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The Stock Interest.

NATURE OF DIFFERENT FEEDS.

Cost per Pound of Pork Produced by Same.

Paper by Prof. C. C. Georgeson, of the Kansas State Experiment Station, Manhattan, Kas., read at the annual meeting of the Kansas Swine Breeders' Association, at Wichita, Kas., October 3, 1894.

This is the subject assigned to me by your Secretary. I only wish that I was able to explain the problems which this heading involves in the same plain and straightforward manner that the subject is propounded. Were it possible to give the cost of a pound of pork by using this or that feed, hog-feeding would be as simple and plain as the multiplication table. While it is possible to classify feeds in a general way according to their feeding value, so many conditions influence the cost of pork produced by them that it is out of the question even to approximately state what the cost of pork will be from a given feed unless all the conditions which influence the result are known and taken into account.

There are a few facts in connection with the feeding of hogs which I believe most hog-breeders are willing to accept as general rules, and it may be well to mention some of these before we go into a detailed discussion of the merits of feed stuffs.

First, a young growing pig requires richer food than a pig which approaches maturity; second, it requires more food to produce a pound of gain in a pig approaching maturity than in a young growing pig; third, in proportion to the live weight the young pig requires more food per day than the matured pig; fourth, other things being equal, the more a pig eats the better the gains in proportion to the food consumed. I believe that we can all accept these propositions as facts which have been proven, and, therefore, do not need discussion.

As to the value of different feeds our experiment stations have brought out a number of facts during the last six years, many of which are very valuable, but it is to be regretted that a large number of these experiments, perhaps the majority of them, are not as valuable in their results as could be wished for. In most cases there are not hogs enough under experiment to fully determine the truth, and the experiments are not repeated often enough. It is always unsafe to lay down fundamental rules from the result of a single experiment, especially when such experiment has been carried out with only two or three hogs. When the results represent the average of several experiments, it will, in most cases, be pretty safe to accept them as conclusive. The statements given in what follows are the results of the stations named according to their published reports. The facts, as given, are necessarily brief.

Corn as a Hog Feed.—Corn is the universal hog feed of the West, and all hog breeders know pretty well what they can do with it in the production of pork. They are pretty well agreed that, for fattening hogs which are nearly or quite mature, there are few feeds better, and with a normal corn crop none cheaper than Indian corn. Many of them will also agree that for young and growing pigs there are many feeds superior to corn in the amount required for a pound of gain. It is, therefore, not necessary to enlarge upon the qualities of this particular feed, but we will note some of the results obtained at the stations.

In the winter of 1889 the Kentucky station fed six Chester Whites in three lots, two in each lot. The average weight of pigs at the beginning of the experiment was 100 pounds. Lot 1 was fed on corn and cob meal, lot 2 on corn meal and lot 3 on shelled corn, the period of feeding being sixty-three days. Both meal and corn were fed dry, the pigs having access to water for drink. The corn and cob meal lot gained in sixty-three days 58.5 pounds each at an average consumption of 7.5 pounds of meal for each pound of gain, and at a cost of 5.2 cents per pound of gain, or \$5.20 per 100 pounds. The corn meal lot gained in sixty-three days an average of 87.5 pounds each, and made a pound of gain on 4.4 pounds

of corn meal at a cost of 4.4 cents per pound of gain, or \$4.40 per 100 pounds. The shelled corn lot made a gain of 91 pounds each, with a consumption of 4.3 pounds of corn for each pound of gain at a cost of 2.6 cents per pound of gain, or \$2.60 per 100 pounds. In this experiment the whole shelled corn was evidently by far the cheapest feed that the pigs got.

At this station Prof. Shelton carried out an experiment in hog feeding in 1889, five hogs being fed on corn meal and five on a mixture of shorts and bran. The feeding period was 110 days and the average weight of the hogs at the beginning of the experiment was about 115 pounds. The five hogs fed on corn meal gained 229 pounds each in that period, at a consumption of feed of 5.45 pounds of meal to each pound of gain, and at a cost of 2.42 cents per pound of gain, or \$2.42 per hundred weight. It will be seen that in this case the hogs ate more meal per pound of gain than the lot fed on corn meal in Kentucky, and yet the cost was considerably less. This is presumably due to a difference in the price of corn. In Kansas it was worth 25 cents per bushel. In the Kentucky report I find no record of the price of corn.

The shorts-bran lot of Prof. Shelton, above referred to, was fed a mixture of two parts of shorts to one of bran, the feeding period as given above. On this feed the hogs gained an average of 209 pounds each with a consumption of feed of 5.32 pounds for each pound of gain, at a cost of \$2.67 per hundred weight. The experiment was undertaken for the purpose of ascertaining what influence the shorts-bran mixture, a feed rich in flesh-formers, had on the formation of lean meat and fat in comparison with corn meal; but leaving this question out of sight for the present, we note that the corn meal lot made the best gain, but they also ate slightly more to each pound of gain than the shorts-bran lot. For hogs of that weight (over 300 pounds at the close of the experiment) corn is vindicated as the best food.

In a report from the Illinois station, dated 1891, it is stated that the averages of eight experiments with the feeding of shelled corn to pigs varying all the way from fifty pounds to 300 pounds in live weight at the beginning of the experiments showed that it required 4.5 pounds of shelled corn for each pound of gain obtained. The same report states that hogs on blue grass pasture, receiving at the same time a full feed of corn, required 4.6 pounds of corn for each pound of gain, while hogs on blue grass pasture and half a ration of corn made a pound of gain for each 4.3 pounds of corn eaten, while hogs placed in a dry lot and fed on shelled corn exclusively, without any green fodder, required 5.3 pounds of corn to make a pound of gain. We here see that the grass offset only about one pound of corn for each pound of gain. In these cases the corn was fed dry. They also experimented in feeding soaked corn, and found that the gains were slightly better than from dry corn, but I should judge scarcely enough better in this case to pay for the soaking.

Cotton Seed.—The Texas station, in a report dated 1892, details experiments in hog feeding in which corn was fed in connection with cotton seed. The experiment is too complicated to quote in full, nor are the results altogether satisfactory as a basis on which to judge these feeds, and I will, therefore, simply quote the conclusion reached in the report. Corn was valued at 40 cents per bushel, cotton seed meal at \$20 per ton, and raw cotton seed at \$6 per ton. At these rates the feeds rank in the following order in point of economy: The cotton seed meal and raw seed were in each case fed with corn, which amounted to more than half of the feed and sometimes to nearly three-fourths of the feed: First, corn alone was the cheapest; second, corn and boiled cotton seed; third, corn and roasted cotton seed; fourth, corn and raw cotton seed; fifth, corn and cotton seed meal. The cotton seed being worth only \$6 a ton it was very much cheaper than it could be obtained here, and if cotton seed did not prove to be an economic feed under these condi-

tions, with corn at 40 cents a bushel, it is not likely that it would be an economic feed here. The cotton seed was fed with the hulls on; the cotton seed meal, I understand, was from hulled seed.

Oats.—A bulletin from Oregon, dated 1892, reports an experiment in hog-feeding with oats and wheat, whole and ground, and with a mixture of ground oats, wheat, barley and shorts. The experiment was not well devised to ascertain the relative feeding value of these feeds, but I make out that the pigs, which consisted of three lots, two in each lot, with an average weight of a little over 150 pounds each, gained on ground oats during the first two months of the experiment fifty-four pounds each, with a consumption of 5.4 pounds of feed for each pound of gain, while another lot fed on whole oats gained 64.5 pounds in two months, with a consumption of 5.7 pounds of oats for each pound of gain. The oats were worth \$1 per hundred weight, a very moderate price, and hence the gain cost respectively \$5.40 and \$5.70 per hundred weight, rather too high for profit except when hogs command unusual prices.

Wheat.—These hogs were, at the close of the two months, fed on ground wheat and whole wheat respectively, the ground feed being fed to the same lot in each case. The hogs which were fed on the ground oats now averaged somewhat over 200 pounds in weight when ground wheat was substituted for the oats, and on this feed they gained during the next two months 111 pounds at a consumption of 4.5 pounds ground wheat to each pound of gain. This, it will be seen, is the same amount which the Illinois station found to be required of corn for a pound of gain.

The lot fed on whole oats averaged at the end of the first two months about 222 pounds. Whole wheat was then substituted for oats, and during the next two months they gained 89.5 pounds, with a consumption of six pounds of whole wheat for each pound of gain. The wheat was worth \$1.36 per hundred weight. Hence the gain cost, respectively, \$6.12 and \$8.16 per hundred weight, which is still more costly than the gains for oats.

The third lot, to which the mixed ration was fed, does not teach us anything because of the variation in the mixtures and may, therefore, be omitted here.

