 yield of wheat in the United States, thirty of their implements. Farmers should write them at once for catalogue and full information regarding the free premiums. We can heartily recommend D. M. Osborne & Co. to farmers who want first-class value for their money.

statement of the cost of raising wheat. I think he must be a land agent or else working in the interest of one, as his prices allowed for the work done are lower than the average farmer can do it or hire it done. Besides, he allows nothing for rent or use of land; nor does he allow anything for failures. I think if he practically follows wheat-raising at present prices and keeps close account of his expenses, he will feel surprised at the end of the crop season to see what has become of his share of the earnings. I think if he wants anything out of the crop he will have to get out of the shade of that box elder and do the work himself at a low price per day or else his account might come out not showing a profit. There are a good many men who can figure on paper the profits of farming, but let them show it on the farm. The

ter wheat, has suffered a decline since last month, the average for May 1 being 90.7 against 94.4 in April. The averages for the principal rye States are: New York, 95; New Jersey, 98; Michigan, 91; Pennsylvania, 90.

Barley.—The average condition of barley is 62.3 against 86.6 last year. The low condition is the result of the drought in California, which is the largest producing State.

Spring Plowing.—The present season has been unusually favorable to all spring work, and the proportion of plowing done on May 1 is returned as 83.5 per cent. The proportion usually completed by this date is 77.8 per cent. The present season is, therefore, nearly six points above the average. Last year 73.4 per cent. of the intended area had been plowed by May 1; in 1892 64.6

Irrigation.

IRRIGATION CONVENTION AT MEADE

The irrigation movement has got into the counties south of the Arkansas river. Meade county began by a very enthusiastic meeting at Meade, on the 15th inst.

W. F. Foster, the ex-Mayor of the city, who was present at the Wichita convention in December, had worked up considerable local interest and secured the attendance of Judge Emery, Mr. E. R. Moses and Prof. Robert Hay. Mr. Foster met Judge Emery and Prof. Hay the day before at Fowler and drove them through the artesian district, and next morning from Meade they were given three hours' drive to the irrigated ranch of Mr. Steele, on Spring creek.

The meeting convened at 11 o'clock a. m., and at once organized a county association, with President (W. F. Foster), Secretary, Vice President and three other members of an Executive committee, and appointed another meeting for May 28 to complete the organization.

The afternoon was mainly occupied by the addresses of the "visiting brethren." Judge Emery opened with a stirring address on the necessity of irrigation for arid and semi-arid America. He alluded to the fact that the dense populations of Asia were supported by irrigation and that the semi-arid plains of America must become the home of the increasing population of the coming century. The land was too good, the sky too bright, the zephyrs too fresh for this region to be given up merely to grazing either buffalo or Short-horns. Irrigation is the way to redeem the plains. There was a sufficient supply of water in Meade county to irrigate a large proportion of the soil, and as it won't all run from flowing wells it must be got from below by pumps and put on the surface by human industry, and then Meade would export, not import, all the necessities of life.

Prof. Hay followed with an instructive talk on the water supply and the means of putting the water on the land. He showed by a few simple experiments how capillary attraction carried water through soils. He described by diagrams the conditions of artesian wells and indicated how, when circumstances seemed favorable, there might yet be no flow. He had diagrams from the government artesian and underflow report, the level of the sheet water of western Kansas, and gave it as his judgment that there was enough water in Meade county to irrigate an average of ten acres on every quarter section. He insisted on every person who owned land doing the little within his reach. Irrigate one acre. Irrigate five acres and be absolutely independent of what the rest of your farm may do. And yet the unirrigated upland will grow alfalfa and Kaffir corn, and Meade county may support the families of four or five thousand working farmers and make a lively business city of its county seat, with four or five thousand people, with grist mill and canning factories and an export trade of all the necessaries and many of the luxuries of life. God has given the wind, the water and the soil. Man must use brain and brawn for the controlling of the forces of nature in his own behalf.

E. R. Moses, of Great Bend, President of the Inter-State Irrigation Association, spoke of the advantages of association. How united effort would obtain an irrigation survey from "Uncle Sam" and an irrigation bureau from the State Legislature. He spoke further of beautifying the homes by planting and irrigating trees, of supplying the homes with all fruits and vegetables and having a surplus of potatoes and cabbages to sell instead of buying them from Utah and California. He spoke of alfalfa having netted \$45 per acre and potatoes producing 300 to 500 bushels, which is more profitable than an orange grove. He urged the farmers to irrigate, and they would first have a living and then a surplus, which would always be useful.

A vote of thanks to the speakers

closed a successful convention of not less than 150 to 200 people, some of whom already know the blessings of irrigation, and the rest are going to try them.

Farming by Irrigation.

It was my privilege, recently, to visit a portion of Colorado around Greeley and Fort Collins, where farming is carried on extensively and successfully by means of irrigation. This region is watered by the Cache-a-la Poudre, a stream which meanders through the broad and fertile valley of the same name, and from which upwards of sixty canals take their lead. It is a beautiful valley, presenting as it does a broad expanse of level land, bordered on the west by the mountains and on the other sides by low ridges. At first sight a stranger is apt to be deceived in the lay of the land. Owing to the contrast between the mountains and the flat valley, it appears as though the land sloped toward the mountains; but in reality there is on the average a fall of fifty feet to the mile from the mountains down the valley. Alfalfa, wheat and potatoes constitute the main crops, and the values of land and water rights are based on the yield of these. Enterprising real estate men even go so far as to post sworn statements from the farmers, in conspicuous places, which show the fabulous yields of these staples from lands watered by certain canals. Corn is a failure there, owing to the elevation, and only early varieties are grown, and these to but a limited extent. But fruit-growing and truck farming are, on the other hand, on the increase, the mines and grazing regions to the north and west affording good markets for these products.

All their farming is on the intensive plan. The conditions give special emphasis to the almost trite saying that "it pays to cultivate well what is cultivated at all," and the neat homes and the careful methods everywhere apparent bear evidence to the prosperity and industry of the farmers.

Farming there would be impossible without irrigation; with irrigation it is a success beyond what may be hoped for even in favored regions in the rain belt.

The question arises if irrigation could not be made equally successful in Kansas. We worry along with an insufficient rainfall, and accept short crops and more or less complete failures as chastisements from Providence, while our streams carry enough water to the ocean to insure a full crop every year. Our agriculture would profit immensely by a system of irrigation by which this water which now runs to waste could be used to supplement the rainfall. Even central and eastern Kansas, where crop failures are few but shortages many, would find it of incomparable advantage. And the same is true, in fact, of all sections of the United States. Nowhere would the ability to irrigate a crop at a critical period come amiss. But, confining the case to Kansas, there are no two opinions on the subject.

There are three general sources of water supply: (1) By diverting the water of streams into canals; (2) by collecting surface drainage in storage tanks, or reservoirs constructed in suitable depressions; (3) by raising water to the surface from the "underflow." All three methods will find their appropriate uses in Kansas.

Where the streams can furnish the water and the contour of the land permit of its application through canals, this is doubtless the cheapest and most efficient system. Irrigation from reservoirs must necessarily be confined to limited areas, and to regions where the surface drainage can readily be collected. It is for the individual farmer who finds himself favorably located for the construction of tanks to make use of this plan. The same is true of pumping plants. That the latter can be operated successfully is demonstrated by the numerous small pumping plants in the Arkansas valley. Their practicability is limited only by the amount of water that can be raised; and the near future will, doubtless, solve this problem satisfactorily. Near Greeley, Col., I saw one plant which

IRRIGATION SUPPLIES.

Tell Us What You Want to Do and We Will Put in the Outfit Which we will Warrant to Do the Work.

FAIRBANKS, MORSE & Co.,

MANUFACTURERS OF

FAIRBANKS' SCALES, ECLIPSE AND FAIRBANKS' WINDMILLS, TOWERS, TANKS AND FIXTURES, STEAM, HAND AND WINDMILL PUMPS, CYLINDERS, STEAM, GAS AND GASOLINE ENGINES, BOILERS, ETC., ETC.

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Write us for Special Information about Pumps. Catalogues Free.

irrigated ninety acres by a pump worked by a ten horse-power boiler, the water being raised seventeen feet. When the tide of prosperity shall again set in, and capital shall seek investment in new enterprises, it will find few investments more productive of dividends than the construction of irrigation systems in Kansas. But our farmers must take hold of the problem themselves, and by their zeal for the cause call capital to their aid.—Prof. C. C. Georgeson, in *Industrialist*.

Dodge City Irrigation Convention.

PROGRAM.

SATURDAY, MAY 26.

1. Music—Beeson's orchestra.
 2. "The Keys of the City"—W. J. Fitzgerald, Dodge City.
 3. "What Is Being Done for Irrigation in Western Kansas"—E. R. Moses, President Inter-State Irrigation Association, Great Bend.
 4. "Future of the Arkansas Valley"—H. V. Hinckley, Irrigation Engineer, Topeka.
 5. "Irrigation for Western Kansas—What It Will Do for Us"—Judge J. S. Emery, National Lecturer, Lawrence.
 6. Music.
 7. "Windmills and Reservoirs"—Ira Hubbell, Kansas City.
 8. "Measurements of Water in the Arkansas River"—Hon. F. H. Newell, Washington, D. C.
- EVENING SESSION.
9. Music—Beeson's orchestra.
 10. "My Experiences and Observations of Irrigation"—Hon. J. R. Burton, Abilene.
 11. "Irrigation and Work of the Inter-State Association"—J. L. Bristow, Secretary Inter-State Association, Salina.
 12. Music.
 13. "Possibilities and Certainties of Irrigation"—Capt. John H. Churchill, Dodge City.
 14. "Relation of Irrigation to Land Values"—Jno. E. Frost, Land Commissioner A., T. & S. F. R. R., Topeka.
 15. "Progress of Irrigation in Kansas"—Hon. D. M. Frost, Garden City.

Prof. Hay's address to irrigating conventions, which he illustrates by simple experiments on capillary attraction and by diagrams showing the position of the water-bearing strata of the West, should be heard in every county west of the 99th meridian. Committees arranging the programs of conventions should secure his services.

Our correspondent at Bird City, Cheyenne county, writes of gloomy prospects in his county. Wheat not up and so dry that nothing grows. Close observers long ago came to the conclusion that to attain certainty of prosperity the extreme western part of the State must develop its irrigation resources to the fullest possible extent.

Geo. O. Vick, of Meade county, has seven artesian wells, five of which discharge into a reservoir of just a little over an acre extent. He irrigates seventy acres, has strawberries and blackberries and the usual orchard fruits, and now has twenty acres of alfalfa. Last year five acres yielded fifty tons, worth an average price of \$5 per ton.

Robt. Bonner purchased his first trotter in 1856, and to that time but nineteen horses, all told, had records of 2:30 or better.

Its either Direct Legislation through the INITIATIVE and the REFERENDUM or another Revolution. Which shall it be? For books, information and plan write W. P. BRUSH, Topeka, Kansas.

WATER PIPE.

Our Hard Burned Vitrified and Glazed Clay Pipe is everlasting. With our Improved Joints this pipe will stand same pressure as iron and costs about one-fourth as much. Write for particulars.

W. S. DIOKEY CLAY MFG. CO.,
Makers of all kinds of Burned Clay Goods.
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Five World Beaters.

"SICKLES" BRAND HARNESS. All genuine stamped with this "Trade Mark." Made in five styles at \$6.50, \$9.00, \$10.00, \$15.00 and \$25.00 per set complete. The best harness for the money on the market. Ask your harness dealer for them. Manufactured only by J. B. Sickles Saddlery Co., St. Louis, Mo.

Weekly Weather-Crop Bulletin.

Issued by the United States Department of Agriculture, in co-operation with the Kansas State Board of Agriculture, for the week ending May 21, 1894, T. B. Jennings, observer:

A week of almost uninterrupted sunshine, and no rain, except a narrow belt extending from the northern half of Lyon through the northern half of Osage, through Douglas into Johnson and Wyandotte. The weather was unusually warm until Friday, when it turned cold, giving a general freezing temperature Saturday and Sunday mornings.

The weather has been decidedly beneficial in the southeastern counties, where much rain has fallen the past few weeks and all crops have greatly improved. Over the rest of the State rain is needed.

Wheat is heading in the central counties, and is in bloom in southern. The high winds of the 17th caused some injury by whipping. Corn has generally been cultivated once, and in the south much of it twice. Oats have improved slowly. In the west alfalfa is in fine condition, and in the southwest its first harvest will begin this week.

The wind and cold snap have injured fruits to some extent by whipping. The freeze has cut tender vegetables and much corn to the ground, and generally injured the potato crop. Apples have been falling badly in many localities.

Our First-Page Illustration.

Now that the cultivating season is close at hand in some localities, and soon will be in others, it is of great interest to farmers to know what implement will do the work most effectually, and at the same time give the crop the greatest advantage over the weeds. A gain in yield of 10, 20 or 30 per cent. by using a suitable cultivator is not a new idea, the fact having been demonstrated over and over again by hundreds of farmers; and the reason for such results is well understood, and may be stated as the effect of a better handling of the soil and more thorough killing of the weeds close to the corn or other crop when it is young, thus giving it a more vigorous start. It seems plain enough, therefore, that an implement which works close up to the crop, stirring the dirt thoroughly near the plant without injuring its root and without throwing enough dirt to cover it, would be the means of an increased yield. Almost every one will admit this, and the inquiry naturally is, what implements have the advantage? A look at the cut on our front page and a description of same which has been furnished us by the David Bradley Manufacturing Co., of Chicago, Ill., seems to answer the question, as they claim that the inner disks of the Bradley Disk Cultivator can be changed in the angle of their "setting" so as to throw little or no dirt, and by so setting them they can be run close to the plant without covering it, and yet stir the soil and kill the weeds. When the corn has grown higher the angle of the disks can be changed and as little or as much dirt thrown as desired. Several thousands of these were sold last year and the year before, and the testimonials they have concerning them indicate great benefit and satisfaction in their use. These testimonials will be furnished to any interested parties who will send a postal card to the David Bradley Manufacturing Co., 68 North Desplains street, asking for them.

Gossip About Stock.

C. S. Cross, proprietor of Sunny Slope farm, now owns that celebrated Berkshire sire, Major Lee 81189, formerly one of the boars at the head of Geo. W. Berry's herd.

An evidence of improved condition among farmers in the country is indicated by a farm sale made by W. P. Popenoe, of Shawnee county, assisted by Captain Hungate, the veteran salesman, who had a splendid sale. Twenty-two horses, mostly colts, averaged \$35; grade Jersey cows sold from \$40 to \$70; stock hogs averaged 6 cents a pound.

F. J. Berry, Union stock yards, Chicago, reports the following sales made during the past week: 265 horses sold at Saturday's auction, \$19,075; 178 horses sold at Tuesday's auction, \$12,735; 87 horses sold at private sale, \$6,977.50; one load, eighteen mixed, \$1,607.50; one load, twenty horses, mixed, \$2,025; one load, eighteen horses, common, \$1,280.

N. H. Gentry, President of the American Berkshire Association, in a recent letter, states the following significant fact: "The activity in the demand for recorded Berkshires has never been more spirited and satisfactory to advertisers than during the past six months, and the breeders who use the live stock and agricultural press in calling attention to their herds will not be disappointed in the results."

Through the courtesy of W. B. Oaks, Silver City, Iowa, banker, also breeder of fine roadsters, we reproduce from a photograph his 27-year-old mare that had been barren for years, and her 7-day colt, sired by Harrymont 7024, but got by the use of the Perfect Impregnator without the horse. This impregnator is sold only by the Specialty Manufacturing Co., Carrollton, Mo., who send free an illustrated book on Sterility to all who write for it.



J. F. Bishop & Sons, of Lincoln, Neb., who held two of the most successful public sales of Poland-China swine in the country last fall and winter, report the Poland-China business "all lovely" so far this season. They say they are "fixed" for two of the top sales of the season. They have ten litters of Electioneer pigs that will hold their own with the best. Van Wert, the big hog at the World's Fair, came home in perfect breeding form, and did the best service that he ever did. Royalty, the sire of Free Trade, is producing good things right along. Kansas took some of the best pigs the Bishops raised last year and the opportunity is open again. The Messrs. Bishop are just pushing along with the current, and when the time comes they will be found at the front with the best lot of pigs they ever raised.