The most interesting experiment is the one conducted at the Utah station, by Mr. A. A. Mills, and only recently reported upon. He fed twelve pigs in four lots of three each, the pigs having an average weight of about thirty-seven pounds each at the beginning of the experiment. They were fed from December 6 to May 16, a period of 161 days, on the following feeds: Lot 1 on equal weights of bran and ground wheat, lot 2 on bran and field peas, lot 3 on bran and corn, and lot 4 on bran and barley, the bran in each case being half the feed by weight. On these feeds the average gain made per pig in 161 days was as follows: Lot 1 (bran and wheat) 111 pounds, or .69 of a pound per day. Lot 2 (bran and peas) 176 pounds, or 1.09 pounds per day. Lot 3 (bran and corn) 101 pounds, or .63 pounds per day. Lot 4 (bran and barley) 89.66 pounds, or .56 pounds per day. And these gains were made on the following consumption of feed for each pound of gain: Lot 1, 4.02 pounds; lot 2, 3.63 pounds; lot 3, 4.55; lot 4, 4.62 pounds. It will here be noticed that the mixture of bran and barley, equal parts, by weight, gave the poorest results, though taken by itself the gain made on this feed was fair. Bran and corn was slightly better, bran and wheat still better, the gain being ahead of that on corn, but the mixture of bran and peas, equal weights, produced the most satisfactory gain. Lot 2, which was fed on this, gained 195 pounds more than the next best (the lot fed on wheat), and it made this gain on less feed per pound of gain than any of the others. It was a highly nutritious feed, the peas being much richer in the flesh-formers than wheat. It is also likely that this feed was more palatable than any of the other mixtures, as the average consumption per pig

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daily exceeds that of any of the others by somewhat more than one pound. The report also shows that there is a gradual increase in the amount of food required to make a pound of gain as the pig increases in weight.

The feeds cost as follows: Bran \$10 per ton, wheat 45 cents per bushel, peas 75 cents per bushel and barley 38 cents per bushel. At these prices the gains cost respectively as follows: Bran and wheat 2.51 cents per pound, bran and peas 3.18 cents per pound, bran and corn 2.84 cents per pound, and bran and barley 3 cents per pound gain in live weight. It will be seen that the wheat made the cheapest gains in spite of the fact that the peas produced by far the largest gains. This emphasizes the fact that it is necessary to figure the cost before we decide on what we shall feed, and the only way to approximate results is to know what gains may be expected from each feed, of which indications have been given in the preceding experiments. Then knowing the price at which feed can be bought, it is possible to approximate the probable cost of the pork.

If peas could be raised largely in Kansas, so as to be had at a low figure, this feed would doubtless become a favorite with our hog-raisers, but, unfortunately, the common field pea does not do well in our hot and dry seasons.

The Oakland Sale of Jerseys.

According to previous announcement concerning the sale of Jerseys at the Oakland Dairy farm of Mr. A. E. Jones, held on Monday, the 22d inst., the following list of the buyers and animals sold is given:

Eleven head of registered cows and heifers brought a total of \$584, being an average of \$53.09 per head.

Mollie Herrick 65979, dam Nemo's Alice 26448, sire Baron's Hugo Pogis 14008, was sold to W. J. Rickenbacher for \$90. This cow was 4 years old last March and has given forty pounds of milk per day.

Plum Butter 96026, dam Young Annette 2d 58767, sire Prospect's Pedro 11166, was sold to D. B. Doyen for \$80. She was 4 years old in September, and won second prize as a two-year-old at the State fair in 1892. She is good for thirty-five pounds of milk a day.

Mr. Rickenbacher also bought Belle of Topeka 92522, for \$75. She was out of Mollie Herrick and sired by Prospect's Pedro. This heifer was dropped in February, 1892, and had given birth to her second calf one week before the sale. She is giving twenty-five pounds of milk in twenty-four hours.

Mulberry of Cedar 2d 99290, dam Mulberry Cedar 22231, sire Charity Stoke Pogis 18215, found a buyer in Mr. W. S. Kale, at \$60. This heifer was 2 years old and was fresh in June. Her dam gave, at one time, sixty-two pounds of milk in a day.

Thora 2d, dam Thora 21872, sire Prospect's Pedro, was sold to Mr. V. B. Howey for \$50. This is a promising two-year-old cow and was fresh in July.

Comra 2d, dam Comra 38886, sire Prospect's Pedro, was sold to Mr. Howey for \$45. This was a thirteen-months-old heifer and her dam was nearly full sister to the famous World's Fair winner, Brown Bessie.

Clissie Copperas 3d 86452, 3 years old, dam Clissie Copperas 30129, sire Prospect's Pedro, was knocked off to Mr. E. A. Reed for \$46. The dam of this young cow has a record of twenty-four pounds of butter in seven days.

Clissie Copperas 2d 58768, same sire and dam as last, was sold to Mr. G. N. Morton for \$37.50.

The five-months-old heifer Maud White 96231, was secured by Mr. Reed at \$25.50. Her dam is Clissie Copperas 3d, sire Mulberry's Rioter 29563. This heifer is finely developed for one of her age.

A three-months-old heifer from Thora 2d, sire same as last, was sold to Mr. Reed for \$15.

Mr. Reed also bought a two-months-old bull calf out of Plum Butter to go with his other purchases, for \$10.

Comra 2d, 2 years old, dam Comra, sire Prospect's Pedro, and carrying a fine square udder, was taken by Mr. Doyen at \$60.

One fine six-year-old grade cow was sold to Mr. H. C. Cunningham for \$65.

Another two-year-old grade cow was sold to Chas. McCarter at \$40.

Agricultural Matters.

VALUABLE EXPERIENCES.

EDITOR KANSAS FARMER:—It gives me much pleasure to tell you that you are making the KANSAS FARMER the brightest and best farm paper published. It is better than ever it was, and I want to thank you for the benefits you are conferring, especially by publishing the practical experiences of the best farmers. Many can sit in an office and tell us how to farm, when, if the writers would do it that way they would make howling failures. Once, before I had experience, I read an article by some one directing to plow deep for alfalfa and harrow and sow. I did not stop to use a little common sense, but took his advice and swallowed it whole, as many others have done, no doubt, and made a howling failure. I got no stand, for the reason we plowed deep and turned up a new subsoil to the surface, and no rolling or harrowing or dragging could compact it, and the dry wind blew through it like a sieve, and the little plants had to perish.

I advocate deep plowing. But plow reasonably deep one year and raise a crop, then the next year plow as deep again and it throws the soil near the top again. Sow your alfalfa right after a good rain, and you are as sure of a good stand as with oats. Now, I find our worst trouble is with the ground crusting just before the alfalfa gets through and it cannot break the crust and come up. Now, brother farmers, I find that by running a sulky rake over the ground the crust can be successfully broken without destroying the plants, as is liable to be done by the rubbing of the frame of the smoothing-harrow when that implement is used. Again, if your alfalfa is a thin stand, too thin to leave, plow it up and harrow the ground down fine, either the first of April or the first of September, after a good rain, and every root will grow and you will have a good stand. One plant every four to six inches is as close as I want it for second bottom.

But there is another plant which I like as well as alfalfa clover, and that is Kaffir corn. It is a god-send these dry years—the greatest friend that ever came to this country. It is a surer crop than anything, alfalfa not excepted, and makes the best cattle feed of any plant I ever fed. I just bought one hundred head more steers to help eat another piece of Kaffir corn I have just bought.

As for wheat for hog feed, it is better feed for hogs than it is for man; it makes them fatter these hard times, anyway. I have tried feeding it in all kinds of ways—cooked, soaked whole, and ground. My experience is that I would just as soon have the whole wheat soaked as to have it ground without soaking. But soaking will not break that skin, which the action of the stomach does not thoroughly break up. Just buy a sweep mill that will crack the wheat—if only in two or three pieces all the better—put it to soak with a quart of flaxseed to a bushel of thick slop, and you will be feeding the best hog feed in the world, and it will make you thirteen pounds of hog to one bushel of wheat. The coarser the wheat is ground the slower the hogs will eat it, and the better it digests, and the less they will eat.

I called on one of our best feeders the other day. His name is Charley Curry, of Medicine Lodge. He took me to see his one hundred and fifty head of fattening hogs, which scooped mine a little, I will have to admit. As there were big piles of good corn there I expected he was feeding corn. He said: "That stuff is no account for feed." Said he had sent his teams after wheat, as his hogs were falling away on those big yellow ears of corn after being raised and nearly fattened on wheat. The trouble is that in this hot climate corn is too heating, the hog is restless and some way gets off his feed, which means loss. But wheat is cooling.

We have nearly finished hauling cane to the sugar mill. It made a big run. But the Democrats raised more Cain than we did by taking the bounty off.

But I guess the only way to break these sugar trusts and refining trusts up is to let all foreign sugar swoop down on them. It will make cheap sugar and that is what we must have.

ELI BENEDICT.

Medicine Lodge, Kas.

Corn vs. Alfalfa.

The following table, taken from Bulletin No. 26, of the Colorado Experiment Station, shows the total yield of dry and the amount of digestible matter in a crop of corn and alfalfa, each occupying an acre of ground:

	Total.		Digestible.	
	Corn	Alfalfa	Corn	Alfalfa
Dry matter....	Lbs. 5,539	Lbs. 10,304	Lbs. 3,605	Lbs. 5,611
Albuminoids..	405	1,602	296	1,193
Nitrogen, free extract.....	3,263	4,732	2,186	3,114
Fiber.....	1,472	2,800	1,060	1,193
Fat.....	84	246	63	101
Ash.....	315	829		

The variety of corn was Golden Beauty, planted May 16, in hills three feet apart each way and irrigated once. The alfalfa was three years from seeding, irrigated twice and cut three times. As will be seen, the table indicates that a much greater feeding value can be secured from an acre of alfalfa. Undoubtedly the same relative values would hold good without, as well as under irrigation, and the table, therefore, will be of great interest to our readers and of vital importance to the agricultural industry of the whole West, especially as it is becoming more thoroughly understood that our soil and climate is more adapted to the raising of alfalfa than corn.

Feeding Wheat and Alfalfa.

A feeder in McPherson county writes: "I intend to feed 100 three-year-old steers this winter. I have no corn, but plenty of wheat, and I wish to know which would be best to use, alfalfa or corn fodder, for the roughness. Also, if it would do to run the coarse feed through a fodder cutter and mix it with ground wheat and moisten it. The alfalfa being rich in protein, I have thought that the corn fodder and wheat would make a better feeding ratio."

To this Professor Georgeson makes the following reply:

"I regret that I cannot give you a direct and specific answer to your question for the reason that I have never experimented with the feeding of steers in the manner you propose. My judgment in the matter would be this: That although cut alfalfa hay and ground wheat would be a richer nutritive ratio than necessary for fattening steers, resulting in some waste of protein, still I think that the alfalfa would give better results than the corn fodder; but you might use half of each. I am not altogether sure that the wheat alone, as the grain feed, would give as good results as it would to mix a little corn with it, or even bran. I think that the variety in such a mixture would be more palatable to the steers than wheat alone. If, therefore, you have a good market for your alfalfa, as there ought to be this dry year, my judgment would be that it would pay you to sell part of your alfalfa, at least half, and substitute corn fodder, and with the proceeds from your alfalfa buy corn and bran to mix with the ground wheat. This will give a greater variety and induce the steers to eat more, and, therefore, to make better gains.

"Your plan of cutting the fodder, I think is a good one, and to mix the grain with the cut fodder is a good plan, but you should take care in that case not to feed more than they will eat up clean and not to have too large a proportion of cut fodder. I would moisten it only in mild weather.

"I am interested in your feeding and I would thank you to keep notes on the amount of feed consumed and the gains made, and let me know the result. You may develop facts which may be useful in the future. If you are disposed to experiment I should like to see you try feeding twenty-five or fifty of the steers on wheat and alfalfa alone, as you suggest, and the balance on a mixed ration, as I suggest, and note the difference."

Plan for Barn.

EDITOR KANSAS FARMER:—I have been planning to build a small barn, or rather a stable. First, I thought of 30x40 feet square; second, an octagon, with sides sixteen feet; third, twelve sides of twelve feet each; but have about fallen back on the first plan. This will contain basement for horses and cows, the stone wall being one and one-half foot thick; will leave for horses on one side, twelve feet; the other side, nine feet, for cattle, with six feet through center for a feed-way, making five double stalls on each side. The upper part finished with lumber, twelve feet up to square, roof to taper on four sides; tight floor and some granaries at one end, laying floor double where wagon is driven in.

Some time back preserving shingles was spoken of in the FARMER. When I get farther along, if necessary, I will describe treatment of shingles.

If any one using a good, cheap barn can suggest improvements on the above he will oblige. J. F. WOODROW.
Eureka, Kas.

Feeding Value of Kaffir Corn.

EDITOR KANSAS FARMER:—Will you please state in your paper the value of Kaffir corn as compared with other grain? I raised some this year, and find it kept green and made a fair crop while other crops were destroyed by hot winds and dry weather. The little birds came in large flocks and ate nearly half the crop. A great deal of nonsense is said and written about protecting birds. They are about as damaging to the horticulturist as chinch bugs are to the grain farmer. B. E.
Peabody, Kas.

In reply to the above, I will say that we have, so far, had no opportunity to make a thorough experiment concerning the relative feeding value of Kaffir corn and corn; but I have studied the question and compared contents of nutrients in the two grains. From this I can say that, in my judgment, Kaffir corn will nearly, if not quite, be equal to corn for feeding purposes to both steers and hogs.

The grain being small and hard, ought to be ground fine before it is fed, or there will be a large amount that will pass through the animal undigested.

I am aware of the fact that sparrows and other grain-eating birds will eat the seeds off the heads, even before they are ripe. I know of no other remedy than to shoot at the birds and thus keep them off as much as possible until the grain hardens, when it should be cut. The fodder will be better for being cut early, and the grain gains nothing by standing. The birds will attack it also in the shock, but hay caps, or even straw, may be tied over the tops of the shocks to keep the birds off until the fodder is cured.

C. C. GEORGESON.

November Notes.

Fall plowing can be done until the ground freezes.

This ought to be the month for preparing for winter.

Push the corn-gathering and get it all under good shelter.

Provide good racks in which to feed the hay, straw and fodder.

Fruit trees may be planted until the soil freezes too hard to work.

A cheap straw shelter is far better than allowing stock to go through the winter exposed.

It will nearly always pay to keep at least one good team on the farm well shod during the winter.

The fattening hogs should be pushed this month, as usually much later than this the cost of feeding will be increased.

It is better to feed a little now and keep the stock in a good condition than to be obliged to feed more later to keep alive.

Lessen the cost of feeding as much as possible by providing comfortable quarters, feeding regularly and supply with plenty of water.

Before the ground freezes see that good drainage is provided the fall-sown wheat and grass, as well as in the orchard and among the small fruits.

While mulching is often beneficial, especially to young growing trees and among the small fruits, it should not be applied until the ground freezes sufficiently hard to bear up a wagon.

One advantage with fall plowing is that it offers a better opportunity for applying the manure during the winter as fast as made.

"For Years,"

Says CARRIE E. STOCKWELL, of Chesterfield, N. H., "I was afflicted with an extremely severe pain in the lower part of the chest. The feeling was as if a ton



weight was laid on a spot the size of my hand. During the attacks, the perspiration would stand in drops on my face, and it was agony for me to make sufficient effort even to whisper. They came suddenly, at any hour of the day or night, lasting from

thirty minutes to half a day, leaving as suddenly; but, for several days after, I was quite prostrated and sore. Sometimes the attacks were almost daily, then less frequent. After about four years of this suffering, I was taken down with bilious typhoid fever, and when I began to recover, I had the worst attack of my old trouble I ever experienced. At the first of the fever, my mother gave me Ayer's Pills, my doctor recommending them as being better than anything he could prepare. I continued taking these Pills, and so great was the benefit derived that during nearly thirty years I have had but one attack of my former trouble, which yielded readily to the same remedy."

AYER'S PILLS

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass.
Every Dose Effective

Applied on plowed land the rain and snow will carry the soluble portions into the soil, where it will be retained for the use of the next growing crops.

A good way of applying manure is upon grass lands during the latter part of the fall and early winter, taking care to scatter out as evenly as possible, as with coarse fresh manure there is danger of killing out the grass unless this is done.

While it is best to provide a good warm shelter for the hogs during the winter, in nearly all cases it will be best to arrange so that they can run out every day during the winter. Close confinement is not conducive to good health, even with hogs.

It is a waste of good feed to turn stock in to a good straw stack or to scatter fodder or hay upon the ground. The most economical plan is to provide good feeding racks for feeding all of this kind of material. Even when feed is cheap it is quite an item to save.

When needed, this is a good time to haul out and apply a good dressing of manure in the orchard. Broadcast manuring is nearly always best. One advantage in manuring in the fall is that in addition to the fertility supplied the manure will act as a mulch to the trees during the winter.

Where several cows are kept, if it is not considered best to feed all so as to maintain a free flow of milk, it will be better to select a sufficient number to furnish what milk is wanted and feed them liberally and let the rest go dry rather than distribute the feed among a larger number and have each one only give a small mess of milk.

It is of no advantage, and, in fact, in many cases it is a positive detriment to allow the stock to run out on the pastures or meadows too late. Some growth of the leaves is necessary to secure proper protection for the roots, and it is better to commence feeding a little earlier rather than to run the risk of killing out the grass plants for the small amount of feed that will be secured. N. J. SHEPHERD.
Eldon, Mo.



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.

"Howdy, Stranger!" Is the Texas Welcome.

Texas will say "Howdy" to you, if you will run down and give her hospitable citizens half a chance to get acquainted with you.

Besides being a pleasant place to visit, it does not take a back seat as a wealth-producer.

G. T. Nicholson, G. P. A., Topeka, Kas., will furnish free pamphlet describing Texas. Write for it.

This is a good chance to see northern Texas, low round-trip rates having been made for Texas State fair and Dallas Exposition, over the Santa Fe Route, October 19, October 26 and November 2. Inquire of nearest A., T. & S. F. agent.

Irrigation.

Dates of Irrigation Conventions.
NOVEMBER 23-24.—Kansas State Irrigation Association, at Hutchinson.

Irrigation for Eastern Kansas.