Geo. W. Berry, breeder of Berkshires, Berryton, Kas., writes: "I have some late fall litters and a fine lot of spring pigs on hand. Among them are a number of boars and sows which will be well nigh invincible at the fall fairs. Nothing reserved for next thirty days. Two yearling sows by the great Longfellow's Model, and just bred to the splendid Majestic Lad 32201. They were State fair winners, and will be offered at bargain prices. Laura Lee 27800, first at Illinois State fair in 1891, and first in herd at Kansas State fair in 1893, is due to farrow the 20th; bred to Longfellow's Model. I will offer her with or without the pigs. A rare opportunity for somebody to start a herd of this famous family, that produced so many of the World's Fair winners. I do not intend to show this year. I have plenty of feed and was never before so well fixed to please buyers."

The American Berkshire Association is in a flourishing condition. Such information in these dull times is refreshing, and indicates more prosperous times for the farmer, in one line of stock breeding at least. The FARMER is in receipt of the following information from Geo. W. Berry, Kansas Vice President of the American Berkshire Association: "The cash receipts of the association for the months of January, February, March and April, 1894, exceed the receipts for the corresponding months during the past twenty years, and are larger than the average receipts for January, February, March and April of the past ten years by over 95 per cent. The States are entitled to precedence according to the cash receipts of the association for the months of January, February, March and April, 1894, in the order named: (1) Texas, (2) Illinois, (3) Missouri, (4) Iowa, (5) Tennessee, (6) Kansas, (7) Pennsylvania, (8) Ohio, (9) California, (10) Nebraska, etc." This shows that Kansas has advanced from ninth to sixth place.

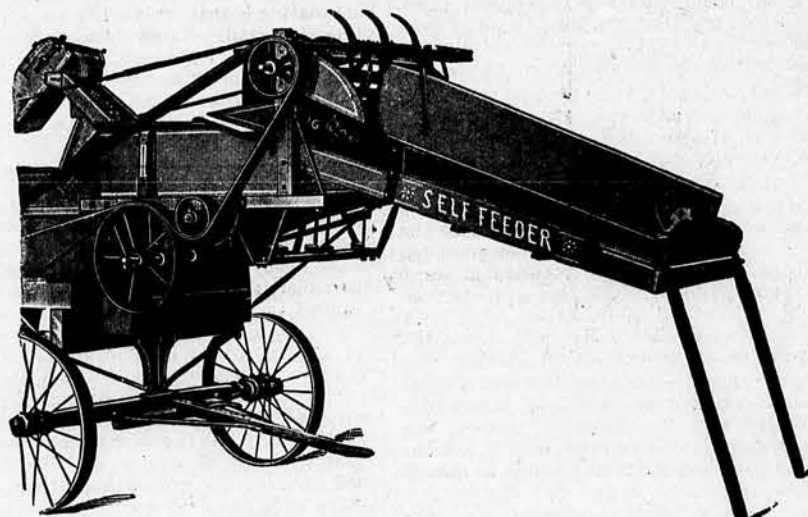
Messrs. Ellis & Stewart, breeders of Large English Berkshire hogs, at Cameron, Clinton county, Mo., this week place their advertisement with the KANSAS FARMER. They are offering at reasonable prices a fine lot of both spring and fall pigs of both sexes, that are of prize-winning strains. The stock are splendid specimens of the

best strains of the large variety of English Berkshires. They have both males and gilts of May farrow that will easily weigh 225 pounds. They are of splendid length, level lines and have lots of bone. There are, besides the spring pigs, a slick lot of fine fall pigs that are about ready to ship. Of course, these can be bought cheaper than the early pigs, and the express on them will be much lighter than on heavier pigs. There is the making of some show hogs among them. They still have the fine, strong boar that at the Cameron fair, where there were 112 hogs on exhibition, took the first premium in the class for boar under six months. This fellow will be a bargain for some one, for he is the making of a grand, big hog. The two-year-old boar, Roger Q. Mills, heads the herd. He was bred by Mr. Gentry, sired by Rambler, out of imported Minnie Lee. The sows in the herd are of the popular strains, of large size and excellent breeders, almost all bringing two large litters each year. All inquiries addressed to these gentlemen concerning their stock, prices, etc., will have prompt attention. We recommend them as careful, honest, intelligent breeders.

Live Stock Report, World's Columbian Exposition.

This office is in receipt of the final report of the National Live Stock Association by its Executive committee of eighteen. This committee was appointed by the various live stock and agricultural associations of the United States to represent the live stock industry before the World's Columbian Commission.

The report makes a very handsome volume and will be greatly prized by all having exhibits of live stock at the World's Columbian Exposition. The report contains handsome portraits of Director General Davis, Chief Buchanan and Chief Clerk Mills, and other prominent officials connected



THE EDWARDS SELF-FEEDER.

with the live stock exhibit to the number of twenty. About forty illustrations of the sweepstakes and first prize winners add much to the attraction of the volume. The volume contains handsome views of the grand gateway to the live stock exhibit of the World's Columbian Exposition, the exterior and interior views of the live stock pavilion, ground plan of the show ring in one of the barns provided for the Columbian live stock show. The first six Columbian awards in each ring are given in the classes for horses, cattle, sheep and swine.

In addition to the above items of general interest to the Columbian exhibitors of live stock, the report contains the full proceedings of the several meetings of the committee of eighteen, at which the classification of prizes, the rules, etc., were adopted by the live stock organizations prior to their presentation to the Columbian Commission.

The report was compiled by Col. Charles F. Mills, the Chief Clerk of the live stock department of the World's Columbian Exposition, and is published by the National Live Stock Association.

Hon. J. H. Pickrell, 510 East Monroe street, Springfield, Illinois, the Treasurer of the National Live Stock Association, has the distribution of the very limited edition of this valuable report, which should find its way into the home of every live stock breeder in the United States and Canada.

A Free Offer to the Sick.

Any person sick or in poor health, who will send a 2-cent postage stamp to The Flower Medical Co., 550 Columbus Ave., Boston, Mass., will receive, postage paid, their work entitled "Dr. R. C. Flower's Great Work in the Sick-Room." This work contains a description of Dr. R. C. Flower's great work in healing the sick—his treatise on sleep, eating, consumption, worry, with numerous recipes and formulas. This work should be in every household; it will relieve the sick and save thousands from getting sick. It will lift the burden of worry and bring sunshine into the darkest life.

Milo Maize, Kaffir Corn and Jerusalem Corn.

EDITOR KANSAS FARMER:—Would you submit the following to your experienced readers or correspondents: First, what is your experience in growing white milo maize, red Kaffir corn and Jerusalem corn? Giving location, season (wet, dry or medium), bushels of seed and tons of dry fodder per acre. Second, market price compared with Indian corn; feeding value compared with Indian corn; best way to dispose of crop for net cash results. CHARLES CAMP, JR. Burdette, Pawnee Co., Kas.

Kansas Swine Breeders.

EDITOR KANSAS FARMER:—As the time for arranging program and place of our annual meeting draws near, I would be pleased to hear from officers and members regarding same. We should have some score-card practice, and also have the proceedings of this meeting, together with the coming winter meeting in Topeka, reported in full and have them printed in pamphlet form for distribution. I have had many calls for proceedings of last year's meetings. The expense would be light and it would be of incalculable value to the breeders and feeders of the State. I suggest that we hold our annual meeting in connection with Wichita fair, first week in October. WILLIS E. GRESHAM, Secretary Kansas Swine Breeders' Association. Burrton, Reno Co., Kas.

Horse Markets Reviewed.

KANSAS CITY.

W. S. Tough & Son, managers of the Kansas City stock yards horse and mule department, report the market as being decidedly off. Prices are from \$7 to \$10 lower than during the past week on everything except stylish roadsters and knee actors.

Half the Money

spent for harness and shoes could be saved if they were treated right. Whether leather lasts or not depends on the care it gets.

Vacuum Leather Oil

is the care-taker.

25c. worth is a fair trial—and your money back you want it—a swab with each can. For pamphlet, free, "HOW TO TAKE CARE OF LEATHER," send to VACUUM OIL CO., Rochester, N. Y.

every year with our most intelligent business men, who appreciate and avail themselves of the protection as well as the investment.

It is now better understood than ever before, since the malicious and personal attack made upon it, that we have now in this State the Kansas Mutual Life Association, a company which will compare with the best and much older companies anywhere. Recently, because of the unfriendly attack made upon this Kansas institution, an official and expert examination of the Kansas Mutual Life was made, and the result is most gratifying, not only to the company, but to the thousands of Kansas policy-holders. Our readers may find it quite advantageous to read this report of the official examination of the Kansas Mutual Life Association, of Topeka, Kas. A postal card request will bring you full particulars.

Publishers' Paragraphs.

We have received the initial number of the *Southwestern Farm and Orchard*, published at Las Cruces, New Mexico, in the interests of the agriculturist and horticulturist of the irrigated Southwest. The new applicant for public favor contains articles written by practical men upon live subjects connected with field crops, vegetables, orchard, vineyard, floriculture and the care of bees, stock and poultry, as practiced by the best authorities in New Mexico, Arizona, southern Colorado and western Texas, where the conditions are so exceedingly different from those existing east of the Rocky mountain district. The journal is issued semi-monthly, neatly printed in magazine form, and those interested in these industries in the Southwest will find in the *Farm and Orchard* just the information which will be the most reliable and of the greatest practical value.

REVISED ENCYCLOPEDIA BRITANNICA.—KANSAS FARMER has, on several occasions, inserted its own advertisement of this Cyclopaedia, and keeps it standing in every issue of its supplement, which is issued quarterly, for those who apply for it. If you have not seen the advertisement referred to, drop us a card asking for our supplement. Now, instead of sending us one dollar as first payment, according to the advertisement, send us the names of twenty-five farmers of your locality, who do not take KANSAS FARMER, and to whom you have shown our advertisement, and we will send a sample copy of our paper to each one, and this list of names shall represent to us the first dollar called for by the terms of our original offer, and the set of books will cost you only nine dollars, to be paid for either weekly or all at once, as you deem best. No farmer's family ought to be without this valuable library when it can be gotten so cheaply.

It has been aptly written that "speed seems to spring from the soil in which the ashes of George Wilkes sleep," and each succeeding year the truthfulness of this saying is more apparent. He now has seventy-six performers in 2:30; his daughters have produced seventy, and his sons have sired 1,075, making a total of 1,221 standard performers in two generations, nearly three times the number of any other sire, the next to him being Almont, with a total of 466.

German Baptist Annual Meeting.

The annual meeting of the German Baptist Brethren will be held at Meyersdale, Pa., on the Pittsburg division of the Baltimore & Ohio railroad, commencing May 24th, 1894.

For this occasion the Baltimore & Ohio Southwestern railway will sell excursion tickets to Meyersdale and return from all stations on its system of lines at rate of one first-class fare for the round trip.

Tickets will be sold from May 21st to 26th inclusive, and will be valid for return passage within thirty days from date of sale.

For time of trains, etc., address nearest agent of the B. & O. R. R. Co., or O. P. McCarty, Gen'l Pass. Agent B. & O. S. W. R'y, St. Louis, Mo.; G. B. Warfel, Ass't Gen. Pass. Agent, Cincinnati, O.; R. S. Brown, Div. Pass. Agent, Louisville, Ky.; A. C. Goodrich, Western Pass. Agent, Kansas City, Mo.; Arthur DeArmas, Southern Pass. Agent, New Orleans, La.; H. C. Archer, S. W. Pass. Agent, Dallas, Tex.

About Life Insurance.

How many readers of this journal carry life insurance? Have you ever thought about making an investment for the future welfare of your family? If so, you should not fail to consider the matter of life insurance in that connection. Life insurance is one of the best saving institutions and at the same time a choice and sure permanent investment. This is true when your insurance is with a well established company of unquestioned integrity, and there are many such, which are doing an immense business

The Home Circle.

To Correspondents.

The matter for the HOME CIRCLE is selected Wednesday of the week before the paper is printed. Manuscript received after that almost invariably goes over to the next week, unless it is very short and very good. Correspondents will govern themselves accordingly.

A Crop o' Kisses.

From her side I go a-singin' in the mornin' cool and gray,
When the dew shines in the furrow an' the hills climb into day;
An' I kiss her at the partin'—she's the sweetest thing in life—
Like I use' to kiss my sweetheart 'fore my sweetheart heart was my wife.

It's a kind o' "good-bye" kissin'—though it's kissin' mighty soon!
An' I say: "I'll make it last me 'till the shadders point to noon."
An' the keen larks sing: "He kissed her!" an' the winds sing: "So did we!"
When some wild rose comes a climbin' an' jee' steals her kiss from me!

Then the plow stands in the furrow, an' my dreamin' eyes I shield
As I look where last I left her as I sing across the field;
"Here's the winds a-laughin' at me; here's the larks a-singin' this;
'He's kissed her, kissed her, kissed her—but the rose has stole the kiss!"

Then the birds a-singin' an' a-twittin' me so sweet,
I lose sight o' all the grasses roun' the corn-blades at my feet,
An' my horse looks roun' a-wonderin', 'till he almost seems to say:
"Will you make a crop o' kisses or another crop o' hay?"

An' I don't know how to answer, for I'm thinkin', an' I seem
Like a feller jes' a-wakin' from the middle of a dream,
An' my horse is out o' harness, with his mane a-flarin' free,
An' the rose that stole her kisses—well, she kisses it an' me!
—Southern Magazine.

HOW TO DRESS THE BABY.

The following directions, given in *Harper's Bazar*, for dressing the youngster, are very useful, perhaps, to those who can afford to expend some twenty odd dollars in the operation; but it is within the recollection of most of us that when our mothers on the farm gave us our first "dressing down," the materials used consisted largely of pieces left over from the making of other family garments, and represented a cost possibly of about thirteen cents in all. When one is hungry, a nice "bill of fare" sometimes proves enjoyable in the mere reading. So to those who have babies to dress the following may prove of interest. It is entitled:

THE BABY'S LAYETTE.

Every one has a different idea of what the wardrobe for the little baby should consist. The babies themselves are pretty much alike in their requirements, and so it seems that they might be governed by one simple rule.

The foundation is generally the same, but the variations are found in the different forms of elaboration and expense. In this article I want to tell what is necessary to make the baby comfortable, and how to arrange for it. We will begin with the bands—the first article of clothing that is put on the baby.

These, of course, are made of flannel. They want to be made from a nice piece, at about 65 cents a yard, and should be torn in strips fifteen inches long and five inches wide; six are enough. Do not turn down the edges, for even that little hem is rough for the baby's skin. If any decoration is wanted, button-hole them along both sides with white silk. This is all that is necessary.

The nicest shirts are those made of silk and wool mixed, high-necked and long-sleeved. These should button all the way down the front. It is much easier to put them on when they button in that way, and saves putting over the head, which the baby always dislikes. They can be bought for \$1.15 apiece. Six is a generous supply, and two can be bought a size larger than the other four, which should be the smallest size. A less expensive shirt, that is very good, is of cotton and wool mixed, for about 65 cents.

Next come the barrow skirts. These are made with a cambric waist-band, five inches deep and sixteen inches long. The flannel is gathered in at the bottom of the band, and should be about twenty-five inches long. It is left open all the way up, and is bound with flannel binding all around the edge. The same quality flannel as used for the bands will do for these. There should be six. Babies, as a rule, do not wear the barrow skirts longer than the first three months. Then they will need the flannel skirts, which do not differ very much. They are larger, and do not open up the front, and are generally embroidered around the bottom. There is no better or prettier way to finish flannel than to work it in this way. Of course it is much less expensive to buy the flannel and have it stamped and do it yourself than it is to buy the flannel already embroidered. If it is a "winter baby," a good plan is to make the band of the skirt also of flannel. These skirts should be quite full to look nicely. The white skirts can be made of domes-

tic cambric for 12½ cents a yard. Or, if something nicer is wanted, some of the soft finished cambrics that can be had from 14 cents to 20 cents a yard. These are made on a cambric band the same size as that on the barrow skirts. The white skirts should be about thirty-four inches long when finished, and made of two widths of the cambric. They can be finished around the bottom with a deep hem and two small tucks, or else with embroidery. There should also be six of these. Ten or twelve dresses and six night-slips are a good supply.