"The farmers of western Kansas will do more figuring this winter than they have ever done before in their lives." This remark was called out by the fact that the exhibit of pumping machinery, windmills and engines, at the recent Garden City fair, drew larger crowds than the race track, a thing doubtless before unheard of at an agricultural fair.

The variety of questions the exhibitors were called upon to answer regarding the capacity and cost of their different plants showed the disposition to "get to the bottom" of the facts in the matter.

While many false hopes may be raised and many trials made which will end in disappointment, in the long run the gain is sure to be great and the productive capacity of the West greatly increased by all of this agitation.

The eastern Kansan has always known, he would tell you, that the West did not have rain enough, and those fellows would have to "irrigate or emigrate" sooner or later. The eastern Kansan always believes it is too dry in the next county west of his. But after having his own favorite corn crop cut short once or twice he begins to ask seriously whether irrigation can be made to pay for eastern Kansas.

Before attempting to answer this question, let us look at some important differences between this section of the State and the irrigation districts of Colorado, Utah or California. In those countries the farmer knows to a reasonable certainty that the water he turns upon his crops from the ditch is all that they will receive.

Rainfall during the growing season is so slight as to be counted out in the problem of watering the crop. In scientific irrigation the application of water to the growing crop in proper amount and at the proper time has been reduced to a nicety. The inexperienced fall about as often in applying too much water or at the wrong time as in not watering sufficiently. Let us suppose the eastern Kansas farmer equipped with a ditch and water supply. During a protracted drought he floods his land, watering the crop as thoroughly as it will stand. A soaking rain follows, and the land, already well watered, becomes almost a bog. The crop, if not ruined, will take some time to recover.

We see that if our farm lands are to be irrigated, the work must be adapted to our immediate conditions. Careful grading and drainage must be secured and experience gained in the use of water.

Again, where a large irrigation scheme is carried out, capital must be interested and the returns secured by water rates or rents from the farmers tilling lands under the ditch. If the farmer knows that he must depend upon the ditch water wholly, he will make contracts for a given water supply, sufficient for ten or a hundred acres, as the case may be, with as much certainty as he would buy his year's supply of fuel or engage his hands for the season's work. The ditch companies also feel as sure of a market for their water as the coal operator does of a market for the output from his mine.

In this section of the State sufficient rainfall is the rule, a drought the exception. Seasons, in the past, when the rainfall was so heavy as to be a damage to the crops, are about as numerous as those of complete failure from lack of rain. It becomes evident that the duty of water here would have to be computed upon a very different basis from what it would be in Colorado or Utah, or even in western Kansas, and yet the demand upon a certain ditch at some particular period of drought may be as great as in any locality.

The Colorado irrigator engages water upon the basis of his greatest need during the season. If the Kansas farmer engages upon the greatest possible need, he must carry this expense

for months, perhaps, as an insurance against loss of his crop in time of drought.

Other differences in conditions may also be taken into account. Our streams as a rule, run deeper in the channels than do the mountain streams, and have very much less fall to the mile. The difference between the natural water level and the level required to reach the land will be greater, and hence either a longer canal will be required or a head secured at the start by putting in a strong dam.

Our streams carry so much more soil in suspension, especially in times of floods, that the filling up of reservoirs and canals from silt or sediment would be much more rapid.

Taking all of these difficulties into account, the fact still remains that our crops are often lost from drought while floods of storm water have past by us that might have been diverted upon the land. Our people are awake to these facts, and it seems probable that irrigation will, in the near future, be called into play to assist the rainfall in developing our crops. That this will be by means of individual or co-operative effort at first seems most probable.

If such enterprises prove profitable, they will stand as object lessons for the surrounding community and larger investments will be sure to follow.—Prof. S. C. Mason, in *Industrialist*.

To Make Kansas Rich.

The following not overdrawn view of some irrigation points indicates to some extent the interest being taken in the subject. A clear-headed writer in an exchange says:

"There never was a time when so many people in this State were talking irrigation as the present. It is hard to run across a farmer these days who is not informing himself upon the subject and the most practical way of using it. They all claim it would increase their earnings and insure certainties every year from that portion of their farm which they would irrigate. The drought throughout this whole Mississippi valley has caused many men in other States to begin an investigation along this line.

"Some real estate men claim it is a bad kind of advertising—this talk about irrigation. But it is nothing of the sort, and talkers of flap-doodle should not be listened to. The world knows from statistics, gathered now for many years, that the average of Kansas productions compares favorably with those of any other State. In corn, wheat, oats, rye, hay and live stock no State shows up better than Kansas, considering the number of people at work in the business. But what is needed is more production and more certain returns each year. The man who has stuck to his business in Kansas and had the benefit of the averages, is to-day a well-to-do man. But irrigation will add to the riches of Kansas beyond computation. It will go on planting great areas of wheat, corn and other cereals, and raise hay and live stock and fruits, but by irrigation it will raise more of the smaller things in the truck line. For instance, at the present time, hundreds of carloads of cabbage are shipped in here, when, by the use of little irrigation plants, the shipments will go out to as large an extent. Less than three years ago it went by common consent that celery could not be raised here, and vast sums of money were sent to Kalamazoo, Mich., to buy that delicious vegetable. Now by means of irrigation it is demonstrated that we can excel the Kalamazoo plant in size and quality, and the production of it is only limited by the number engaged in the business. It is said one man in this city has raised a thousand dollars worth of it on a couple of vacant town lots, and that by only spending his mornings and evenings at it. Another man has raised about 1,500 bushels of Spanish onions, heretofore sold in small lots at big prices as a great delicacy. We sell wheat at 40 cents per bushel and buy potatoes at \$1 per bushel, when one acre of wheat will produce twenty-five bushels, and one acre of irrigated potatoes will produce 400 bushels. Annually hundreds of car loads of potatoes

Irrigated Farms---\$1,000!

Out of a thousand farms in **SOUTHWEST KANSAS**, of 160 acres each, we are selling a limited number equipped with an independent and permanent irrigation plant sufficient for at least ten acres on each farm. The price at which these 160 acre farms are selling is merely about what the ten acres and irrigation plant are worth.

Before buying a farm investigate this. Special terms made for Colonies. Call on us or write for particulars.

THE SYNDICATE LANDS & IRRIGATING CORPORATION,

Room 412 New England Life Building, 9th and Wyandotte Sts., KANSAS CITY, MO.

are shipped in here. With many other productions the same is true, and our losses are incomputable on account of it. Irrigation will transform this valley from a consumer of these things to a producer, and a famous one, too.

"In this region, of which Hutchinson is the wholesale center, the radius of which is very modest indeed, there is done about between \$30,000,000 and \$40,000,000 worth of business annually. Enough to make the people rich in a short time did we not spend our money for things we could produce at home by the means of individual irrigation plants. Look on the grocers' shelves and see corn, tomatoes, beans and all sorts of vegetables, and many kinds of fruit there for sale that were canned hundreds and, in many instances, thousands of miles from here, for which we pay the cost of production and the freight. Nearly all this can be raised right here just as well as elsewhere. Demonstrate the certainty of a crop each year and money and men will develop the industries to take care of the stuff. Irrigation is the method to adopt to make Kansas rich."

The World's Irrigated Area.

By the census of 1890, showing the irrigated area in the United States, California comes first, with 1,004,233 acres and 13,732 irrigators; then Colorado, with 890,735 and 9,650 respectively, while Montana shows 350,582 and 5,706 and Utah 263,473 acres with no fewer than 9,725 irrigators. Adding the other western commonwealths and the increase since 1890 makes a total of about 4,000,000 irrigated acres in the United States. Of foreign lands India has at least 35,000,000 acres, Egypt 6,000,000, Italy nearly 4,000,000, France and Spain 500,000 each, and eastern Asia and South America large areas, so there must be on this globe about 50,000,000 highly prolific acres that but for irrigation would be almost totally barren.

The problem of the great plains region is to devise means for the support of the people who have made that region their home. To locate and determine the amount of the hidden stores of water and how best to utilize the limited visible supply. With us, the problem is exactly the reverse. It is how are we to people and reclaim the vast areas of unoccupied arable land, and how are we to secure the diversion and use of the great rivers which each year run to waste. This is not to be determined by surveys. We have long passed the period when surveys would lend any material aid.—*Elwood Mead, State Engineer, Wyoming.*

Raising water for irrigation by means of gasoline power bids fair to become the favorite method. H. B. Jones & Son, of Delphos, have just had installed by Fairbanks, Morse & Co., of Kansas City, a Fairbanks-Morse centrifugal pump driven by a Fairbanks-Charter gasoline engine. With this plant water is lifted from the Solomon river a total vertical height of thirty-eight feet.

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. DICKEY CLAY MFG. CO.,
Makers of all kinds of Burned Clay Goods.
Office 800 N. Y. Life Bldg., Kansas City, Mo.

FARMER'S ACCOUNT BOOK.

The keeping of farm accounts is one of the important elements of farm prosperity which is too often neglected. This results largely from the feeling of uncertainty as to the correct method of making the entries. This is entirely overcome by the use of a book prepared expressly for the farmer and embracing a system both simple and satisfactory. Anybody who can write can keep all necessary accounts intelligibly by the use of this book. The KANSAS FARMER has, during the past, supplied many of its subscribers with copies of this book and has given them the advantage of discount rates, whereby they obtained a \$2 book for \$1. The FARMER Company has just now bought out the entire stock of these excellent books at panic prices and is now able to supply it to any subscriber, postage or express prepaid, to any address in the United States, for only 60 cents, or as a premium for three subscribers and \$3. The book contains 222 pages, 8x12 inches in size, substantially bound in cloth-covered boards.

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Half Rates Via the Baltimore & Ohio R. R.

On October 2 and 9, November 6 and December 4, the Baltimore & Ohio railroad will sell home-seekers' excursion tickets from Chicago to Winchester, Harrisonburg, Staunton and Lexington, Va., and intermediate points at rate of one first-class limited fare for the round trip. Tickets will be sold only on the above dates, and they will be good for return thirty days from date of sale.

Complete information relating to lands for sale can be secured by addressing M. V. Richards, Land and Immigration Agent, Baltimore, Md.

For further particulars in relation to tickets, rates, sleeping-car accommodations, etc., apply to any Baltimore & Ohio railroad agent, or L. S. Allen, A. G. P. A., Room No. 411, Grand Central Passenger Station, Chicago.

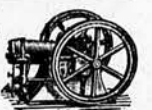
Get up a club for the KANSAS FARMER.

If It's a Sprain, Strain, or Bruise
St. Jacobs Oil
Will Cure It

DO YOU USE POWER?

WEBER Gasoline Engines run anything.
For catalogue and testimonials address
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ALL RIGHT; you need CHEAP POWER. ONE CENT per horse power per HOUR is CHEAP! Economy in power, our motto.
459 Southwest Boulevard,
KANSAS CITY, MO.



A Day at Wood Dale Farm.

The history and associations of the five hundred and twenty acre "Wood Dale farm," commonly known for four generations as the old original Gentry homestead, situated six miles northeast of Sedalia, Mo., is more or less known throughout the improved live stock breeding world, and now under its present ownership and management is, perhaps, more interesting than ever before. Its first associations began with grandfather Reuben Gentry, who, about the dawn of the present century, bid adieu to his native heath in Kentucky and set out to found a home somewhere in the Western wilderness. He gradually worked his way up the Missouri river; and by the time of 1812, when the second war with Great Britain broke out, he arrived at a place called Boon's Lick Fort, a kind of trading and military post, just opposite where the historic little city of Boonville is now situated, on the Missouri. There he remained until the close of the war, when, in 1815, he came to the section of country since settled and organized as Pettis county and located upon what is now known as Wood Dale farm. Among his family of five children, four sons and one daughter, that reached man's estate, was Joel W. Gentry, the father of the present proprietor of the farm, who was blessed with two children, a daughter, Mrs. S. M. Morrison, a resident of Denver, Col., and a son, generally known among the pure-bred live stock fraternity as "Nick Gentry of Sedalia."

The farm for half a century or more has been noted for its horses, jack stock, cattle, and more particularly for its swine, which are generally acknowledged the best ever bred in Berkshire history. Twenty-five years ago Mr. Gentry began to study how best to proceed in the development for size, quality and early maturity, and his success, year after year, in the show yard rings of the United States, as well as the hundreds of victories achieved by individuals that were bred at Wood Dale and went out to compete for honors under the direction of new masters in almost every State and Territory in the Union, Canada, old England, the Island of Cuba and Old Mexico, is perhaps best understood after a brief reference to the record of the herd. Victory after victory came to the Wood Dale representatives at county, district and State fairs up to 1885, when the World's Fair was held at New Orleans, when, among the prizes won, was the \$100 gold medal for the heaviest hog of any breed and the \$250 gold medal for the best boar and five sows of any age or breed. Such was the individuality of the fourteen head exhibited that they showed more size and better weights in rings ranging from one to fourteen head than did any herd or breed. As every one acquainted with modern live stock history is aware, the greatest of live stock shows was made at the Columbian Exposition, held at Chicago, in 1893, where the herd won ten out of eighteen first prizes; the other eight were won by individuals bred at Wood Dale or the produce of their descendants. The herd now consists of about 175 head, all ages, and was strongly re-enforced by an 1894 importation from England. Among the harem kings now doing service at the farm is King Lee 27500, the sweepstakes prize-winner at the World's Fair, Chicago. He was farrowed August 25, 1890, sired by Longfellow 16835, he by Charmer's Duke 13860, by Duke of Monmouth 11361; dam Lady Lee VII. 25107, by Model Duke 17897. His sire, Longfellow, weighed when within five days of 17 months of age 726 pounds, and it is safe to say that his get, both sons and daughters, have taken more prizes than the descendants of any other boar in Berkshire history, save, perhaps, the noted English Berkshire gentleman, Othello. Close up in line array comes the aged fellow, Model Duke 17897, by Longfellow and out of Perfection 14681, an imported sow. This fellow, when in his two-year-old form, went to California for \$750, and after three years service there he was brought back to Wood Dale and has been used for the past two years. Many of the top harem queens in the brooder division are by him. His sons and daughters all attest his worth as a sire and as he grows more aged the more highly is he appreciated by his original and now present master. Another gentleman that is sure to attract the attention of the visitor is Victor 30288, a son of Model Duke and out of Royal Beauty XLI. 25124, who at 18 months and 6 days tipped the beam at 660 pounds, which is perhaps the heaviest for his age of any recorded in all his conformation points. Close up and along side, too, of the trio just mentioned is the eight-year-old Enterprise 26461, that was owned for five years by Canada's greatest Berkshire breeders, J. G. Snell & Bro., of Edmonton, Ont. He was exhibited at many of the leading Eastern and Canadian shows for five years in succession and was during his show ring career never beaten. Such is his high character and individuality that

Mr. Gentry exercised more or less strategy for several years before he finally got him away and from off her Majesty's soil to that of Uncle Sam's. He, like his coadjutors at Wood Dale, needs no description beyond the show ring record and that he is doing service under the direction of his American master, Mr. Gentry. The visitor will find after scanning the seventy-five aged harem queens one of the strongest arrays that he has ever seen, and will at once conclude that "Nick Gentry of Sedalia" is entitled to all the honors bestowed upon him during his career as a breeder of Berkshires. One of the first to attract one's attention is the very excellent Duchess CXXIII. 30279, that has won everything she has ever competed for, including both sweepstakes at the World's Fair, taking in all there \$552.50. She has just weaned a handsome litter that were sired by Victor 30288. Another very handsome three-year-old, Duchess CXVIII. 28665, steps up well into the front line and says "Me, too, because I took the first prize at Columbian in my two-year-old best show ring dress." In close company comes Duchess CXX. 28675, that is in the prime of life and is the dam of the young fellow that took first prize at World's Fair under 1 year and subsequently left the farm for \$350. In her last litter were individuals having such promising characteristics that they have been retained in the herd for future usefulness. More could be said about the members comprising the Duchess family but space forbids, and we go on to the Royal Beautys, where one finds the best show queen in the herd, Royal Beauty LXVII. 30289, that is a full sister to Victor, and was one of the three with boar that won first at the Columbian. She has lately farrowed a fine litter by Longfellow. Such is her conformation and maternal character that Mr. Gentry refused \$300 for her when a gilt and she has proven to be one of the best mothers ever bred on the farm. Two of her spring of 1893 farrow, both daughters, have been retained in the herd. Up comes a troop of twenty-five belonging to the Lady Lee family, and the first to register on the visitor's memorandum is Lady Lee II. 25095, the dam of Columbus 28791, who sired all the youngsters of both sexes belonging to Wood Dale that won at the Columbian. To her right comes Lady Lee VII. 25107, the dam of King Lee 27500, King Lee II. 29301, Longfellow's Model 27058, Baron Lee II. 30294, Garland 30377 and Baron Lee IV. 33446, all of whom are noted sires. Garland 30377 won second prize under 6 months at the Columbian and Baron Lee IV. 33446 has lately gone to head the leading Canadian Berkshire herd, owned by J. G. Snell & Bro. What dam belonging to any breed on American soil can present a stronger array of sons than does Lady Lee VII. 25107? In another family circle of ten Charmers was Charmer XXXVI. 27531, that lately went for \$200 to re-enforce the very excellent herd of that very successful young Berkshire breeder, Mr. James Qurollo, of Kearney, Mo. One of the nine yet on the farm is Charmer XLIII. 30305, that, while not quite so good, perhaps, as the one Mr. Qurollo got, is one of such character as to command a careful inspection. Another little group of six knowing females, the Black Girls, whose acknowledged leader is Black Girl XXIX. 28874. It is perhaps enough to say of her that she is a full sister to Black Knight 30003, that was bred at Wood Dale and went to W. E. Spicer, of Nebraska, who afterwards showed him at the Columbian and won first in class as a two-year-old and third boar and three sows over one year, also sweepstakes boar any age.

THE NEW BLOOD IN THE HERD.