The slips can be made of cambric at 14 cents a yard. It will take two yards for each one. They want to be cut a yard long. A width and a half or a little over is wide enough, as the cambrics are all a yard wide. These can be finished in around the neck and left to hang loose, or made with little tucks across the front and back. A pretty narrow plain ruffling comes at 50 cents a piece of ten yards, which is very nice to use for trimming on these slips. It washes and wears well, and is "babyish." Many of the French imported slips are trimmed with it. In place of it, however, narrow edging or Valenciennes lace may be used for the neck and the sleeves.

The dresses can be made of a more expensive quality of cambric, and the best ones of nainsook. There is very little variety in the way these are made. Those with little tucks across the front are the prettiest. A line of feather-stitching can be made between the tucks. A cotton comes by the ball for the purpose. Narrow lace or fine nainsook edging is best for the finish of the neck and sleeves. A deep hem with three or four very fine tucks above it is more used nowadays to finish the bottom of the skirts than the ruffles of lace and embroidery that used to be so much the fashion.

Talks on Astronomy.

If we could visit the little planet Ceres we would find that it is much smaller than our earth and that it receives seven times less light and heat from the sun than we do.

When we watch this asteroid through a telescope we find that it looks like a bright red star of about the eighth magnitude. The year on Ceres lasts as long as four years and about eight months on our earth.

While the astronomers were admiring Ceres another asteroid was discovered the very next year by an astronomer called Olbers. He found that it traveled at about the same distance from the sun and was also very small, like Ceres. This new planetoid was called Pallas, and it was discovered on the 28th of March, 1802.

On the 2d of September, 1804, yet a third planet belonging to the same family was observed, and the discoverer gave it the name of Juno, while on the 28th of March, 1807, Olbers found a fourth, which he named Vesta.

Astronomers began to believe that a large planet which had once traveled between the paths of Mars and Jupiter had been destroyed, and that Ceres, Pallas, Juno and Vesta were four of its fragments. But for many years no new planets of this family were discovered. At length, on the 8th of December, 1845, the observer Hencke discovered a fifth member of this strange family, and a sixth on the 1st of July in the year 1847. Since that time scarcely a year passes without the discovery of some new members of the family, until now no less than three hundred are known, all traveling between the paths of Mars and Jupiter, but some much nearer to the sun than others. Many of them have paths which are very oval, and many travel on paths very much tilted from the plane on which our earth travels. But they all move round the sun in the same direction as the earth and the other planets. Astronomers do not now believe that the asteroids are the fragments of a larger planet which was destroyed. There are good reasons for believing that there are thousands of asteroids—many of them, however, being probably too small to be seen with any telescope yet made.

Vesta, the largest and brightest of the planetoids, has a diameter of about 320 miles. None of the rest are much more than 100 miles in diameter, while some newly discovered ones are not much larger than the moons of Mars—that is, from 10 to 20 miles in diameter. Then again, the asteroids are so small that, if they were all rolled into one, they would make a planet only about one-fourth the mass of the earth. The asteroid which travels in a path nearest to the sun is Medusa, and it has a year lasting as long as three of our years and forty days. The asteroid Thule which is the most remote from the sun, has a year lasting ten days less than nine years.

I wonder what it would be like if we could live on these little worlds, and if we would prefer it to our own planet, earth.—*Mary Proctor, in New York World.*

Hall's Vegetable Sicilian Hair Renewer has restored gray hair to its original color and prevented baldness in thousands of cases. It will do so to you.

IVORY SOAP

99 1/2% PURE

DON'T ACCEPT IMITATIONS.

THE PROCTER & GAMBLE CO., CINCINNATI.

Home Building in Bermuda.

Any man who chooses may scrape the thin coating of earth off from his proposed building site and proceed to lay up the walls of his habitation with the blocks sawed out in the process of excavating his cellar. Thus when the cellar is dug the house may be ready for roofing, and if enough roofing material has not already been accumulated in the course of the excavation, it can easily be had by digging the cellar a trifle deeper, for the roofs in Bermuda are invariably made out of thin slabs of this same white coral rock. It has the advantage of being so soft that one may cut it with an ordinary hand-saw ten hours a day for six months or a year without refiling the saw. It may be sawed into slabs two or three inches thick and eighteen inches or two feet square without particular danger of breaking the slabs. It looks somewhat like a very soft, chalky variety of marble. Though so workable when first quarried, it hardens upon exposure. Moisture permeates it easily, however, and it is desirable that a building should be covered with a thin coating of Portland cement, or a mixture of common plaster with cement. This coating is then treated with a heavy whitewash made of lime burned from the same ever-ready coral rock. The roofs and chimneys, as well as the walls, are kept constantly whitewashed, and are absolutely as white as the driven snow.—*Review of Reviews.*

Asparagus.

Of all the plants used for food, there is none which has been so long known, or has had, so to say, so distinguished a lineage as asparagus. Its record, in fact, reaches back to almost the commencement of authentic history, as it is mentioned by the comic poet Cratinus, who died about 425 B. C., and was a contemporary of, though slightly older than, Aristophanes. Among the Romans, also, the tasty vegetable was held in high esteem. Cato the elder—not the gentleman who was of opinion that Plato reasoned well, but his great-grandfather, who insisted upon the destruction of Carthage, and who was born 234 B. C.—wrote a work, which is still extant, *De Re Rustica*; and in it he treats at length of the virtues and proper cultivation of asparagus. Pliny, also, in his *Natural History* (about 60 A. D.), has much to say on the subject. "Of all the productions of your garden," he feelingly observes, "your chief care will be your asparagus;" and he devotes several chapters and parts of chapters to its many beneficent qualities and the best modes of raising it. He asserts that, even in his day, the soil about Ravenna was so favorable to its production that three heads grown in that district had been known to weigh a Roman pound. As, however, this pound seems to have been equal to only about eleven of our ounces, it would apparently have required four of the stalks to reach a pound of our weight; but this result, considering the state of horticulture in those days, may be looked upon as wonderful enough, and has, in point of fact, only been equalled in our own times.—*Saturday Evening Gazette.*

Woman, Lovely Woman.

A woman is a creature that goes to a dress-reform club and votes that bifurcated skirts be adopted, and then goes to her dress-maker and orders her dresses made low in the neck, with long trains. She also gets on a platform and demands the ballot for woman, and then fails to register.—*Atchison Globe.*

This is not republished in "Home Circle" as an endorsement of the spirit of the remarks made by the *Globe*, but it is desirable to KANSAS FARMER to have the farmer ladies of Kansas write to "Home Circle" their "views" on the subject of "female suffrage." Please each one consider this a personal invitation. Seriously, we inquire, do the wives and daughters want to vote? They should not be deprived, under any circumstances, of anything they want and need.

The sugar-coating on Ayer's Pills not only makes them easy to take, but preserves their medicinal integrity to an indefinite period. It dissolves immediately after reaching the stomach and thus permits the full effect of the physic to be speedily realized.

The Weight of the Earth.

One of the problems that men of science occasionally undertake to solve over again for the sake of getting nearer to the exact truth is that of the density and mass of the earth. The density of a body is the quantity of matter that a given volume of it contains, while its mass is the total quantity of matter that the whole body contains. In a popular sense the mass of a body is measured by its weight. Water is taken as the standard of the comparison in estimating the density of the earth. It has been known in a general way for a hundred years that the earth's average density is between five and six times that of water; in other words, that the earth weighs five or six times as much as a globe of water of the same size would weigh, provided that the water in such a globe had the same density that water has at the surface of the earth. The matter composing the earth is denser in the interior than at the surface. If that were not so it would only be necessary to take a cubic foot from the surface of the globe and weigh it against a cubic foot of water in order to ascertain the density of the earth. As it is, the earth's density can only be learned by roundabout methods; by noting, for instance, the difference in the attraction of gravitation at the surface and at the bottom of a mine. Recently a new method of measuring the mass and density of the earth has been put into practice into France. This consists in changing the level of a small lake, which can be raised or lowered by artificial means and noting the effect upon a column of mercury. The results of these experiments have given for the earth's mean density 5.41 times the density of water. The latest previous estimate gave 5.56. It has been customary to speak of the earth as weighing six sextillions of tons. Its weight, according to the recent determination, is 5,757,000,000,000,000,000, or five sextillions, seven hundred and fifty-seven quintillions of tons. A very weighty and substantial globe, notwithstanding the fact that the sun could swallow it in one of the "spots" with hardly a wink!—*Youth's Companion.*

Dr. Thornton & Minor,

Bunker building, Kansas City, Mo., the well-known specialists in the treatment of all rectal troubles, have established a principle in connection with their ever-increasing clientele that is well calculated to inspire confidence in their integrity and ability to perform to the last degree that which they promise when assuming to cure their patients, and that is, they decline to accept a fee until they have clearly demonstrated that a cure has been accomplished. Thousands testify to the efficiency of their treatment. Another specialty of theirs is diseases of women, and of the skin. Beware of quacks. Ask for their circulars, giving testimonials of leading business men and high officials—they contain special information for the afflicted. Address, DR. THORNTON & MINOR, Bunker Building, Kansas City, Mo.

DO YOU WANT to sell Highest Grades Teas, Coffees and Grocers Specialties to farmers and other country consumers. A most respectable occupation and good earnings. If you are a hustler and mean business, address: WESTERN TEA AND COFFEE CO., Chicago.

\$2.75 Buy our \$9 Natural Finish Baby Carriage complete with plated steel wheels, axle, springs, and one piece steam bent handle. Made of best material, finely finished, reliable and guaranteed for 3 years. Shipped on 10 days' trial. FREIGHT PAID; no money required in advance. 15,000 in use. We are the oldest and best known concern of our kind, reliable and responsible. Reference furnished at any time. Make and sell nothing but what we guarantee to be as represented, sold at the lowest factory prices. WRITE TO-DAY for our large FREE illustrated catalogue of latest designs and styles published.

OXFORD MFG. CO., 340 Wabash Ave., Chicago, Ill.

ONLY 10% ABOVE FACTORY COST

\$8.78 buys a **\$65 Singer** Style Machine. **\$19.88** buys Highest Grade modern style machine in the world. 25 different styles at intermediate prices. **Warranted Ten Years.** We are the only manufacturers selling sewing machines direct. Liberal terms for securing a Sewing Machine **FREE.** CHICAGO SEWING MACHINE CO., 70 Halsted St., Chicago, Ill.

The Young Folks.

"Keep Humpin'."

I remember the time when I was a lad,
An' lived on the farm long with ma and dad;
In the long hot days how I'd have to hoe,
Out in the cornfield, row after row.
How I'd think of the fishes that lay in the brook,
An' I just a-lookin' to take my hook.
An' line, an' sprawl by that ole trout stream,
For I loved in them days to loaf an' to dream—
An' watch the fish a-jumpin';
Then I'd groan an' bemoan my unfortunate lot,
I'd go to my father an' say, "It's so hot—
Can't the corn an' potatoes wait well as not?"
But my father, he'd say—
In a stern sort of way—
"Keep humpin'."

Then I'd work with a will till each sep'rate row,
Stood forth without airy a weed to show.
An' each little rock I would duly install
In its own proper niche in the ole crumblin'
wall.
An' I'd say to my father, as proud as could be,
"I've finished my work, dad!" an' then in high
glee
Off I'd go, skippin' an' jumpin';
Then he'd say, "It's well done exceptin' one spot:
Now bring down them cows from the north pas-
ture lot—
There's no time to shirk—a farmer has got
(So my father would say
In a stern sort of way)
"Keep humpin'."

Take this for your maxim, and may it e'er be
Deep-seated and firm as the roots of a tree:
Whatever your work, whether peddling corn-
Salva or door-mats, or tootin' a horn,
Or sellin' of clothes line or cloth by the yard,
You'll find that your duty'll be much the less
hard,
If you put to your labor the heft of your soul;
Half-hearted won't win—you can't reach the
goal.
By occasional skippin' an' jumpin';
If you're fully determined, my friend, to "git
there."
You mustn't sit down by the wayside and swear;
You can gather more courage from a fervent
prayer.
And, as father would say,
In a stern kind of way,
"Keep humpin'." —A. P. Roberts.

YOUNG FOLKS' TRIP SOUTH.

(Continued from last week.)

The Yazoo & Mississippi Valley railway connects the beautiful city of Memphis with the other fine cities of the great valley southward to New Orleans. However, for three hundred and sixty-six miles of its route, it does not approach near the river, except at Vicksburg, until it reaches Baton Rouge, from which point it follows along the left bank for nearly one hundred miles, until it reaches the city of New Orleans.

Our young people left Memphis on the morning of April 23, anxious to see what the western part of Mississippi looked like, and to compare it with the green fields of sunny Kansas. If they expected to see pretty farm houses, nice lawns, beautiful shade trees, clear streams and waving grain, such as the greater part of Kansas can show in April or May, such expectation would have been sufficient cause for disappointment in the journey. Possibly "before the war" there may have been mammoth plantations, big houses and elegant home comforts there but no trace of such are left. As in the tearing down of existing institutions, laws and long-established usages, it requires a great length of time to build up again on the remnants of foundations left, so the thirty years since the war have not been sufficient to replace much that is beautiful between Memphis and Vicksburg.

The first of farming operations observed that morning consisted of an aggregation somewhat like the cotton draying in Memphis, viz., a negro, a mule, and a light plow. This combination seemed to be scratching the ground lightly between rows of cotton plants just high enough out of the ground to be observed from the train. Nor were the fields evenly tilled and clear like Kansas will show, but stumps and fallen tree trunks—half decayed—covered much of the surface. The kind of energy which would be required to clear the fields of such obstruction, seems to be largely lacking in that locality. The farm houses seen along the route consisted of cabins made of logs, slabs, boards or other material, such as could be from time to time propped up and made to stand together temporarily. The farming efforts of the colored farmers seem to be confined to cotton culture. Fat cattle, pigs and chickens seemed to be wonderfully scarce. During an hour's ride not a dozen chickens were seen, not more than a half dozen cattle and pigs, while mules, negroes and cotton plants were always in view. The average energy displayed by Kansas farmers would soon remove the fallen trees, decaying stumps, pools of slimy water, and that country could be made to bloom like the best portions of America. The cabins would disappear and substantial farm houses with the usual Kansas accompaniment of sleek cattle, pigs, chickens, etc., would take their place. Ten hour's traveling brought our young folks to the city of Vicksburg, two hundred and twenty miles, by rail, from Memphis. Too late in the night to see the city or river, but remembering that the morrow would bring another day, they went to bed to dream of negroes, mules, plows, cotton plants, and the chickens which had not been seen.

Vicksburg, like Memphis, is situated on a bluff, high above the river, but, unlike Memphis, which is comparatively level, the

city of Vicksburg is built on a series of terraces and several hills must be climbed before one reaches the "top of the city." What our party considered as the top of the city was the west front of the court house, from which point a river view can be obtained, which is as magnificent as anything that can be seen along the Hudson or Columbia rivers. To one who has studied the campaign of General Grant in 1863, this city is especially interesting. Standing in the court house square, one may see where the river was crossed by the Union army in April, and, directly in front, the position where the attempts were made to cut an artificial channel for the great river so as to divert its natural course and leave Vicksburg as an inland town. Then, to the rear, may be seen the location of the fortifications made by General Pemberton to resist the attacks of the Union forces. A short walk brings one to the place where the "mines" were exploded, by orders of General Grant, July 1, in the effort to blow up the Rebel fortifications. Into the crater, formed by these mine explosions, it will be remembered that the Union soldiers rushed in the vain endeavor to capture the breastworks. Here the Southern defenders enjoyed themselves with the cheerful pastime of rolling down upon the Union soldiers lighted hand grenades, with the expectation that they would suddenly rise in the world. And here the boys in blue showed their courage and appreciation of good things by catching up the missiles before they could explode and tossing them back to "blow up" the "Johnnies," and when this work proved bad for the hands, blankets were brought into use. Two soldiers holding a stretched blanket would catch the smoking shell and with a graceful flirt toss it over among the rebels. If you ever meet one of the old soldiers who was there, he will tell you all about it—he will never forget the circumstance.