The former patrons of Mr. Gentry will doubtless be interested in learning something of his late importation from England, which consisted of twenty-one head, also four others from Canada. The English consist of drafts from the noted herds of Edney Hayter, White Church, Hants; E. Burbidge, South Wraxhall; R. E. Horwood, Drayton, Beauchamp; Col. J. Blandy Jenkins, Kingston, Abingdon; John E. Lywood, Stockbridge, and R. L. Mills, Ruddington, Notts. The visitor will find them a grand lot, and among the more toppy ones is Lady Supreme 33841, bred by Jenkins. She shows a fine, cleanly dishd face, a good head and ear, high, full crest, broad, deep shoulder, very strong in the heart, long, arched back, supported by a remarkably well sprung rib, deep, wide ham, well-balanced top and bottom lines and shows that character and individuality not seen once in a thousand times. Another one well to the front is Highclere B. III. 33538, bred by Burbidge. She is one of those long, evenly conformed kind that is sure to attract attention for a second inspection. Then comes Ruddington Maid III. 33844, that has just farrowed a fine litter of nine pigs. Such is her individuality that she is considered by Mr. Gentry to be one of the best on the farm, being a sow of great size, very uniform and a splendid set of limbs. One of the most attractive harem ladies is Drayton Queen II. 33886, bred by Mr. Horwood. She has just weaned a nice litter

that was farrowed in quarantine. Individually she is a queenly little mother, having an extra good head, back and ham, perfectly marked and possesses quality in every respect. Space and the reader's time forbids further mention of the herd at this writing, except it be to state, twenty gilts of spring of 1893 farrow, which were retained for future use in the herd, were out of Lady Lee VII. 25107, Duchess CXX. 28675, Royal Beauty LXVII. 30289, Duchess CXXVII. —, and Pinnock's Pride, an imported dam.

The arrangements provided for the care and development of the swine herd are the results of years of trial and experience. The visitor finds a twenty horse-power boiler and engine that is used to run a pony saw mill, supplies the power for the grinding machinery and furnishes steam for the feed cookers. The grinding machinery is used in grinding rye, oats, wheat and corn. There is a mill specially used for grinding corn in the ear, reducing both grain and cob a little finer than graham and not quite as fine as merchantable flour. In grinding corn and cob Mr. Gentry acts on the theory that the cob possesses about the only bone elements in an ear of corn. Not only this, but that it assists digestion and facilitates assimilation by preventing doughy lumps that naturally form when finely-ground grain is fed to animals having but one stomach, and affords a better opportunity for the gastric juices secreted by the stomach to permeate the ration before it leaves its natural place and gets beyond the point where assimilation ceases and thereby avoids in a great measure waste of ration that must necessarily and does occur if the powers of the growing animal should happen to be taxed beyond its capacity to take up the necessary elements for its further growth and development. In its use he has reached another conclusion, and that is that the grain and cob ground together and fed to a great extent prevents undue fermentation that must occur after the ration has left the stomach unless it be perfectly saturated with the natural aids of digestion by the stomach. Several mills for grinding grain and cob were tried and the one selected as the best, most durable and satisfactory is one made by M. P. Bowsher, South Bend, Ind. It costs about \$3 per year, and the only repairs in five years use is for a new set of grinding plates about once a year. Other makes of mills are used in grinding grain other than corn and cob. The cooking machinery consists of twelve vats or barrels of about sixty gallons capacity each, that are supplied with steam through pipes from the boiler before mentioned. The grain, both whole and ground is cooked for rations according to fixed calculations of Mr. Gentry, who, in his judgment, varies the ration as occasion may require. Among others of his favorite rations is one of three-fourths wheat and one-fourth corn, one of same proportions oats and corn. For field ration clover and blue grass.

The visitor will find another entertaining feature of the farm—a herd of seventy-five head of excellent Short-horn cattle, fifty of which are registered or eligible. Many of the best were selected from the leading herds of the United States at prices ranging from \$60 for a calf up to \$216 for cows and heifers. At the head of the herd is the four-year-old Ravenswood Prince, sired by Imp. Barbarossa 68197 (50783), that was bred by A. Cruickshank, of Scotland; dam 25th Duchess of Ravenswood (Vol. 33, p. 698), by Royal Champion 53715. Space forbids that detailed description that he merits, save the statement that "he's a grand good one." He has been in service here three years and the youngsters in the herd, both sexes, are indeed a strong typical lot. During the past season the royally-bred young fellow, Airdrie Duke of Hazelhurst, calved June 8, 1893, was placed on the farm and assisted his senior, Ravenswood Prince. He was bred by Elbert & Fall, of Albia, Ia., and was sired by Wild Wild Eyes 110654; dam 51st Duchess of Airdrie (Vol. 37, p. 513). The reader will at once appreciate his strong Duke ancestry. In a future "Stock Gossip" notice more will be said of the Short-horn herd, and now will pass the flock of finely-bred Merino sheep, among which are about twenty-five one and two-year-old rams that can be had at hard times prices. W. P. BRUSH.

Missouri Swine Sales.

Last week four of northwest-central Missouri's noted swine-breeders, Mr. H. C. Sydnor, of Corder, Lafayette county; Mr. F. M. Lail, of Marshall, Saline county, and Messrs. C. G. Sparks, Mt. Leonard, with Geo. L. Davis, of Elmwood, Saline county, made their regular annual clearance sales. On Tuesday about 300 visitors and onlookers gathered at Higginville from Iowa, Illinois, Nebraska, Kansas, Tennessee and old Missouri. After an excellent lunch Col. H. D. Smithton, of Kansas City, mounted the sales block as the representative of Mr. Sydnor, and after the usual preliminaries proceeded with the sale. The offerings consisted of Poland-Chinas and Berkshires of the leading and fashionable strains and of excellent form and in-

Consumption.

The incessant wasting of a consumptive can only be overcome by a powerful concentrated nourishment like Scott's Emulsion. If this wasting is checked and the system is supplied with strength to combat the disease there is hope of recovery.

Scott's Emulsion

of Cod-liver Oil, with Hypophosphites, does more to cure Consumption than any other known remedy. It is for all Affections of Throat and Lungs, Coughs, Colds, Bronchitis and Wasting. Pamphlet free. Scott & Bowne, N. Y. All Druggists. 50c. and \$1.

dividuality. It soon became evident that the efforts of Mr. Sydnor were highly appreciated, and the spirited bidding, through the professional energy of his auctioneer, Col. Smithton, resulted in good prices. Eighty-three head were soon run through the sales-ring gauntlet. The Poland boars averaged \$39.55, the sows \$27.44, and in the Berkshire division the boars brought an average of \$21 and the sows \$20. All the Polands were, except two head, farrowed in 1894. The crowd was an almost exclusively Poland one, hence the up-eared Berks did not bring quite as good prices as they probably would had the sale been one exclusively of Berkshires.

Wednesday came, and along with it Tuesday's crowd, and after a bountiful noon spread at Mr. Lail's farm, near Marshall, Col. Jas. W. Sparks, the very popular and successful young auctioneer of Marshall, announced the preliminaries and opened the sale. The offerings consisted of ninety-eight head and were in good sales-ring condition. After the spirited contest had ended it was found that the top of the sale was an even \$200, for the noted breeding boar Lail's Victor 4298 S., and the general average of the ninety-eight was \$32.56. This was Mr. Lail's fourth annual clearance sale, and such was its success that it more firmly than ever confirmed the fact that Mr. Lail stood up in the front ranks as a successful American breeder of high-class Poland-Chinas. It was generally understood, too, that he intended aiming higher for his prospective next year's sale.

Thursday dawned bright and crisp and found that a majority of the two preceding days' attendance was yet in and about the city of Marshall, and by the time of noon strongly re-enforced by a score or more of new men, all of whom were entertained by Messrs. Sparks and Davis at Hotel Hurt. At 1 o'clock Col. Sparks led the "four hundred" into the comfortably seated pavilion which had been erected for this special occasion in Sparks Bros.' spacious mule barn in Marshall, and after making one of his spirited, yet practical and business-like talks, opened the sale, and the crowd of breeders seemed to have caught on to "Gentlemen, somehow or other, good hogs are the best money-makers now in the business." At no sale in all our years of auction block attendance did we ever see offerings such as the twenty-four head brought into the ring by Mr. C. G. Sparks have a more even conformation and the best of high-class sales-ring finish. The breeding, too, was first-class, of the leading strains and uniform in family characteristics. That the twenty-four were highly appreciated is shown by the fact that their general average was \$45.91. The offerings of Mr. Davis were at some disadvantage, being in such strong company with Mr. Sparks' and at the close, practically, of the three days' sale. They were about as well bred but not quite so uniform in conformation and hardly as well finished, and then, being "a new man," as it were, detracted some from the real merits of his very excellent offerings. His Spartan-like courage will not allow him to abate one point in his future efforts to climb higher, and his gentlemanly and professional bearing was duly appreciated by the many friends and acquaintances made during the sale. His forty head sold brought an average of \$21.33, which was, considering everything, doubtless both satisfactory and remunerative. And thusly closed the three days' swine sales. W. P. BRUSH.

"Garland" Stoves and Ranges are no higher in price than the worthless imitations. Ask to see them.

See Chicago Sewing Machine Co.'s advertisement in next week's issue.

Interesting circulars sent to farmers. Send name to Bureau of Immigration, Spokane, Wash.

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 Housekeeper's Autumn Time.

The autumn winds sigh through the trees,
The brown leaves earthward float,
And I must sew the buttons on
My husband's overcoat.

The western sky, where gilded clouds
Loom up like mountain crags,
Seems to portend a pleasant day
To color carpet rags.

The gorgeous beauty of the days,
With white frosts intervening,
Warns me that little time remains
To do my fall house cleaning.

The honey bee and butterfly
Bid farewell to the flowers,
While I am scrubbing fly specks off
These dirty walls of ours.

The squirrel hoards his store of nuts,
The wild bird southward goes,
The children rambling in the woods
Will soon need winter clothes.

So, as the autumn days go by,
With joy and duty teeming,
They bring me double happiness
In doing and in dreaming.

And teach this lesson, as with toil
I mingle thoughts of heaven,
The Maker of this beautiful world
Worked six days of the seven.
—Good Housekeeping.

CHECKING THE BABIES.

"Well, I declare!" exclaimed a lady upon entering one of the large theaters in New York city. "That's something I would never do." The "that" in question referred to a rather unique custom which is rapidly coming into vogue in this ever-progressive country.

In some large cities there are theaters which give continuous performances from noon to eleven p. m. Any person paying for a seat can occupy it as long as he or she chooses, and no efforts are spared to render the audience entirely comfortable. Refreshments are close at hand, and as the entertainment is of the light vaudeville order, with the scenes constantly changing, these play houses have come to be popular resorts for all classes.

But soon after opening, one great drawback was discovered. Mothers



THEATER CRECHE.

and nurses with infants of all ages and temperaments flocked to the theaters, and confusion instantly ensued. In the midst of the most thrilling scene where the prima donna touched her highest note, a dozen youngsters from all parts of the auditorium would se, up a shrill and discordant chorus of wails. Of course, the aspiring infants were quickly hustled out by sundry ushers and supes, followed by humiliated mothers or maids.

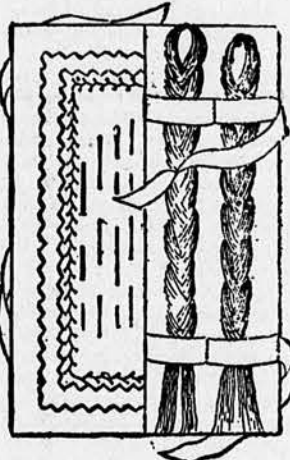
Nevertheless the number of these habitues seemed to increase, and the proprietors were confronted with the necessity of meeting the difficulty. Extra rooms were fitted up, which served as havens of refuge where the disgruntled babies could be effectually soothed, a clever arrangement, which, however, prevented the other persons concerned from witnessing the performance. Accordingly maids were secured, so that now the mother simply buys her ticket and deposits the baby in a room. Here, with a goodly amount of the lacteal fluid and a gew gaw or two, the mischievous youngsters enjoy life in their own peculiar way while the mothers "take in" the vaudeville in uninterrupted bliss.

In some places where the number is very large special rooms have been fitted up in a building adjoining the theater. Here the infant is deposited and the mother receives a check: "No. 101,

deposited at 2 p. m., to be called for at 5:30." This method, as Mr. Welman, of Proctor's theater in New York, admits, "is more systematic and prevents all property dispute. But yet," he remarked, "it has some drawbacks. For, you know, a mother always wants to be near her child and likes to see it often. Now, in our theater she can go back and ask: 'Ooze little baby is oo?' as often as she pleases and still return in time to see the next living picture, whereas in the other way she may miss a whole act."—Detroit Free Press.

Darning Cotton Book.

The ever ready materials for "mending the holes and preserving the soles" encased in a compact form as here illustrated, will be found particularly convenient to carry about in the satchel or for the big brother that is out of home reach. The dimensions of the book are six and a quarter by six inches.



FOR THOSE WHO DARN.

For the cover cut two pieces of cardboard the above size, cover them neatly with gray linen, fasten two bands of golden brown ribbon across the inside of one and the outside of the other half, and over-hand the remaining space together on the back. Attach a couple of leaves of light brown flannel on the inside of the book to hold the needles. Slip the darning cotton underneath the bands on the opposite side. Decorate the cover with fanciful gilt lettering and circles and tie it together.—Orange Judd Farmer.

Cucumber Salad in Winter.

Cucumber lovers will find a way to enjoy them fresh out of season by following this German recipe to preserve them: Take as many medium-sized cucumbers as you wish and pare and slice them as if for salad and then salt them well and after leaving them in the salt a few hours the salt and liquid are squeezed out of them with a clean white cloth. Then take a quantity of finely-cut onions and peppercorn and mix them well into the cucumber. Put the whole into a large stone jar and pour over it the best white wine vinegar, and on top two inches of good salad oil; cover the top of the jar with a bladder. During the whole winter the cucumber remains fresh and good. When necessary add a little more vinegar, and always leave two inches of oil at the top. Cucumber salad made from the vegetable thus prepared is said to be almost equal to its use in the fresh state.

A Defense of Hot Bread.

So much has been said and written about the unhealthiness of eating hot bread that its lovers will be comforted to know that the doctors do not all talk the same way about it. Dr. Troitzki, writing to a Russian medical journal, says that after careful examination he has found that new and uncut bread contains no nitro-organisms, as the heat necessary to cook the bread has destroyed them all. After bread has been cut and allowed to stand around for awhile it quickly collects bacteria, as it is an excellent medium for them to thrive on. Wheat bread, he thinks, gathers bacteria faster than rye, as the latter has more acidity. Now all people who love hot bread can eat it with the comfortable feeling that, while it may not be quite as digestible as stale bread, it is free from the bacteria, which are making the world so uncomfortable in these days. A little dyspepsia is better than the cholera.



FORTY MILLION CAKES YEARLY.

THE PROCTER & GAMBLE CO., CINCINNATI.

Equal Suffrage Questions.

"So much has already been said, and that so well said, that very little more remains for me to say." Years ago I used to listen to the semi-annual address of a dear old college dignitary who generally prefaced his remarks with the above words. They seem to me, now, to pretty well apply also to the woman suffrage discussion. Before clamoring for a parallel position to "man" I would like to ask a few questions (sort of count the cost) as to how far this exact equality shall extend. If I am privileged to vote shall I also be expected to work on the roads, pay extra taxes, sit on the jury, chop the wood, husk the corn, etc.; in fact, I want to know how far the "equality" is to extend. Personally I have many "rights" now that I cannot use or avail myself of for want of time, and I fancy my little month-old daughter will give me more. How one wishes for more opportunities of helping the troubled ones, more chances of doing church work, more time to read, both of present events and past occurrences. But in order to keep up with the children's education and requirements, how much has to be left, to say nothing of "shirking" the housework.

ENGLISHWOMAN.
Paxico, Kas., October 24, 1894.

When women shall be able to vote at all elections as a man may do now, she will be subject to every legal burden the same as man would have to assume. If she were deprived of the privilege of "sitting on a jury" she would not have equal suffrage. As to road working, she must bear her share of the burden if she is so unfortunate as to possess property which could be taxed for that purpose. The old-time law requiring all voters to work on the road a certain number of days or pay an equivalent in money has been repealed in Kansas, thus relieving a large number from a burden who never paid any other kind of tax. As to "chopping wood, husking corn, etc.," the women then would have to assist in all respects the same as William K. Vanderbilt, the Astors, or Henry Dinkleschmidt, who owns the little five-acre lot in the southwest corner of Kansas. If, like Vanderbilt or Astor, the women have some one else to do this for them, they will easily escape the burden. If, like Mr. Dinkleschmidt, who has to work for his own living, they may have to do it for themselves.

Yes, they might be obliged to undergo enforced enlistment in times of war, just the same as men. More than likely, however, this would never worry them a great deal. Our present laws permit men to vote who are past forty-five years of age, but also exempt them from military duty. There is no good reason why women should not be exempted, by law, in like manner, after they become voters, and at 21 years of age.

As to the general effect "equal suffrage" may produce, there is a sure way of finding out definitely, and that is, "wait and see."

Antiquated Farming in Kentucky.

EDITOR KANSAS FARMER:—I have just finished picking my corn to-day, and happening to pick up a Western paper and seeing mention made of the various improved agricultural implements in use there, I thought, perhaps, a short description of the methods of agriculture in vogue here might be interesting to your readers, by reason of the contrast.

Here we have a different stage of civilization from that to which you are accustomed in the West—the civilization of 200 years ago. Shut off by almost impassable mountain barriers from communication with other sections, the people here are a little world unto themselves, and preserve, almost intact, the manners and customs of their ancestors of two centuries ago. Here "the sound of grinding is heard in the land," for the people still use hand-mills in preparing their corn for use, and as the labor is generally performed by the "women folks," who sing at their task, the scenes and incidents of Bible times are strongly recalled to mind.