But, when one wants to enjoy a really interesting walk or ride from Vicksburg, let him go north along the river for two miles from the center of the city and take a stroll through the National cemetery. On beautiful terraces covered with blue grass and edged with evergreens and pretty flowers, lie covered the remains of many regiments of Union soldiers, whose mortal lives were ended in the Mississippi valley in 1862 and 1863. One who writes this says he has visited many of the most beautiful cemeteries, from the Atlantic to the Pacific, but considers this one the most beautiful of all. The cleanly kept driveways and pretty walks lead to the topmost terrace, where, at a point overlooking the city and river, is located a small monument on which is inscribed the fact that it was erected at the spot where General Grant and General Pemberton consulted over the proposed surrender of Vicksburg on the morning of July 8, 1863. One at first wonders why, if it was erected there, is it now at a different place, for that locality was several miles from this. The reason is shown by the ugly notches on every edge and the missing fragments whose vacancies tell of idiotic actions of relic-hunters. General Grant says the meeting occurred under an oak tree, which relic-hunters soon had carved to pieces and even dug up its roots, and that enough wood ornaments made of it are shown all over the world, to equal the amount of "the true cross" as shown, or that, if consolidated, would make a ship as large as the Great Eastern was. This monument was then erected to mark the site. But maniacs who wanted "relics" soon had so marred it that for preservation it had to be removed to the National cemetery, where it could be continually guarded. As we passed out through the arched gateway we all read the inscription chiseled at the top, which imparted the information that here sleep 16,600 Union soldiers who died in the cause of freedom.

One walks on in a deep and patriotic study of the grandeur of the cause for which they died, until the very center of the city is reached, when, right in front, is observed another magnificent monument, which no doubt must tell of heroic deeds done in the cause of fatherland. On approaching closely enough one may read the fact that this monument was erected in honor of the brave Louisiana soldiers who so nobly came to the assistance of the besieged city of Vicksburg in June, 1863, and gave their lives to defend its citizens and property from the attack of the Northern foe. Over yonder the one, here the other, honored and immortalized so far as unfeeling marble can do the job. The youth of coming generations may be as puzzled over the combined patriotism represented in the National cemetery and the Louisiana monument at Vicksburg, as were our young people who left this beautiful city wishing some time to visit it again.

Not So Easy as It Looked.

Said Ted to Tim: as the twins sat upon opposite arms of Uncle Rob's arm chair:
"Tim, we're visitors."
"Yes, we're visitors, Uncle Rob," echoed Tim.
"Ah!" exclaimed Uncle Rob.
"It's a very rainy day, Tim," went on Ted.
"Very rainy, indeed, Uncle Rob," reiterated Tim.
"And what follows?" calmly inquired Un-

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cle Rob. His eyes twinkled, but he went on reading.

"You should entertain us, Uncle Rob," answered Ted, decidedly.

"That's what mamma always says when we have company," finished Ted, triumphantly.

"Well!" ejaculated Uncle Rob. He put down his paper suddenly. "I'll entertain you! How many days would it take to cut up a piece of cloth fifty yards long, if a yard was cut off each day?"

"Fifty!" shouted Ted, without thinking a minute. "Pshaw! Uncle Rob don't ask us those foolish, easy puzzles. They're as old—old—as the hills!"

"Seems to me," retorted Uncle Rob, "if they are old, they are not so wonderfully easy as you think. You're wrong, Ted. You've got to give me a better answer, or I won't think much of your smartness. Now, here's another awfully easy one—as old as the hills, too. But it has puzzled many a small boy before you. If a goose weighs ten pounds and half its own weight, what is the weight of the goose?"

Tim was just going to call out, "Fifteen pounds!" But Uncle Rob's solemn expression disconcerted him. Instead, he pursed up his mouth and looked at Ted, and Ted wrinkled his brows and looked at Tim.

"Doesn't sound hard," faintly from Tim. "It's very easy, indeed," replied Uncle Rob. "And here's one more of the same sort: A snail climbing a post twenty feet high ascends five feet every day, and slips back four feet every night. How long will it take him to reach the top?"

"A snail?" sighed Ted, thoughtfully.

"Yes, a snail," repeated Uncle Rob.

"Seems as if he only got up one foot each day—at that rate," considered Tim.

"So he did!"

"And the post was twenty feet high?"

"Yes, Ted, twenty feet."

"Well, then," pursued Tim, "it must have been two—enty—"

Uncle Rob laughed. "Now, I'll tell you what I'll do. You boys each take a pencil and paper, if you find them necessary, and work out those three puzzles. And when you each bring me the right answer we'll go to the circus and rest our brains for the afternoon."

Then Uncle Rob went back to his paper,

and Ted and Tim slipped softly down from the arms of his chair, and went to the drawer of the library table to hunt for lead pencils.—Harper's Young People.

Will some of our young people send in answers, to this office, to above puzzles, and tell the process of reasoning by which the same were determined. Then, if you have a really good puzzle of your own send it along for the benefit of us all.

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If our subscribers who are about to renew their subscriptions will notice our advertisement of "Picturesque America" in this issue, they no doubt will desire to take advantage of our offer. Send for our supplement containing our various clubbing propositions.

Readers should remember that the special offer to send the KANSAS FARMER to new trial subscribers for 50 cents from now to January 1, 1895, is still open, and that the person who sends in the subscription is authorized to keep 25 cents of the money. See the neighbors and get us a big list of trial subscribers.

The first basket picnic of the Shawnee County Horticultural Society for the season of 1894 will be held at the residence of E. Marple, four miles north of Topeka, on Thursday, May 31. The central subject for discussion will be strawberries. The discussion will be opened by J. F. Cecil and G. W. VanOrsdal. Each fruit-grower present will make a report of his experiences.

In order to secure the additional circulation to which the KANSAS FARMER is entitled by virtue of its intrinsic excellence, the publishers have this week made a sensational introductory offer for the remainder of the year. Every boy in every subscriber's family ought to make from his commissions on this offer enough money to pay all of his Fourth of July expenses and buy his mother a new dress besides.

If there were no other reason for depression of prosperity, the national coal miners' strike now on would seriously affect industry. Foreign coal has been imported while our own rich mines are the subject of contention between miners who refuse to submit to reductions of wages and operators who are trying to fill their places with other men who are willing to work at the wages offered. Such manufacturing industries as might otherwise continue in operation are shutting down for lack of fuel.

Reports as to the damage by the frosts of Friday, Saturday and Sunday morning are variable. That gardens and potato fields were cut down in the river bottoms seems to be a universal fact. Grapes suffered in the low lands and in some parts of the State on the uplands. Apples have been falling badly for some time and some large orchardists estimate only a light crop. Whether the late frosts will cause still more to drop off cannot yet be determined. Corn is reported cut down in some of the river bottoms, but it is thought the aggregate injury to this crop will be light. No damage to wheat is reported.

SOME REASONS FOR UNREST.

Why are "times" hard? Why these oft-recurring periods of depression? Why this universally conceded distress of people who depend upon their daily toil for their daily bread? Why this almost universal unrest? Why this movement "on to Washington?" Why this widespread sympathy with the men who propose to personally petition Congress?

One answers that the times are out of joint; another says, the men are lazy vagabonds who would not work if they had a chance; another says, times of depression come periodically and it can't be helped; another even denies that there is any unusual distress. Politicians all have their answers and each lays the blame to the opposite party. There is a general feeling that when Congress shall have done whatever it is going to do times will revive.

A New York paper—the *Press*—published last Wednesday an explicit and circumstantial account of what promises to become one of the great scandals of Washington corruption and the influence of trusts upon legislation affecting the interests of all the people. It shows how the sugar trust, through its agents at the national capital, demanded of the Senators such protection as would benefit that trust to an amount which the *Press* estimates for the first year at \$52,000,000 to \$56,000,000.

Demands for "protection" to great corporations are not unusual and it is barely possible that the methods of showing Senators the advantage of this protection have some uniformity, but it is not often that they are so clearly and explicitly stated as in the paper which makes this exposure. Without taking the space to give all of the details, the matter may be summarized by saying that the *Press* gives the names of the persons, the times and the places, in such a way as to convey clearly the impression that it is telling the truth, and alleges that Senators and other officials were shown that if certain amendments to the pending tariff bill were agreed to the stock of the sugar trust would go up thirty points in thirty days. Such information is what is called "a tip." Now there is constantly on the market a vast amount of this stock and it can be bought on the exchange by paying in cash only a small part of its current selling price. It is alleged that Senators took advantage of the "tip" given them. It is known that the desired amendment was made to the pending bill and that the promised advance in the selling price of the stock occurred. Later it turned out that there was still some doubt about there being Senators enough in favor of the bill as amended to pass it, and at least two Senators have given information of negotiations for their votes on a basis of so much cash to be paid on the recording of their votes for the bill. Of these it is definitely stated that the amount proposed for Senator Kyle, of South Dakota—the negotiation having taken place with his private secretary—was \$14,000. The Secretary, under direction of Mr. Kyle, carefully noted the proposals, so that if the investigating committee wants to know the exact facts they will be available. It is some satisfaction to know that our sturdy neighbor on the north was not found to be in the market. It is also gratifying to know that our Senator Peffer promptly introduced a resolution calling for an investigation of the sugar stock operations of Senators and that though his resolution was then voted down its principal provisions have since been incorporated in the resolution adopted.

It may be remarked that \$56,000,000 to be paid in a whole year by 78,000,000 of people is no serious matter and that no fuss ought to be made about it. But this is only one of the thousands of subjects of legislation affecting the interests of the people and corporations. It is the almost universal belief of those who are most inconvenienced by the state of the times that mistaken or vicious legislation is responsible for what is wrong in the situation. They believe that the personal presence of persons who have interests similar to those of the sugar trust to promote has more to do than ante-election pledges

and platforms with shaping the action of Congress. The prevalence of the belief among farmers that this cause has much to do with the low and declining prices of farm products accounts for the lavish abundance with which they are providing daily supplies for the marching armies. The belief that it has much to do with the decline of wages and the uncertainty of employment accounts for the friendly and liberal hand extended by labor organizations to the "armies." The merchant's belief that there has been buying and selling in which his prosperity was the commodity, has made him friendly to a movement which under other circumstances he would condemn.

The on to Washington movement is to be deplored, not so much for what it is as for the popular belief in a justifying cause for it and for the unrest which it augments and the precedent it sets for future and possibly greater movements. But it is questionable whether it will cease, whether it can be repressed, whether it will not augment until are dispelled both the belief in the corruption at Washington and the pall of idleness of the hundreds of thousands now unemployed.

THE SHOP OR THE FARM.

The fact that some 400 men who have been earning a living in the Santa Fe shops in this city were "laid off" last Monday evening calls for profound sympathy. No fault of the men led to the suspension of their opportunity to work. Lack of business on the road had so cut down the revenues that reduction of expenses was found to be necessary. The practical value of this bit of information to the boy or young man on the farm, who has possibly imagined that the lot of every young man in town is better than his, will in some cases not be realized until he shall have, for a time, at least, exchanged the bright and cheerful experiences of the corn field and the meadow for the smoke and grime of the shop, his work with horses and cattle for toil with forges or greasy machines. But when the "lay off" comes, when men who have to live from the grocery store and the meat shop find their money gone, their occupation gone, their credit gone, but hunger still making its three times daily demands, then is the contrast between the farm with its wheat in the granary, corn in the crib, potatoes in the cellar, meat in the smoke-house, cows and chickens in the barn yard, vegetables and fruits in the garden, its never-ending opportunities for work—then is the contrast apparent between all these advantages of the farm and the uncertainties of the life in the towns.

Not infrequently the employing company is blamed for not providing regular employment for its workmen. But without entering into details it may be sufficient to say that our industries are not organized that way. When an employer has need for the services of a number of workmen, he hires them. At present and usually there is no difficulty in obtaining men in practically unlimited numbers. When fewer men are needed some are laid off, and that with reference only to the interest of the employer. True, it is customary to give preference to men having families to support in determining who shall remain, but even these must go if the interest or whim of the employer so decrees. Perhaps the reader—humanitarian as he is—declares that if he were the employer he would so arrange his work as to use about the same number of laborers continuously. No doubt something could be done in this direction, and it is true also that a good deal of attention is given to this in arranging the work of the employing companies. But unforeseen contingencies arise; revenues are diminished, traffic is decreased, expenditures must be curtailed. The reductions are seldom or never applied to the high-salaried officials. Under the universal system the dependent laborer is the one to suffer.

Perhaps the system needs amending. But such as it is, it is the unyielding, cast-iron system under which the young man who exchanges the freedom of the farm for the semi-bondage of

city wage service must bow his neck. It is not too much to say that of all the avenues of life upon which the young man of to-day may enter, the one presenting the best present opportunities and the most pleasing prospect for the future is farming.

STATISTICAL BUREAUS, PUBLIC AND PRIVATE.

The accuracy of the official crop reports and estimates of the United States Department of Agriculture has often been challenged. Foreign statisticians have been astounded at the great difference between the published estimates and the amounts really harvested and thrown upon the world's markets. But American speculators have considered the official estimates of so great importance that the market has often experienced violent changes on account of the government report. Advance information as to what this report would be has been diligently sought by heavy speculators, and lately it has been found that some operators had such information as enabled them to anticipate the publication of the report by several days. By so doing they have been able to "buy" or "sell" large amounts of "grain" as their interests might dictate. Thus information as to the May report made it certain that its influence would be to advance the price of wheat, since a heavy decline in the condition of that cereal was indicated. The result was that those who possessed the inside information bought large quantities of "wheat," that is, they contracted for large quantities of this cereal, and then gave out that the May report would be a "bull" document. The expected rise came only as a brief spurt, but it served the purpose of the speculators and they sold at the higher prices as much "wheat" as they had bought, while they alone possessed the information, and made a clear profit of the difference. Their selling caused a reaction in the speculative market, and by the time the May report was officially published the price was even lower than before the rise which had been caused by the anticipation of the report. Indeed, the report itself, as well as its precursor, was out of harmony with general information as to the condition of the crop. The clique of speculators who had successfully obtained inside information as to what the government report would contain next turned the attention of their experts to ascertaining wherein that report was at fault, and on the information thus obtained the market went lower than ever before, No. 2 wheat having sold at 53 cents in Chicago.

This forecasting and later discrediting the official report has led many to suppose that some officer of the Department of Agriculture must be selling the information. It is easily believed that heavy grain speculators could well afford to pay a large price for advance information. Their operations extend to millions of "bushels," and a change of 1 cent per bushel means a profit of many thousands of dollars to the speculator who is on the fortunate side of the deal. Inquiry has shown, however, that the information was not furnished from Washington, but that a former employe of the Statistical division of the Department of Agriculture has a list of all correspondents of that department and that he has obtained from them throughout the country duplicates of the information furnished the department and by summarizing these this ex-employe was able to determine in advance what the official report would be. This information he sold to Chicago speculators, who doubtless paid him a good price for the opportunity thus afforded.

This incident has led the Statistician of the Department of Agriculture to enter upon a revision of his list of correspondents. While no blame can be attached to the correspondents, who serve the government without pay, it was very embarrassing for the department to find itself tamely repeating in its official utterances the estimates which a band of speculators had some days before declared it would make. But the vigilance of the official statistician does not exceed the activity of the speculators who, having had a

taste of the profits from advance information, appear to be now organizing a statistical bureau whose efficiency and thoroughness may surpass anything heretofore attempted on either public or private account.

That the gathering of official statistics needs thorough reorganization in this country has long been apparent. The loose methods which have heretofore given fairly satisfactory estimates will not long be even respectable in the face of the profits pocketed by owners of private statistical bureaus and the repeated discrediting of official figures by the markets and by later developments. The general public—dealers, producers and consumers alike—need to know reliably and with the greatest possible accuracy, the conditions on which markets and prices are to some extent dependent. Not unlikely the bureau now being organized in Chicago will put to still greater shame the work of the bureau at Washington.

DECORATION DAY.

One week from the day on which this paper is printed will recur the occasion which presents annually one of the best aspects of the human race of to-day. When, nearly a third of a century ago, the young man left his family fireside for the field of war in defense of the perpetuity of our nation, one of the pathetic questions which involuntarily arose was: "Will people care for me should I lay down my life for my country?" He well knew that father and mother, brother and sister, and perhaps one nearer and dearer than all these, would care. He did not ask about that. But his countrymen, the vast multitude who in after years should enjoy the peace purchased by his sacrifice—would they remember him?

But whatever the answer to these queries, the man went, he shared the hardships of the camp and march, the fierce struggle of the conflict, with thousands of others who became endeared to him as only mutual sufferings and enjoyments can endear humanity. As long as any of the comrades of the great war remain there will be those who will care for the comrade who has fallen, whether in the conflict or since his return to the walks of peace. Not only this, but while loyalty to this government exists, while valor and heroism command admiration, will the patriotic millions of the United States care for the soldier who has fallen. Each Decoration day adds new evidence of appreciation of the soldier's sacrifice and constitutes an object lesson in loyalty mighty in its influence for the perpetuity of our institutions.

WHICH BREED FOR MEAT?

One of our subscribers at Downs, Kas., makes inquiry of our readers upon a disputed question that few of our breeders will hardly dare to tackle. He asks, first, "Which breed of hogs makes the best meat?" and, "Will you write some of your subscribers who have bred Victoria swine to give their experience with them?"

Swine-breeders and fanciers are cordially invited to answer either query of our young friend, who concludes as follows: "I am a young farmer and desire information on these questions from readers of the KANSAS FARMER."

As a matter of fact, there is but little material difference in favor of any one breed, so far as quality of meat is considered. The hog with a "streak of fat and a streak of lean" is generally regarded as the best from an epicurean point of view, but as a business proposition, the hog that will in the shortest time and with the least amount of feed mature for the market is the best and most profitable hog to raise. Which breed will do this, we leave to the practical experience of Kansas breeders for response in these columns.

By noticing the label on your paper you can easily tell whether your subscription needs renewing. If it does, it is a "sure sign" that you ought to enclose, in a letter to us, a dollar bill—a nice, large "flat" dollar bill issued by the United States. It is just as good for our use as a gold dollar or a silver dollar, and its investment in this manner will repay you "an hundred fold."

PROFIT IN BEANS.

Prof. C. C. Georgeson, Kansas State Agricultural College.

For some unaccountable reason beans are a neglected crop. Their culture seems to be limited to certain sections of the country. Thus we find them grown in the States of New York, Ohio and Indiana, and to a less extent in a few other States, but in most cases they are not of sufficient importance to be noticed by the agricultural statistician. Why this should be so is somewhat of a mystery. Their culture is not limited to the places named by the peculiarities in the soil or climate. They can be grown successfully nearly all over the United States and the bean is an article for which there is a large demand. Beans are used in every household and can be obtained in every grocery store the country over, and to supply the demand it is stated that nearly a million dollars worth are annually imported from foreign countries. They are easy of culture, mature inside of three months, yield well with skillful culture and usually bring the grower in the neighborhood of \$2 per bushel. With such facts before us it seems strange that this crop should be so neglected. The reason must be sought in two causes—first, general ignorance as to the crop and its value; second, fear on the part of those who know about it that they cannot harvest and otherwise handle the crop properly.

The field bean in some of its various varieties is worthy of attention by every farmer. There is no danger of over-production for a long time to come, and even if the price should fall to half of the present rate per bushel there would still be good profits in the bean crop; and the profits accruing from its culture must not be reckoned solely by the amount of cash received from the crop in the market.

Beans are nitrogen-gatherers and enrich the soil in this element to a degree which, if it could be accurately estimated in money value, would be found to equal in value the amount furnished by a good dressing of manure; moreover, beans have certain other advantages in the farm economy. Owing to their short growing season and the fact that they are not planted until the latter part of June, a crop of beans can sometimes be taken from land where other things have failed. As a case in point, we have here, at the college, a field seeded to grass last March. The outlook for a good stand is not a satisfactory one at the present time. If dry weather should still further impair the prospects this field will be planted to beans some time during the last ten days of June. Every farmer can recall similar instances in which a crop of beans might have brought success out of imminent failure.

The culture of the crop is simple enough but somewhat exacting in its nature, and inattention to details may lessen the crop materially. Thus, beans can be planted as soon as the soil is warm, say a couple of weeks after corn planting is finished, or about the latter part of May; but when planted this early the crop is exposed to the attacks of weevils. This may be avoided by planting the last of June. This, therefore is the usual time of planting. The amount of seed per acre varies with the size of the variety. For small beans a bushel to the acre is enough, and this rate is increased up to two bushels for large beans. In this, as in all other crops, it is the safest plan to use a liberal amount of seed. The soil should be thoroughly pulverized and leveled before planting, and it is preferable to plant soon after a rain. A heavy rain immediately after planting, especially on a clay soil, may cause the formation of a crust before the beans germinate, which many of them will fail to break through. Beans are always grown in rows, never broadcasted, and the rows should be far enough apart to admit of cultivation. There are bean-planters on the market of the same general pattern as corn-planters, but in the absence of a special planter they can be put in with a grain drill in which two tubes are closed, leaving the third open, and the rows are two feet apart, or three tubes may be closed, leaving the fourth open, which will put the rows thirty-two

inches apart. The beans should be covered one inch, in heavy soil, and one and a half to two inches in light soil. Wood ashes are a special manure for beans and if a good supply of these can be obtained they may be scattered broadcast over the field and harrowed in before planting. If a limited quantity only is available, they are best applied in the drill along with the seed. Some successful growers whose land is very clean plant their beans with a grain drill, three or four rows close together, then stop up the fourth or fifth tube, which thus leaves the field in strips, or beds, with narrow passages between. This plan is, however, not advisable except on rich land exceptionally free from weeds. The weeds must be kept down, at all hazards, so when there are weed seeds in the soil, start the cultivator as soon as the beans are up, but cultivate shallow and throw no dirt toward the rows. Do not work among them while the leaves are wet, either from rain or dew, as it causes blight, nor should they be cultivated after they begin to bloom. The earliest varieties are ripe enough to harvest in ten to eleven weeks, and it is desirable that they should mature evenly, hence varieties should not be mixed. Harvest may begin when the pods turn yellow. The old-fashioned method of harvesting beans is to pull them by hand, but this is tedious and expensive, although in other respects the most satisfactory method. The best plan is to use a bean-harvester, which is an implement drawn by a horse and which cuts two rows at a time, an inch or so below the surface of the ground. A sod plow with a sharp share and from which the mold-board has been removed, will answer the purpose in an emergency, although it, of course, can only cut one row at a time. When sown in close rows with a grain drill, as mentioned above, they may be cut with a mower, but this is, however, not satisfactory, as it is conducive to much waste.

The next step consists in "curing" the crop, that is, to dry it sufficiently so that it can be stored until threshed. The procedure depends much upon the temper of the climate. In regions where there is but little danger of rain, they may simply be raked into wind-rows and these forked into piles or small cocks, where they remain until dry enough to be either threshed, stacked or otherwise stored. It is important, however, that they should not be rained on during this process, as it will discolor the beans and depreciate their value, and when stored in the barn they must be dry enough to preclude all chances of heating, which will have the same effect. The curing, however, is more difficult in regions where rain may be expected at this period, as is, indeed, the case in most parts of the United States. The plants are then either put in piles on rails laid on the ground, or they are stacked in high, narrow cocks around a stake driven into the ground, and covered with hay caps, or boards, to shed the rain. The piles must be loose to permit the circulation of air through them. The threshing can be done in several ways. Small lots are best threshed with a flail. They can be tramped out by horses on a smooth, hard floor, especially on a dry, frosty morning. Care must then be taken that the floor is well covered with bean stalks, otherwise many of the beans will be crushed in the process. They can be threshed on a threshing machine by removing the concave and running the cylinder at a low speed; and, best of all, they can be threshed on a special bean thresher, which does not split the beans, but cleans them ready for market. To bring the highest price in the market the beans must be hand-picked in order to remove all that are discolored or otherwise defective; but this labor is greatly lessened if they have been cured, threshed and cleaned properly. Beans should always be cleaned at once as soon as threshed. If stored away with the dirt in them many will be stained and depreciate in value.

Beans can be grown on almost any soil, although they do best on moderately light loam, and, of course, the richer the soil the larger the yield.

Twenty bushels to the acre may be considered the common average yield; but this may be doubled or even trebled, and at least one grower claims to have raised over a hundred bushels to the acre. Of the several varieties of field beans the White Wonder is one of the best, being a large yielder and matures early. Let those who have a suitable piece of ground try a small patch of beans this year, and if they give the crop the proper attention I am sure that they will continue to grow them with profit to themselves.

TUBERCULOSIS COMMON TO MAN AND BEAST.

The National Medical Association, of Washington, some weeks ago appointed a committee to investigate the subject of tuberculosis, and its report has been presented at the regular meeting of the association. This report, which is framed by men of national reputation as specialists in lung and throat diseases, declares that consumption is a disease which may be communicated from man to man, from man to animals and from animals to man, and that the bacillus tuberculosis may enter through the stomach, the nostrils or the lungs, but at the same time they claim that no disease is more easily prevented. The report shows that in the District of Columbia from 1883 to 1892 8,091 persons died from tuberculosis, the percentage of deaths from that disease to all deaths being 15.87 during the ten years. In Philadelphia there were 76,272 deaths from this disease from July, 1860, to April, 1892. In New York the autopsies in the charitable hospitals show that 60 per cent. of the patients were affected with the disease, though they did not all die of it, and it is estimated that one death in seven throughout the whole world is due to tuberculosis. The committee recommends:

1. That a committee be appointed to prepare the manuscript for circulars or pamphlets, with the view of having the same distributed among the people, setting forth the fact that each person having consumption is a constant source of danger to others not thus afflicted; that the disease is curable, and, above all, that it is easily preventable.
2. That the hospital authorities be urged to set apart certain wards for the exclusive use of consumptives; although the committee believes that special hospitals for this purpose are preferable.
3. That physicians be especially requested to inform their consumptive patients of the necessity of thorough disinfection of the sputa and of the methods by which this can be accomplished; and further, that they insist that the rooms once occupied by consumptives be thoroughly disinfected before they are again inhabited.
4. That the society take such action as will best secure the enactment of a law whereby no milk can be offered for sale until the cows from which said milk was taken have been tested and found to be free from tuberculosis.

The meeting of the society to which the report was submitted adopted the following important additional recommendation:

"Furthermore, That the health officer of the District of Columbia shall be requested to formulate such regulations as will insure to all persons purchasing vaccine virus in this district a guaranty that the animals whence such material has been obtained were treated with tuberculin and proved free from tuberculosis."

Fruit on Our Southern Line.

EDITOR KANSAS FARMER:—Seeing no mention of fruit prospects from this part of the State, I will say our show for fruit now is good. There will be a heavy crop of peaches. I have, in my orchard, trees that are now carrying their eighth full crop, that were planted in the spring of 1884, and are, to all appearance, in the very best of health and vigor. In the ten years I have lived here there has never been a total failure of the peach crop. I heartily concur with the views of Prof. Massey in the last number of the FARMER. With me the Missouri Pippin, Winesap, Ben Davis, Jonathan, Maiden's Blush, Cooper's Early and White and Yellow Transparent are making the best show for apples.

E. T. DANIELS.

Kiowa, Barber Co., May 21.

C. L. W., Cunningham, Kas.:—The address of the Secretary of the American Clydesdale Association is Chas. F. Miller, Springfield, Ill.

The Kansas Weekly Capital publishes more Kansas news than any other weekly paper. A free sample copy will be sent on application to THE TOPEKA CAPITAL CO., Topeka, Kas.

Horticulture.

A SUBSTITUTE FOR COFFEE.

The Director of Purdue Experiment Station, Indiana, has experimented with a substitute for coffee, which he recommends as superior to the cheaper grades of coffee on the market. This is no other than the Soy bean, which our own experiment station has found a desirable crop to cultivate for forage. In these times of scarcity of ready money it is worth while to consider all suggestions of methods of becoming more independent of outside sources of supply. The bulletin of Purdue Station says:

"While no substitute will satisfy the lover of high-grade coffee, the peculiar properties of coffee as a drink render it unsuited to a few people in every community. These few persons frequently make use of a substitute, which, while lacking the alkaloid of true coffee, in a measure imparts to the fluid made from it a flavor similar to that of coffee. Such a drink may be palatable, nourishing and well adapted to the person using it.

"The purpose of this brief bulletin is to direct attention to what seems to be a desirable and easily available substitute for coffee, such as can be grown upon the farm in this latitude, viz., the Soy or Soja bean.

"The Soy bean (*Soja hispida*) is a Japanese plant that has been but little grown in America. It has an upright, stiff, bushy form, under favorable circumstances attaining a height of three feet. There are three large leaves on a leaf stem. Short flower shoots come from the axils of the leaves, which with maturity produce pods in clusters of two or three. Each pod contains from two to four seeds, a little longer than broad, being about three-eighths of an inch in length. One plant may produce a large number of pods and leaves. The plant sends a vigorous root down into the soil. The leaves, stems and pods are as a rule very hairy.

"The writer's attention was first directed to the peculiar merits of the roasted Soy bean, as a substitute for coffee, by Mr. L. D. Brown early in 1892, who was then a farmer in this county. In a letter Mr. Brown says: 'We have used it almost exclusive of other coffee, for coffee, for many years—seven or eight, I believe. I have raised 782 beans on one stalk from one bean planted, and had sixteen bushels on one acre in Tippecanoe county.'

"The seed should be planted about thirty inches apart in rows, with a bean every six to nine inches in the row. The ground should be prepared as for any other beans. The seed should not be planted until the ground is well warmed, about the latter half of May, though a satisfactory crop has been gathered at this station from seed planted about the middle of June. Yet the season may be too short if, the planting is delayed much beyond June 1. After the beans are ripe enough the plants should be mowed off or pulled up, and dried in the field in small piles or stacks, after which they may be taken to the barn and threshed out. Care should be taken not to harvest when the pods are too ripe, or they will shell in handling. A flail is a satisfactory instrument for threshing them out with, for they must be broken as little as possible in shelling.

"Of the Soy coffee, 17.07 per cent. became soluble when boiled in water for drinking. The one main and essential difference between the seeds of the Soy and coffee is that one contains an alkaloid—caffeine—to which is due its peculiar flavor, which the other lacks. Both contain considerable fat, fibre and albuminoids, but the amount of available nutriment in either case would be inappreciable in a cup of coffee. That there should be so close a relationship in the amount of fat in each is of special interest. It is important to note that the Soy bean roasted is more nutritious than the artificial coffee or barley coffee sold in the market, and that the two latter contain but little fat and a great deal of carbohydrates (starch and sugar mainly).

"As tried in the family of the writer,

the drink made from the Soy bean was agreeable, and enjoyed more than some of the so-called coffee served in some hotels and restaurants. I have no hesitation in recommending farmers to make a drink from roasted Soy beans, rather than buy the cheaper grades of coffee sold on the market, that in so many cases are adulterated with burnt pastry, beans, peas, chicory, etc. Drink made by a number of persons in this community from the roasted Soy bean was much relished.

"A tablespoonful of the ground beans makes a cup of coffee. Mr. Brown recommends using one-fourth cup of common coffee and three-fourths cup of Soy to begin with, and one will thus more readily become accustomed to it. If too strong it has an unpleasant odor, and may be diluted with boiling water. Special care should be taken in roasting. The hull of the bean should be brown, and not black, when properly roasted, and the berry should grind easily in the mill.

"In 1892 a man by the name of Cole, of Missouri, advertised extensively at \$3.50 per pound, cash with order, what he termed 'Cole's Domestic Coffee Berry.' This so-called coffee, a sample of which was sent to this station, was made from nothing else than Soy beans, the seed of which can be secured of leading seedmen at 10 to 15 cents a pound. For those who desire a substitute for coffee as a drink, I suggest that they secure half a pound or pound of this seed and grow a small crop and make a trial of it. The plant will grow in very hot, dry weather, when many plants would suffer greatly. It is also important to note that the beans are much relished by some as a vegetable, while the plant as a whole makes desirable forage."

Summer Protection for the Orchard.

All practical orchardists probably agree that the two "critical" months for the apple orchard are July and August. During this hot and dry period the trees mature their fruit, and, as a rule, require more moisture than the average atmosphere and soil of the West are able to furnish. As a result, some of the fruit drops before it can be used for any purpose and a large part remains under-grown or becomes sapless and woody. The trees, too, suffer as much as the fruit, and there is no doubt that the early decay of many orchards is due chiefly to this cause. Anything, therefore, that may tend toward retaining the moisture of the soil, or may help to protect the roots and the trunk from the excessive heat of the summer months, without, at the same time, endangering the health of the tree in some other way, is of great benefit to the fruit-grower.

Many plans have been suggested and tried to this end. It is well, in the first place, not to plant the orchard on a south or southwest slope. Other conditions being equal, the east or southeast slopes are undoubtedly the best. Even a north slope is better than the opposite. West of Topeka the sandy creek and river bottoms, with their overflow of water, offer favorable sites, except where they are too rich or swampy. Another means is the planting of a dense shelter belt of evergreens. Such a belt, consisting of at least two rows of closely-planted Austrian or Scotch pines (not red cedars), together with at least one row of elms, will keep the drying winds out of the orchard in summer and favor the deposition of snow in the winter. The beneficial effect of such a fringe of timber has been noted by every one who has had a good opportunity to make observations. Many years ago Prof. Gale, of the State Agricultural college of Kansas, made a series of experiments upon the effectiveness of shelter belts in checking winds, and found that a dense double row of trees, supported by a dense Osage orange hedge, materially reduced the velocity of the wind for a distance of at least eleven times the greatest height of the belt. This, for a shelter height of thirty-five feet and a level orchard, would give a width of protected area of nearly four hundred feet.

Another means that has been found beneficial is the low trimming and pruning of trees in order to prevent

the hot south wind from passing in full force through the orchard between the ground and the lower branches. In my own orchard the trees are kept so low that it is impossible to walk erect, while the branches of my ideal orchard touch the ground with many twig ends when loaded with apples.

Some orchardists protect the southwest side of the trunks of old trees with a board about twelve inches in width and reaching from the ground to the first branches. The writer noticed this method in the orchard of a German, from southern Russia, and was told that it was frequently followed by orchardists in the hot and dry plains of southern Russia. It certainly seems a reasonable practice and deserves to be tried.

Another means that has been found effective is mulching, i. e., the covering of the soil about the tree, as far as the branches reach in a lateral direction, with a thin layer of old straw, hay or very light manure. Such a coating will assist in retaining the moisture, keep down the weeds and thus reduce the number of greedy feeders, and by its gradual decay increase the fertility of the soil. Many other materials may, of course, be used. Sand, sawdust or chips, leaves, moss, loose earth, and even stone will answer fully, or nearly, as well. It is generally held, also, that mulch placed upon the soil about the trees when the ground is frozen will retard flowering in the spring. If true, this would be an additional and very valuable benefit. There are reasons, however, for supposing that the philosophy of the matter is not fully understood and that the facts are not as commonly supposed. Prof. Bailey, of Cornell university, after due investigation of results, arrived at these conclusions:

First.—The early bloom of fruit plants depends very largely upon the appropriation of food stored in the twigs, and it is more or less independent of root action. This is proved both by direct experiment and by study of the physiology of plants.

Second.—It must follow, then, that the temperature of the twig or branch must be reduced if vegetation is to be much retarded; or in other words, the tops of the trees, as well as the soil, must be mulched, and in practice this is possible only with strawberries and other very low plants, or those which are laid down during the winter.

Third.—It must follow, also, that there is danger of injuring plants by heavy mulch. The best time to mulch apple trees is in May, after the tree has its growth well started and the blooming season is over, and even then the practice should not be too violent and trees should be carefully watched.

On the prairies of Kansas, Oklahoma and Nebraska, the ten months from the 1st of September to the 1st of July are almost perfect for the apple orchard, and if the orchardist could counteract the usual drought of the two remaining months by intelligent care and inexpensive means, the three States named would indeed become "the country of the big red apple."—*Prof. J. D. Walters, in Smith's Fruit Farmer.*

Pansies Out of Doors in Winter.

Except in the extreme northern part of the country it is easy to have pansies in winter by the protection simply of a cold frame. The same is true of the sweet violet, a plant closely allied, and which does well under the same treatment. Select a sheltered position facing south, so as to get all the sun possible, and provide a frame—the one used early as a hot-bed is just the thing. Place this in the ground and if the soil is not a good, friable, sandy loam make it so to a foot in depth, leaving about a foot of space between the plants and glass. The sooner the better now, select young seedling plants and set in the soil one foot apart each way. For the present or until cold weather comes, leave off the glass entirely, so that the plants may not be drawn up. Keep down the weeds, and water regularly in dry weather. If good varieties are selected, as the cool days of fall approach, flowers of a very large size will begin to appear. When frost is likely, put on the glass but take off on

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all fine days. In December, as the winter sets in, bank up the sides of the frame with soil or loose manure, and be prepared in extreme weather with plenty of straw mats to keep out frosts. On all sunshiny days possible give light, and it will be very rarely that a bunch of pansy blossoms cannot be picked in winter.

Sweet violets can also be grown the same way, and either of them if they do not afford a picking in the dead of winter, will very early in the spring and a month before they can be obtained out of doors. Instead of seedlings of violets, nice young plants that have been planted out in the open ground during the summer will be required.

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—From Chicago Globe's account of the World's Fair office of the Erie Medical Co.

In the Dairy.

Conducted by A. E. JONES, of Oakland Dairy Farm. Address all communications Topeka, Kas.

All Against Oleomargarine.

The dairy trade is up in arms against oleomargarine. C. W. Horr, of Wellington, President of the National Dairy Union, addressed a gathering of the New York Auxiliary Association, Thursday morning at the Mercantile Exchange, in Hudson street. Mr. Horr said that it was principally against fraud that the fight was made. What was wanted, the speaker said, was a law to compel oleomargarine to be so made that it would not resemble butter. All the colors of the rainbow were at the disposal of the big slaughter-house men and others who manufactured "oleo."

Ex-Congressman Roswell G. Horr, a brother of the first speaker, also made a plea for the farmers' interests. Mr. Horr described the result of his observations at a visit to the Armour establishment, where the process of manufacturing oleomargarine was fully explained to him. The addition of a small percentage of milk to the oil, which is the basis of the product, and of coloring matter, proved beyond doubt, he said, the intention of the manufacturers to deceive the people who buy and eat butter. The imitation, both in flavor and color, admitted of no other explanation. "Let the manufacturers of oleomargarine," said Mr. Horr, "preserve the natural color and flavor of their product, and let them so appeal to the taste of consumers by legitimate methods that the latter will prefer oleomargarine to butter." Mr. Horr added that he would willingly help to pass a law that would prevent dairymen from making butter in imitation of oleomargarine. (Laughter.)

In response to the appeal for money made by George A. Boyce, the chairman, who is also the President of the local union, \$200 was raised in a few minutes. It is expected that the \$1,000 necessary to carry on the crusade will be raised in a short time.

It is the purpose of the union to send a committee to Washington to further the passage of a bill recently introduced by Senator Hill to give the police of the different States control over packages of oleomargarine imported from one State into another. This measure will place the article in question on a similar footing with spirituous liquors and will tend to diminish its sale to a large extent.

Cheese Curing.

Prof. James Robertson, Dairy Commissioner of Canada, gives the following advice: "The hooping of the curd should begin when the harsh surface, which is produced on each piece by the action of the salt, begins to give place to a sloppy, mellow quality, or in about twenty minutes after the salt is stirred in. If the curd be left longer, it becomes firm and unyielding in body, resulting in three-cornered or mechanical holes in the cheese. Sometimes the flavor is also injured by a delay at this stage. Pure water only should be used in the bandaging of the cheese. Shoulders or projecting edges on cheese are unsightly evidences of careless workmanship and reduce their value from two to three shillings per cwt. in the English market. Careful pressing and bandaging, and the turning of the cheese in the hoops in the morning will prevent their formation. The pressure should be applied gradually, and through the long lever, about four hours after the curd has been hooped. The press cloths should be left on the ends of the cheese, and the cheese should be turned in the hoops every morning. No cheese should leave the press-room until the shape is symmetrical and the finish neat. If the hoops be washed once a week with a solution of borax, the growth of the mold on the sides of the cheese will be prevented to some extent. When the press cloths are removed from the ends of the cheese, clean whey-oil or butter (into which has been dissolved a teaspoonful of soda to a cupful of oil),

should be applied hot. The temperature of the curing room should be kept continuously as near 65° Fahr. as is practicable. Cheese boxes should not be stored in the curing room, as the odor of the elm wood penetrates the cheese and affects their flavor. They should be provided, strong, smooth, neat and of the exact size of the cheese. A badly boxed lot of cheese, or a lot of cheese arriving in England with boxes in a broken condition, will realize from two to four shillings less per cwt. in consequence. The weight of the cheese should be stenciled in neat figures on the side of every box."

Dairy Notes.

An exchange says that if a cow gets choked with an apple or potato, holding up its head and breaking an egg in its mouth is a sure cure. The same remedy is recommended for horses under similar circumstances.

The butter fat that is lost by careless setting of milk in private dairies is enormous. Paying 10 per cent. interest on borrowed capital is nothing to it. This is one of the leaks in dairying that cuts down the net profits.

Hunter Nicholson, who is a high authority on dairy matters, says that oats cut and cured when the seed is in the milk stage makes as good a hay as can be fed to a milch cow. Oats grow so quickly that dairy farmers can afford to cut them when they are green.

No dairyman who advocates the purity of dairy products or condemns the fraudulent sale of oleomargarine, can consistently favor the use of any milk or butter preservatives. He ought to know that the use of such antiseptics is not only a fraud of health-destroying effect, but a violation of law.

The Wisconsin Short-horn Breeders' Association in 1893 offered a premium of \$15 for the best seven days' production of butter made by a registered Short-horn cow owned in Wisconsin. This premium was won by J. W. Ganes, Lowell, Wis., with his registered cow Sue Cady; she made twelve and one-half pounds of butter in seven days. The association has renewed this offer for 1894.

Messrs. Miller & Sibley, of Franklin, Pa., have lately made a seven-day butter test of the Jersey cow Fable 62520, and report that for the seven days ending March 24 she gave a total of 304 pounds of milk, which yielded twenty-six pounds and five and one-fourth ounces of butter, salted one ounce to the pound, and well worked, ready for market. She was six years and one month old at the time of the test, and weighs 1,000 pounds.

If any instance of the value of knowledge in the dairy were needed, no more striking proof could be given than that furnished by the experience of Hoard's Dairyman in the vicinity of its location. In 1885 the township of Koshkonong, where it had an established circulation, produced 154,081 pounds of butter, which, we are told sold for an average of 21.08 cents. In the township of Watertown, where it had no subscribers at the time in question, there were produced only 83,445 pounds, which sold for the average price of 12.08 cents per pound, or 9 cents per pound less than the price obtained in Koshkonong township. This amounted to \$7,710.10 or \$3.71 for each man, woman and child in the township. The farmers of one township posted themselves and the others did not. These two townships were only sixteen miles apart and had the same characteristics and the same markets.

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A. M. Fuller, city ticket agent, U. P. system, Topeka, Kas., or E. L. Lomax, G. P. & T. A., Omaha, Neb.

The Poultry Yard.

Report From 134 Hens.

My 134 hens were mostly pullets hatched in March and April and well cared for. I have tried feeding bran mash at two different times, and as an egg-producer it proved a failure; although for others it may prove a success. I feed warm feed in the morning, consisting of equal parts of oats, wheat and corn ground together. I take eight parts of this mixture and one part of cottonseed meal and table scraps and thin them down with milk and dish-water. At noon I gave them all the wheat they would eat, scattered in straw and chaff to make them scratch and hunt, for exercise. At night a light feed of corn and a warm place to sleep, and plenty of fresh water and gravel and a dust bath to use at their pleasure.

Now for the return for my work. They commenced laying early in the fall; but I will make my report from the first of the year. In January they laid 154 dozen; in February they laid 124½ dozen; in March they laid 206 dozen; total for the three months 484½ dozen; for April I have got 207 dozen eggs, and I have 165 nice young chicks, a part of which were hatched in March, the rest in April, and twenty hens sitting at the present time, and six bid-dies running with chicks.

My experience is to commence to feed heavy in late summer and early fall, so that the chickens will moult early, and then you will be able to gather in the eggs during the winter. —Exchange.

Points on Lice.

1. When chicks droop and appear sick without cause, especially in summer, look for lice, not for little red mites, but for the large gray body lice on the heads and necks.

2. If you find them use a few drops of grease of any kind. A teaspoonful of oil of pennyroyal to a cup of lard is excellent.

3. Look under the wings for the red lice, but use only a few drops of the lard.

4. Never grease the bodies of chicks unless lightly, as grease will often kill them.

5. Never use kerosene on chicks, unless it be a teaspoonful of kerosene to a teacup of lard, as it is irritating.

6. Crude petroleum is always excellent, and serves as a liniment, but mix it with twice its quantity of lard.

7. Keep the dust bath always ready. Use dry dirt or sifted coal ashes. Add carbolate of lime, Persian insect powder or oil of pennyroyal to the dirt.

8. To rid the house of lice, sprinkle coal oil everywhere—floor, walls, roosts, yards, roof, inside and outside, and repeat often.

9. Dust insect powder in the feathers, and be sure it is fresh and good.

10. Put insect powder and tobacco dust in the nests. Clean them out every week.

11. Even when no lice may be present use the sprinkler of kerosene at least once a week, and keep the roosts always saturated.

12. No matter how clean things may appear, look for the large lice on the heads, throats and vents.

13. Lice abound both winter and summer, but more especially in summer.

14. One-half the chicks and young turkeys die from lice. Chickens or turkeys with hens or turkey hens al-

Only the Scars Remain.

"Among the many testimonials which I see in regard to certain medicines performing cures, cleansing the blood, etc.," writes HENRY HUDSON, of the James Smith

Woolen Machinery Co., Philadelphia, Pa., "none impress me more than my own case. Twenty years ago, at the age of 18 years, I had swellings come on my legs, which broke and became running sores. Our family physician could do me no good, and it was feared that the bones would be affected. At last, my good old mother urged me to try Ayer's Sarsaparilla. I took three bottles, the sores healed, and I have not been troubled since. Only the scars remain, and the memory of the past, to remind me of the good

Ayer's Sarsaparilla has done me. I now weigh two hundred and twenty pounds, and am in the best of health. I have been on the road for the past twelve years, have noticed Ayer's Sarsaparilla advertised in all parts of the United States, and always take pleasure in telling what good it did for me."

For the cure of all diseases originating in impure blood, the best remedy is

AYER'S Sarsaparilla
Prepared by Dr. J. C. Ayer & Co., Lowell, Mass.
Cures others, will cure you

ways have lice, either the mites or large lice. Remember that.

15. Carbolate of lime is the cheapest powder to use for dusting over the floors and walls.

16. Always aim to get the solutions of powders into the cracks and crevices.

17. The easiest and best way to white-wash is with a force pump. They are now made to force water from a bucket. —From "Five Hundred Questions and Answers."

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Are you, can't sleep, can't eat, tired, thirsty? Blood poor?

It's a tonic you want—

Hires' Rootbeer.

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TO THE EDITOR—Please inform your readers that I have a positive remedy for the above named disease. By its timely use thousands of hopeless cases have been permanently cured. I shall be glad to send two bottles of my remedy free to any of your readers who have consumption if they will send me their express and post office address. Respectfully,
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The Family Doctor.

Conducted by HENRY W. ROBY, M. D., consulting and operating surgeon, Topeka, Kas., to whom all correspondence relating to this department should be addressed. Correspondents wishing answers and prescriptions by mail will please enclose one dollar when they write.

Answers to Correspondents.

(NUMBER 25.)

An esteemed correspondent sends us this newspaper clipping, and the following comments and queries:

A few days ago a fifteen-year-old daughter of J. Luckish, living at Cresco, Ia., had a tooth pulled and an anesthetic was administered during the operation. The next morning she was found dead in bed. The following day she was buried. Two or three days later the grave was opened and it was found that she had, as suspected, been buried alive. The glass in the coffin was broken to fragments, the body was in a condition of fearful contortion, the hands were cut and blood-stained, the hair was torn out, the corpse was turned over and the body was found face downward.

CONDUCTOR, Grant Co., Kas., April 26, 1894.

DEAR FAMILY DOCTOR:—Please tell me who is responsible for this poor young girl's horrible death? If no physician was in attendance, are the relatives responsible? Surely the responsibility lies somewhere. Tell me, is it not wrong that such a death is possible? Why are not measures taken in every case to prevent such a fate? We too often hear of such cases, and how many unknown are there, who knows? Is it not an abominable custom to bury the dead? Were it not better to burn them? The disease germs would also be destroyed, and for my part burning alive is a hundred times preferable to being buried alive.

I have read of cases where even physicians supposed a patient dead when he was still alive. What security then is there against being buried alive? None that I see except to change this custom.

I am a graduate of a training school for nurses. In the hospital with which the school was connected, and which averaged about one hundred and fifty patients under treatment each day, it was customary at night for the head nurse to give the orders for the removal of a corpse to the morgue. I call that criminal carelessness on the part of the hospital authorities. What right has a nurse to pronounce a patient dead? That certainly should only be done by a good physician. Absence of respiration and imperceptible pulse surely do not absolutely indicate that life is extinct. If every one felt about this as I do burying would soon be abolished. Sometimes it seems to me I shall go insane, such is my fear that I may be buried alive. Life's pleasures are all tinged with this fear.

Doctor Roby, you have influence, and legislation can prevent such a doom. I appeal to you to do what you can to rob the grave of more victims.

I read your articles in the KANSAS FARMER on emergency cases with much pleasure, and cut them out so I can refer to them when necessary. I should be happy to hear your opinion on the custom of burying, and hope to see something in the columns of the KANSAS FARMER in regard to the subject.

L. E. S.

This case is only one out of many thousands of premature and all too hasty interment. In a book on "The Disorders of Death," Dr. Whiting has given the world so many horrible narratives of persons being buried alive that one writer, in commenting on the subject says, "it makes one afraid to die lest he should be buried alive." In England it is customary, or possibly legal, to keep the corpse several days before interment. But in this country we bury the dead, and the people in trance and catalepsy and suspended animation and catohus, all in the same rude haste that the merchant displays who closes his door and placards it "gone to dinner, back in five minutes." We often bury them "before they are cold," and leave them to cool off and reflect on "man's inhumanity to man," all by themselves. Of course, such things should not be, but they are, and we are all liable to be planted before we have "shuffled off this mortal coil." But an old cynic has said that as we have but once to die, we might just as well go off to the cemetery and die quietly by ourselves as to bother our friends about it.

Many years ago, Bubler collected the then accessible and authentic cases of live burial, reporting fifty-two of them. He also found the records of fifty-three people prepared for burial returning to life, and seventy-two cases falsely reported as dead.

It was said by the greatest physician of all ages, the great Galilean, of one in a cataleptic state: "He is not dead, but sleepeth." So of this poor girl. On the morning of her interment a wise physician could have repeated the words of the Master, saying, "She is not dead, but sleepeth." She was in the cataleptic state. That condition is not an uncommon one, though more common in oriental countries than ours. In India, men in catalepsy have been buried four months and then resurrected and restored to their friends, "clothed and in his right mind."

It is quite easy for a good hypnotist to throw a sensitive subject into so profound a state of catalepsy, that he might easily keep him in a state simulating death for an indefinite length of time. Just how long we do not know, for no hypnotist dares to

make the test of time, as it would be murder if he kept the subject cataleptic until he actually died.

The only safe rule is to keep the corpse, carefully and well protected, until the unmistakable signs of decomposition manifest themselves. Under the very ancient and very modern practice of embalming the dead almost at once after apparent death, has greatly reduced the ratio of live burials, for that alone will most surely terminate the life if the subject happens to be cataleptic. An embalmed subject may safely be buried, for there is no possibility of his surviving the filling of his arteries and veins with such rank poison as the embalmers use.

In the days when people believed in witchcraft and sorcery, they tested the matter by driving a stake through the heart of the subject before interment.

Cremation is more rational and humane than burial, for the cataleptic feels no more pain than the dead man, and hence incineration in such a case is not a painful death, whereas, if buried alive and left to come to and regain consciousness and then die by slow degrees, the torture of the occasion is most surely beyond the power of language to portray. Buried alive! Who does not shudder at the thought of it?


The embalmer runs great risk of now and then actually murdering his own subject before he has a real corpse to bury. So that extreme caution should be observed in all cases, and where there is even the shadow of a doubt, the body should be kept until that doubt all ceases in obedience to the known laws of dissolution. And while a body is being thus kept, the utmost care should be taken to see that nothing is done to interfere in any wise with restoration, should the subject prove to be a cataleptic or trance subject. The body should not be embalmed nor frozen, but kept carefully guarded in a warm room, and if signs of decomposition do not supervene in twenty-four to forty-eight hours, then it may fairly be inferred that life is not extinct and all possible efforts made at resuscitation. And therein the greatest caution should be exercised. If possible, a physician who thoroughly understands hypnotism, somnambulism, trance and catalepsy, should be given charge of the case. He will be many times as likely to revive the patient as one who is ignorant on these topics.

Model Dwellings.

Of all the people in any civilized community, the farmers seem to take the least thought or pains to have decent, comfortable and fair looking buildings. Most farmers seem to think a big, four-square dry goods box of a house is good enough, and then they wonder why their sons strike out for the city the very first day the legal halter ceases to tether them at home. They never seem to comprehend that a majority of city homes are as much more attractive and pleasing to the eye, as a handsome, well-dressed girl is more pleasing to look at than a slouch. No man ever tires of looking at a well-dressed, beautiful woman. It is a joy to look at her and a pleasure to think about her, and one never tires of looking and thinking. The same thing is true of a beautiful, well-planned, harmonious house. It is a pleasure to live in it, a pleasure to look at it, and a boon to the neighborhood. A handsome, harmonious house will make a whole neighborhood distinguished for miles around. There is such a charm in a house that is architecturally perfect that no man can pass it by without looking at and admiring it from the time he comes in sight of it until he passes out of sight of it again. When any friend we think much of comes to the city we hurry off to show him the finest residences in the place. We are sure to take him to the homes that show the most beautiful outlines and tints, the one with the finest harmony of parts and features, for a house possesses features as well as a man or woman.

The farmer who builds a harmonious and well-planned house, can always sell his farm for a very handsome advance over his neighbor, who has an equally good farm, but defaced and tarnished by homely, unfeatured buildings. Mean, unsymmetrical, unarchitectural houses actually damage the whole neighborhood. No man of intelligence wants to have his sense of taste shocked and pained, day after day, every time he looks down the road towards his neighbor's shabby house. No man is proud to ride in an old rickety, tumble-down wagon, when he might go in a comfortable carriage, or a light, graceful, easy, spring wagon. No man likes to go to church, or any public assembly, in a dirty, ragged, suit of clothes. He feels that he is himself disgraced and that he is disgracing his neighbors, for they have a right to expect and even demand of him that he be decent among decent people. So one's neighbors have a right to demand of him as tasty and well-planned a house as he can afford. And the same money that will build a horrible distortion of a house will build a beautiful one, and if it is offered for sale it will sell for a good deal more.

These reflections, and a hundred others,



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came to our mind while looking over a most exquisite and charming book, "Model Dwellings, and How to Build Them," by Geo. F. Barber, of Knoxville, Tenn. In its way it is as dainty and pleasing to the senses as a beautiful woman, a handsome baby, or a ravishing song. It is an architectural poem. It is a commanding oration, built out of stones that cry out, and timbers that speak, and proportions that soothe and sway and lift humanity to a higher plane of life. And its author is a genius, standing to architecture as Mozart to music, or Beecher to oratory. The little city of Knoxville will be famous in coming years for its master of material harmonies, as London is for its Sir Christopher Wren, and any farmer can have a copy of this most useful book for a dollar, and it will be the best investment he ever made of that sum of money.

Harvester History.

For the benefit of the younger generation, we reprint below some interesting figures from the *Deering Farm Journal*, showing the dates on which the Marsh harvester, the wire binder and the twine binder were first put out by the leading harvester manufacturers. The older generation does not need to be told. It remembers Hussey's reaper in 1838 and the McCormick some twelve years later. It remembers about reading in 1858 of the success of the Marsh Brothers in their new harvester. It remembers how the Deering people held the field alone with this machine during most of the seventeen years' life of the patent. Then, when the patent did expire, the older generation remembers that William Deering & Co. came out with the wire binder. This was in 1874, and the younger generation, even, can remember the rapid strides that followed. How, after this pioneer in automatic binders had had the field for three years, McCormick and the other manufacturers fell into line; and how in 1878 the Deering people spoiled the whole wire binder business by coming out with the Appleby twine binder. Both old and young must smile as they now look back at the frantic attempts made by the late converts to wire binders, to push that machine in the face of the wonderful twine binder; and how they finally were all ultimately compelled to fall into line and manufacture the twine binder under the Appleby patents. The *Farm Journal* tells the story of the successive steps in manufacture by means of a witty drama entitled "Crow and Quail," which is clinched by the following statement:

The following are the dates on which various manufacturers began building and putting on the market harvesters, wire binders and twine binders. The dates for Deering machines are exact. Those for competing firms are according to our best knowledge:

MARSH HARVESTER.

DEERING.....	1858
Wood.....	1874
Osborne.....	1875
McCormick.....	1875
Buckeye.....	1877
Champion.....	1881
Plano.....	1882

Automatic binders were first put upon machines and sold as follows:

DEERING.....	1874
Wood.....	1874
McCormick.....	1877
Buckeye.....	1877
Osborne.....	1878
Champion.....	1881
Plano.....	1882

The Appleby twine binder was applied to the Marsh harvesters as follows:

DEERING.....	1878
Esterly.....	1880
Excelsior.....	1880
McCormick.....	1881
Buckeye.....	1882
Champion.....	1882
Osborne.....	1883
Wood.....	1892

Get up a club for KANSAS FARMER.

The Edwards Self-Feeder.

Those who have had to do with threshing grain appreciate the arduous task involved in feeding the thresher in the old-fashioned "stand up and shake yourself" way. It is not only extremely wearing on the individual but it is dangerous. Many of us remember the band-cutting days of our youth when we were forced to stand on barrels or boxes and cut the band for the feeder with dust in the face and eyes, so that the labor involved was anything but pleasant. All this is obviated, and more too, by the Edwards self-feeder, which can be easily attached to any make or kind of separator. It is manufactured by the Sioux City Engine & Iron Works, at Sioux City, Ia. It is true that there are a number of feeders in the market which work fairly successful, and if that were all that could be said of the Edwards but a small vantage ground could be claimed. In addition to doing its work perfectly well, the Edwards self-feeder is simple in construction, light running and easily handled. It consists, first, of a carrier which delivers the bundles to the cutting device; second, of a band-cutter, a revolving cylinder with moon-shaped knives; third, of two distributing bands which deliver the grain in an even stream to the threshing cylinder. These different parts possess many advantages, all of which are well explained in the printed matter that will be sent to any one on application to the company. Notice their illustration in this issue.

The cow pony or ordinary "bronco" is utilized in Colorado in a way none but a genius would have conceived. He is fattened and groomed so that his dam would not know him. Then he is docked, his mane "pulled," and "setting-up" processes employed on him. Used as a saddler or to pull a light driving turnout he is a good counterfeit of a fashionable cob.



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The Veterinarian.

We cordially invite our readers to consult us whenever they desire any information in regard to sick or lame animals, and thus assist us in making this department one of the interesting features of the KANSAS FARMER. Give age, color and sex of animal, stating symptoms accurately, of how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. Sometimes parties write us requesting a reply by mail, and then it ceases to be a public benefit. Such requests must be accompanied by a fee of one dollar. In order to receive a prompt reply, all letters for this department should be addressed direct to our Veterinary Editor, DR. S. C. ORR, Manhattan, Kas.

LAME SOWS.—I have two sows that are so lame that they can scarcely get up when they lie down. I think they are weak in their backs. They each have a litter of pigs about a month old. What is the matter?
Leonardville, Kas. O. A. W.

Answer.—Your sows are probably suffering from rheumatism. See reply to C. W. G. in this column. Always sign your name in full when writing to this department.

RHEUMATISM IN SOW.—I have a sow, 2 years old, that had pigs about the 10th of April. She seemed all right until her pigs were about two weeks old; then she refused to eat and made no effort to get upon her feet. She seems to be in great pain when moved. I have kept her well bathed with turpentine. Will you tell me what to do for her?
Auburn, Kas. C. W. G.

Answer.—Your sow is suffering with rheumatism and should be given warm dry sleeping quarters on a plank floor. Give her a tablespoonful of Epsom, in a little swill, twice a day till her bowels are moved, then give her one drachm of bi-carbonate of potassium in a little sweet milk three times a day. You may also continue to bathe all affected joints with turpentine. If the sow still refuses to eat, a little fresh meat of any kind boiled tender is the best to tempt her appetite, and if given in sufficient quantity will serve as a purgative to open her bowels instead of the Epsom salt.

RUBBING TAIL—ENLARGED JOINTS.—(1) My four-year-old stallion has been rubbing his tail since last fall. I have tried several things but he still rubs. (2) My colt, two days old, was constipated. I dosed it with castor oil, and gave warm water injections, and got the bowels open. In a few days I noticed a swelling like thoroughpin on the hock joints, and next morning the joints were swollen all around. Please prescribe.
Alida, Kas. A. J.

Answer.—(1) The itching that causes a horse to rub his tail is often in the skin, in front of the tail, along the spine and down some distance on each side of the hind quarters. Give the parts a thorough grooming for a foot or two forward from the root of the tail and then apply salt water. Repeat this every day, if necessary, until the irritation ceases. (2) Keep the colt's bowels open, if necessary, with injections of warm water per rectum, and apply equal parts of spirits of camphor and arnica mixed together, and give the joints plenty of hand rubbing. As the colt grows older and stronger it will out-grow the difficulty.

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MARKET REPORTS.

LIVE STOCK MARKETS.

Kansas City.

May 21, 1894.

CATTLE—Receipts, 2,705 cattle; 81 calves. Dressed beef steers sold at \$3 10@4 10, the top being 10 cents lower than for the last two weeks. The top price was received for 1,456-pound steers, while the lowest price in this class was for 503 pounders. Texas steers brought \$3 10@3 60 for feds and \$2 75@3 10 for grass. Texas cows, \$2 00@3 00. Native cows, \$1 75@3 40; bulls, \$2 40@3 00; heifers, \$1 50@3 60; calves, \$3 50@6 00; stockers and feeders, \$2 00@3 45.
HOGS—Receipts, 4,038. Heavy hogs sold at \$4 55@4 75, the top being 15 cents lower than a week ago. Pigs and lights, \$4 30@4 60.
SHEEP—Receipts, 1,928. Good native yearlings brought \$4 40. Spring lambs, \$3 25@4 50. Native muttons \$4 25. Texas and Arizona shorn, \$3 50@3 90.

Chicago.

May 21, 1894.

CATTLE—Receipts, 16,000. Market slow and steady. Beef steers, \$3 00@4 30; stockers and feeders, \$2 35@3 55; bulls, \$1 65@2 25; cows, \$1 50@3 50.
HOGS—Receipts, 30,000. Mixed, \$4 50@4 85; heavy, \$4 55@4 90; light weights, \$4 60@4 85.
SHEEP—Receipts, 6,000. Natives, \$2 00@4 60; lambs, per cwt., \$2 75@5 25.

St. Louis.

May 21, 1894.

CATTLE—Receipts, 3,200. Native steers, common to best, \$3 90. Some fed Texans at \$3 75.
HOGS—Receipts, 3,200. Top, \$4 85.
SHEEP—Receipts, 600. Market steady. Natives, clipped, \$2 20@3 85.

GRAIN AND PRODUCE MARKETS.

Kansas City.

May 21, 1894.

In store: Wheat, 262,016 bushels; corn, 2,904 bushels; oats, 15,194 bushels, and rye, 10,370 bushels.
WHEAT—Receipts for forty-eight hours, 25,800 bushels; last year, 54,600 bushels. A liberal decrease in the visible supply and fear of frost damage to the growing crop causing a more bullish feeling than for some days, and enabling holders to spring prices a little. By sample on track on the basis of the Mississippi river, local 6c per bushel less: No. 2 hard, 3 cars 59 and 60 pounds at 54½c, 2 cars choice 60 pounds at 57c, 1 car local at 49c; No. 3 hard, 53@54½c, 1 car at 54c; No. 4 hard, 51@53c, 1 car at 53c; rejected, 45@48c; No. 2 red, 2 cars 60 pounds at 57c, 1 car 60 pounds at 57½c, 3 cars choice 60 pounds at 58c; No. 3 red, 53@55c, 1 car 58 pounds at 55c; No. 4 red, 52@53c, 1 car at 53c.
CORN—Receipts for forty-eight hours, 159,000 bushels; last year, 132,000 bushels. Market lower under liberal offerings but demand fair at the prices, both for mixed and white. By sample on track: No. 2 mixed, 24 cars at 35c, 5 cars special at 35½c; No. 3 mixed, 34½@34¾c; No. 2 white, 25 cars at 37½c, 2 cars special at 37½c; No. 3 white, 36½@37c.
OATS—Receipts for forty-eight hours, 12,000 bushels; last year, 22,000 bushels. Firm and in good demand, the poor crop prospects making holders independent. By sample on track: No. 2 mixed, 36½@37c, as to quality and billing; No. 3 mixed, 36@36½c; No. 4 mixed, 35@35½c; No. 2 white, 37½@37c; No. 3 white, 36½@37c; No. 4 white, 35½@36c. Sales: No. 2 mixed, 2 cars at 37c; No. 3 mixed, 36½c; No. 3 white, 2 cars at 37c.
MILLET—Quiet but steady. Per 100 pounds, German, 70@80c; common, 55@70c.
BRAN—Selling slowly at old prices. Bulk at 55c and sacked at 60c per cwt.
FLAXSEED—Slow sale and lower, at \$1 23 per bushel upon the basis of pure.
HAY—Receipts for forty-eight hours, 100 tons. Demand fair at old prices. Fancy prairie, \$7 00; choice, \$5 00@6 50; low grades, \$3 50@5 50; timothy, choice, \$9 00; No. 1, \$8 00; No. 2, \$7 00@7 50; choice clover, mixed, \$3 00@3 50.
BUTTER—Best table goods sell fairly to home trade, but all else dull; bulk of low grades go to the packers. Creamery highest grade separator, 18c per pound; finest gathered cream, 15c; fine fresh, good flavor, 15c; fair to good, 13c. Dairies—Fancy farm, 11@12c; fair to good lines, 7c. Country store-packed—Fancy 11c; fresh and sweet packing, 7c. Roll—Fancy, 11c; choice, 10c; fair to good, 7c.
EGGS—Quiet. Fresh, 7c.
CHEESE—Missouri and Kansas, full cream, 10c.
POULTRY—There is a light run and the market soon cleaned of hens at steady figures. Turkeys quiet and few on sale; ducks steady. Hens, per pound, 5c; roosters, old and young, 15c each; broilers, per pound, 18c; turkeys, hens, per pound, 6c; gobblers, 5c; ducks, full-feathered, 5½c per pound; pigeons, per dozen, \$1 25; veal, choice 80@100 pounds, per pound, 4½@5c.
POTATOES—New stock crowding the old and values of the latter are far from strong. We quote: Colorado red, per bushel, 70@75c; Colorado white, 75@80c; Northern, choice, 65@70c; Northern, fair, 60c; Idaho, 65@70c; native, choice, 65@70c; native, good, 60@70c; native, common, 50c. Potatoes, sweet, 81.
STRAWBERRIES—There were very few cases on the market, not over 200, and quality was not very good. Buyers, however, took what came in at fair figures. Sales were made at an average price of \$1 75, with range of fair stock at \$1 25@2 85, while some soft and leaky went at whatever was offered. Some Tennessee sold at auction \$1 25@1 35.
FRUITS—Jobbing prices: Apples, fancy stand, per barrel, \$5 00@6 00; choice, \$4 00@5 00.
DRIED FRUITS—Sun-dried—Apples, choice, per pound, 6c; good, 5c; poor, 4c. Peaches, peeled halves, 7c; unpeeled halves, 6c; unpeeled quarters, new, 4½c.
VEGETABLES—Jobbing prices: Beans, navy, California, per bushel, \$2 00@2 15; country, \$2 00@2 10; beets, per bushel, 50@60c; cabbage, per

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100 pounds, \$2 25; celery, California, 75c@1 00 per bunch; onions, Northern, per bushel, 80c.
EARLY VEGETABLES—Asparagus, 10@12c per dozen; cabbage, California, per pound, 1¼c; cucumbers, per dozen, 50@60c; beans, per bushel, \$1 50@1 75; beets, per dozen bunches, 50@75c; egg plant, per dozen, \$1@1 75; kale, per bushel, 30c; new potatoes, per barrel, \$3 75; pieplant, per dozen, 20@30c; peas, per bushel box, 50@75c; radishes, per dozen bunches, 10@15c; spinach, per barrel, \$2@2 50, per bushel, 75@80c; tomatoes, Florida, 6 basket crate, \$3 25. New onions \$3 00 per barrel.
BROOMCORN—Harled, green, 3@3¼c per pound; green, self-working, 2¼@3c; red-tipped, do., 2¼@3c; common, do., 1¼@2c; crooked, half price. Dwarf, 2@3¼c.
GROUND LINED CAKE—We quote car lots sacked at \$25 per ton; 2,000 pounds at \$28; 1,000 at \$14; less quantities \$1 50 per 100 pounds.
WOOL—Slow sale and lower. We quote: Missouri and similar—Fine, 8@11c; fine medium, 10@12c; medium, 12@14c; combing, 13@15c; coarse, 11@13c. Kansas, Nebraska and Indian Territory—Fine, 7@10c; fine medium, 8@11c; medium, 10@13c; combing, 12@14c; coarse, 9@10c. Colorado—Fine, 7@10c; fine medium, 8@11c; medium, 10@12c; coarse and carpet, 9@10c; extremely heavy and sandy, 6@7c.

Chicago.

May 21, 1894.

The following table shows the range of prices for active "futures" in the Chicago speculative market for the speculative grades of the commodities. This speculative market is an index of all prices and market tendencies:

	High-est.	Low-est.	Closed May 14.	Closed May 21.
WHEAT—May.....	56	55½	56½	55¾
July.....	58½	56¾	57¾	57½
Sept.....	59½	58½	59½	58½
CORN—May.....	37½	37	37½	37
July.....	38½	37½	38½	37¾
Sept.....	39½	38½	39½	38¾
OATS—May.....	33½	33	33½	33½
July.....	30½	30	30½	30½
Sept.....	26½	25½	26½	26½
PORK—May.....	11 80	11 70	12 20	11 80
July.....	11 87½	11 75	12 27½	11 87½
LARD—May.....	7 15	7 12½	7 45	7 12½
July.....	6 87½	6 82½	7 07½	6 87½
S. RIBS—May.....	6 15	6 12½	6 35	6 15
July.....	6 15	6 07½	6 35	6 15

WHEAT—Cash—No. 2 red, 56c; No. 3 red, 51@53c; No. 2 hard, 53c; No. 3 hard, 51@52c.
CORN—Cash—No. 2, 37½c; No. 3, 36½c; No. 2 white, 37½c; No. 3 white, 37c.
OATS—Cash—No. 2, 34c; No. 2 white, 36½c; No. 3 white, 36c.

St. Louis.

May 21, 1894.

WHEAT—Receipts, 12,000 bushels; shipments, none. Between a frost scare and nervous shorts a net gain was made to-day of ¼@½c. No. 2 red,

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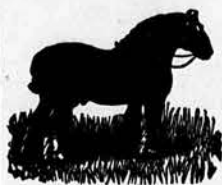
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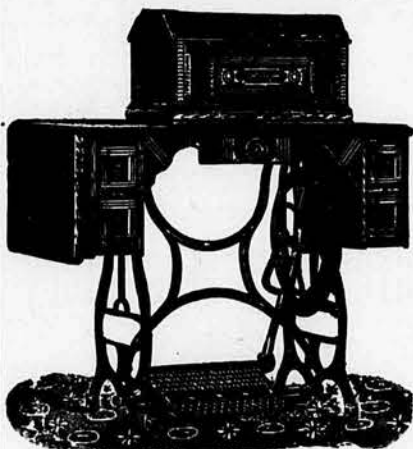
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WANTED, TO TRADE—Three hundred and twenty acres clear land in Greeley county, Kan-sas, for a threshing outfit. Address Charles W. Grimes, Constant, Kas.

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RENTERS.—To man who will buy teams, etc., will rent farm. V. Hiner, Macksville, Kas.

Bronze Sweet Potato—New variety, hardy, productive, sweet, and the best late keeper. Plants 50 cents per 100; \$4 per 1,000 by express; 10 cents per 100 postage, if by mail. J. S. Gaylord, Muscotah, Atchison Co., Kas.

FOR SALE OR TRADE—160 acres of land in Ge-manche county, Kansas. Barred Plymouth Rocks exclusively; fifteen eggs \$1; thirty \$1.50. Thos. Francis, Sovereign, Kas.

DED KAFFIR CORN—For sale at \$1.65 per 100 R pounds; sack, 20 cents. D. P. Norton, Council Grove, Kas.

BULBS AND PLANTS.—Cabbage, tomato, celery and strawberry plants, \$2 per 1,000. Egg plants, 3 cents each. Cauliflower, 75 cents per 100. Pepper plants, \$1.50 per 100. Greenhouse plants, \$3 for 100; thirty for \$1. Canna and gladiolus bulbs, \$2 per 100; 50 cents for fifteen. Dahlias, 50 cents for twelve. Tuberoses, 25 cents per twelve. May price list free. Bonner Springs Nurseries, Bonner Springs, Kas.

FREE SEEDS—Choice muskmelon seed sent free to any KANSAS FARMER subscriber who will divide with his neighbors next spring. Send post-age stamp to defray cost of mailing, to Clarence Skinner, Topeka, Kas.

JERSEY BULL—Baron Coomassie 22488 A. J. C. C. Three years old. Color solid dark fawn with black tongue and switch. One of the finest animals in the State. For sale by C. F. Armstrong, proprie-tor of the Clyde Creamery, Clyde, Kas.

CHOICE HEREFORD BULLS FOR SALE—Eight C to thirty months old. Wilton stock. Fine condi-tion, registered and all right. Also a few fine heif-ers, 1 and 2 years old. Six miles north of Harveyville in Osage county. J. Q. Cowee, Grand Haven, Kas.

FOR SALE—Two Short-horn bulls, sired by Imp. F. Thistle-top; ready for service; fit to head a first-class herd. Also S. C. Leghorn eggs at \$1 per 15. Address Peter Sim, Wakarusa, Kas.

WANTED—Sale bills, horse bills, catalogues and other printing. A specialty at the Mail job printing rooms, 900 North Kansas Ave., North Topeka.

LIGHT BRAHMAS EXCLUSIVELY—The farm-er's "stand-by." Eggs, \$5 for fifty. Mrs. Emma Brostus, Topeka, Kas.

CHOICE BARRED PLYMOUTH COCKERELS—C At \$1.50 apiece. Also White Holland turkeys. Young toms \$3 each, \$5 a pair. Mrs. E. P. Mason, Belle Plaine, Kas.

GALLOWAY BULLS FOR SALE—I have some fine young Galloway Bulls for sale cheap; also Scotch Collie Pups. Come and see them, or address, F. R. Huntton, Snokomo, Wabaunsee Co., Kas.

BELOW THE BLIZZARD LINE—Fruit and stock farms for sale. Enclose stamp for price list, terms, etc. Hynson & Elmore, Mammoth Springs, Ark.

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FOR SALE—Two pure-bred Red Polled bulls, one 5 years old, the other 2 years; from best fam-ilies. Write or come and see. F. Schiltzbaum, Eden, Kas.

GRAND SQUARE PIANO FOR SALE—Or will trade for a good-size family driving horse. Ad-dress "H.," Kansas Farmer office, Topeka.

PURE FELCH LIGHT BRAHMA EGGS, \$1 PER fifteen. Wm. Plummer, Ossage City, Kas.

"HOW TO RAISE PIGS"—A free book to farm-ers, postpaid. J. N. Reimers, Davenport, Ia.

CHEAP ROOFING.—We will sell you a two or three-ply roofing, ready to lay, that any one can apply, suitable for dwellings, barns and other buildings, for \$1.75 and \$2 per square of 100 feet, in-cluding tin caps, nails and coating. Topeka Roof-ing Co., 109 East Fifth St., Topeka, Kas.

WANTED—To sell two good residence rental properties. Choice and central location in To-peka. Or will trade for good farm land. Address "H. A.," care Kansas Farmer, Topeka.

HEREFORD BULL FOR SALE OR EXCHANGE.—The Kansas State Agricultural College offers to sell the Hereford bull, Fortunes 11 37485, or will exchange him for a good young Hereford bull. The college also offers to sell several fine yearling Short-horn bulls sired by Imp. Craven Knight. Also some Aberdeen-Angus heifers. Address Prof. C. C. Georgeson, Manhattan, Kas.

THE HYDRO SAFETY LAMP—For incubators and brooders. Perfectly safe and reliable. I am also agent for the Webster & Hannum green bone-cutter, and handle all kinds of poultry supplies, such as oyster shells, ground bone, dried blood, sunflower seed, etc. In poultry, I only breed the S. S. Hamburgs, the best egg-pro-ducer raised. Send for circular of what you want. J. P. Lucas, Topeka, Kas.

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THE STRAY LIST.

FOR WEEK ENDING MAY 9, 1894. Ford county—J. H. Leidigh, clerk.

2 STEERS—Taken up by Dora Shusty, in Wheat-land tp., P. O. Spearville, March 30, 1894. One red steer, belly and tip of tail white, branded L. C. on left side, 5 years old; also one spotted steer, branded U on left side, left ear cropped, 4 years old; valued at \$50.

Shawnee county—Chas. T. McCabe, clerk. PONY—Taken up by G. W. Selover, in Topeka tp., December 22, 1893, one bay pony, 9 years old, no marks or brands; valued at \$6.50.

Cherokee county—P. M. Humphrey, clerk. MARE—Taken up by A. A. Kenworthy, in Shaw-nee tp., P. O. Crestline, one iron-gray mare, 5 years old, white in face, fifteen hands high; valued at \$35.

MULE—By same, one small mouse-colored mule, 2 years old; valued at \$15. Harper county—Wm. Duffy, clerk.

MARE—Taken up by James C. Crossman, in Stohr-ville tp., April 9, 1894, one roan mare, 4 years old, slit in left ear, both hind feet white; valued at \$15.

MULE—Taken up by C. A. Cliff, in Stohrville tp., P. O. Bluff City, April 11, 1894, one male mule, 10 years old, dun, black stripes down each shoulder; valued at \$30.

Phillips county—I. D. Thornton, clerk. COLT—Taken up by O. W. Hill, in Freedom tp., P. O. Phillipsburg, April 10, 1894, one three-year-old medium size roan colt, no marks or brands visible; valued at \$22.

Crawford county—Peter McDonnell, clerk. FILLY—Taken up by Wm. H. Braden, P. O. Pitts-burg, April 23, 1894, one dark brown filly, a little white on each foot; valued at \$12.

FOR WEEK ENDING MAY 16, 1894. Cowley county—J. B. Fishback, clerk.

MARE—Taken up by C. D. Soule, in Vernon tp., March 26, 1894, one brown mare, 3 years old, a little white on left hind foot, weight about 700 pounds; valued at \$15.

Wyandotte county—Chas. E. Bruce, clerk. MARE—Taken up by John Nelson, in Wyandotte tp., P. O. address Twenty-sixth and Central avenue, Kansas City, April 24, 1894, one sorrel mare, 6 years old, fourteen hands high, white star in face and right hind foot white; valued at \$30.

Harper county—Wm. Duffy, clerk. HORSE—Taken up by E. Davis, in Anthony tp., April 16, 1894, one bay horse, 10 years old, branded "J. O." on left hip, one glass eye; valued at \$12.

HORSE—By same, one bay horse, 6 years old, no marks or brands; valued at \$12. MARE—By same, one iron-gray mare, 10 years old, heavy mane and tail, branded M on left hip; valued at \$12.

Rush county—W. P. Hayes, clerk. COLT—Taken up by P. Magerkurth, in Big Tim-ber tp., May 1, 1894, one dark bay two-year-old horse colt, one white hind foot, star in forehead, rope around neck; valued at \$30.

COW—Taken up by David Zink, in Big Timber tp. (near Liebenthal), April 19, 1894, one dark red cow with white spots on hips and face, horns droop and turn in, a little lame in right hind leg; valued at \$15.

Anderson county—J. T. Studebaker, clerk. FIVE HEIFERS—Taken up by John Bidwell, in Lone Elm tp., four red heifers, dehorned, small, 2 years old; also one red heifer with horns, some white in face, 2 years old.

FOR WEEK ENDING MAY 23, 1894. Cherokee county—P. M. Humphrey, clerk. PONY—Taken up by W. R. Lyerla, in Shawnee tp., April 28, 1894, one horse pony, 14 years old, hind feet white, branded T on left shoulder and brand on left hip; valued at \$10.

MULE—By same, one mare mule, 2 years old, ear split; valued at \$15. Chautauqua county—G. W. Arnold, clerk.

MARE—Taken up by C. H. Shobe, in Belleville tp., P. O. Jonesburg, May 6, 1894, one sorrel mare, sixteen hands high, 7 years old, no brands, wire cut on left hind leg, small split in left ear; valued at \$20.

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