The agricultural implements in use are of the most primitive sort, and generally consist of the hoe and a bull-tongue plow. A bare sufficiency of the necessaries of life satisfies the desire of the average mountaineer, and he asks for and will work for no more. A day or two spent in planting in the spring, a few days work with the plow and hoes—the latter generally wielded by the women folks—in the summer, and a few days more in autumn, spent in gather-

ing the matured crop, is all the work performed by the average mountain man. Nowhere within the limits of the temperate zone, I venture to say, can a spot be found where the bare necessities of life can be more easily obtained.

Here the women have the hardest lot. Theirs it is not only to assist in the out-door work and do the common housework, but they must also card, spin and weave the flax and wool necessary to clothe the family and supply the various wants of the housewife. The men hunt, fish and loaf; the women work. Owing to mild winters it is unnecessary to lay up much provender for stock, and indeed but little stock is kept. A few sheep, which live on the range the year round, and hogs, which are also allowed to "rustle" for their keep and to fatten on mast, being their main dependence.

How a Westerner would stare at the preparation made by a mountain man to butcher a hog. He shoulders his Winchester, whistles for his dog and starts for the nearest hillside, where the oak or chestnut grow, and is almost sure of finding fat hogs in abundance in the right season of the year. He shoots one, sticks it, and then skins it—no scalding for him—then hoists it upon his shoulders and wends his way homeward.

This reign of Arcadian simplicity, however, has about had its day. The Kentucky Union railroad is about to break down the wall of exclusion built by nature and push its way here. It is after the almost inexhaustible supply of coal with which the entire country is underlaid, and the immense forests of oak, poplar, etc., with which it is covered. With its advent old things will pass away and new ones take their place. The mountain man will have some money, for he generally owns immense boundaries of land. As yet this region is thinly populated, but it will soon fill up.

Hindman, Ky. COYIN MCGEE.

Recipes.

Seeing your offer in last week's FARMER for good recipes, I send the following, which I hope will be acceptable:

Corn Bread.—Two cups corn meal, one cup flour, half cup sugar, two cups milk (sweet), butter or lard the size of an egg, half teaspoon of salt and one teaspoonful of soda dissolved in one-fourth cup of hot water. Bake in a quick oven.

Baked Apples.—Select the number of sound apples desired; with a small-bladed knife or corer remove the cores and place the apples in a kettle of boiling water; boil until the skins crack, then take out and place in a dripping-pan with a little hot water. Fill the place where the core was with butter and sugar and a dust of cinnamon and allspice; then bake in a slow oven till done. This is much better than the old way of baking apples. B. K.

Solomon, Kas., October 19, 1894.

Mr. Chas. Bennett, Optician, 713 Kansas Ave., Topeka:

DEAR SIR:—I desire to tell you how pleased I am with the glasses you fitted for me. A prominent oculist in the eastern part of the State attempted it, but without success, and I received little benefit until I visited you. Since then my headache is entirely relieved. I can also see clearly and with perfect ease, and take much pleasure in recommending you to all who may need the services of a first-class optician, as I regard you to be. Respectfully yours,

MARY R. LEE,
Room 13, A., T. & S. F. Building.

A line of through palace buffet sleeping cars between Chicago and New York city has been placed at the disposal of the traveling public and runs over the Nickel Plate road and Delaware, Lackawanna & Western railroad.

"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. LOCKWOOD, Kansas City, Mo.

The Young Folks.

When I Was a Girl.

Aunt Clarissa wears her snow-white hair
In the fashion of long ago,
With three little curls each side her face,
Arranged in a spiral row.
But she looks askance at my frizzy bangs
When their fluffy kinks unfurl,
And mutters with disapproving air,
"La! me, when I was a girl!"

She gowns herself in a skimpy frock
That is fearfully short in the waist,
But opens her eyes at my high-cut sleeves,
And thinks them devoid of taste.
It fairly gives me a fit of the blues,
And sets my head in a whirl,
When she arches her brows and says with scorn,
"La! me, when I was a girl!"

You'd think the girls, in Aunt Clarissa's time,
Were angels from top to toe,
To hear how grimly she lectures me
When I chance to mention a beau,
And if I just venture to speak of love,
Her lips take an upward curl,
And she says, in a prim and prudish way,
"La! me, when I was a girl!"

But I found her reading a letter once;
It was tied with a ribbon blue;
The writing was dim and blurred by time,
But I know 'twas a *billet-doux*.
For I saw a flush on her faded cheek,
Half hid by the spiral curl,
And I heard her murmur, in accents low,
"La! me, when I was a girl!"
—Good Housekeeping.

SIRRAH WAS FAITHFUL.

You often hear a great deal about dogs destroying sheep, and some persons would like to kill all the dogs in the country. That is very foolish, because the dog is really the sheep's best friend, and if, instead of hating dogs, each farmer would get a good one to look after his flock they would be quite safe. He would not let any strange, bad, fierce dog hurt the sheep that were in his charge.

Such a brave and faithful animal was Sirrah. He lived in Scotland a good many years ago, a collie of the best and purest breed, and as hand-



THE SHEEP DOG.

some as he was intelligent. He had a beautiful white frill and the clearest, most honest and affectionate hazel eyes.

Now, Sirrah held a post of great responsibility. He had to take care of the lambs. Not of a few lambs, a dozen or so, but of seven hundred. Just think how hard it would be to count seven hundred lambs! But that was what he had to do. He was expected to keep watch of all and not to lose one.

One very dark, stormy night the sheep managed to break out of the fold. No one knew what started them, but they followed each other, as sheep will, being very stupid animals, and before midnight the fold was empty and the sheep and lambs were scattered in three separate parties over the wide range of hills. The shepherd called Sirrah, who was sleeping after working hard all day, and started off with his men. It was pitch dark and they could not see the dog, but he knew his duty and went off to look for his lambs, while the men hunted for the sheep.

They found them after awhile and then sought for Sirrah and his charge, but no trace of them was to be seen. All night they wandered over the hills, till finally they turned towards home in despair, having made up their minds that the lambs were all lost and that they should never find them alive, for there were many steep precipices and places where they might all have fallen off and been killed.

It was now getting light. The shepherd and his men were going slowly and sadly along, when as they passed a deep hollow among the hills they heard a bark. They looked down and saw some lambs and the dog in front looking round for help, but still at his post. Then they did not feel tired any more, but ran down the side of

the hill, and Sirrah was glad enough to see them. He came a little way to meet his master and the look of care and responsibility left his face.

Not one lamb of the whole seven hundred was missing, but how they had ever been got there, how the dog, all alone, in the black darkness, had ever managed to get them all together and then to bring them safely down the sides of the deep hollow, no one could ever tell.

Sirrah had been all alone from midnight till sunrise. He had no one to help him, and yet all the shepherds of the hills could not have done the same in so short a time.—N. Y. World.

Healthful Exercise.

An eminent physician has said that if the following three simple movements are executed vigorously every day for twenty minutes the effect in a year's time will be very apparent. Before going down to breakfast, open wide the window and for ten minutes go through the following exercises: First, stand perfectly straight, with heels together, and inflate the lungs with the pure morning air, drawing in the breath while fifteen is being counted and expelling in the same way. Repeat this eight or ten times. Then bring the arms forward at full length with the palms together and then throw them vigorously back, trying to touch the backs. At first it will seem impossible, but after a few days' practice it can be done.

Do this from twenty-five to fifty times, then raise the arms above the head to the utmost, with the palms outward, and then lean slowly forward, keeping the knees perfectly straight, and try to touch the ground with the fingers. This, too, requires practice at first, but can be done after awhile. Then raise the arms gradually to the first position and repeat the movement twenty-five to fifty times. At night go through the same movements. This simple little exercise, if persisted in, will prove to be of incalculable benefit and restore young people to perfect health when medicine has failed to bring about the desired result.

A Little American Girl.

Last summer a little girl, ten years old, living in Indiana, was walking across one of the railroad tracks near a trestle across a deep ravine when she discovered that it was on fire. She knew that it was almost time for a train to come. She knew that the train would drop into the ravine if allowed to cross it. She took off her red flannel petticoat and went running up the track waving her danger-signal. She stopped the train at the curve and saved it. There were a number of French people on the train going to the world's fair. These people were so grateful to this brave little girl that they, on returning to France, petitioned that the little girl should receive a medal of honor. President Carnot ordered the medal struck off, and it was sent to the little girl. This medal is given in France only to those who have done marked acts of bravery. It is the medal which France gives her soldiers.—Outlook.

The Joke Was on the Captain.

The following story is told of an English military officer in the Chinese army. Being visited by some friends, the captain, to show the high state of discipline of his command, sounded a night alarm. The troops turned out with commendable alacrity and fell into their places, ready for emergencies, but when they discovered the cause of this sudden interruption to their dreams they laughed heartily, thinking it a good joke. The worthy captain was elated at his success, and determined to repeat the experiment. Soon after he invited another party of friends to witness the performance, and the alarm was sounded at dead of night, but not a soldier appeared, while roars of laughter from the tents showed that the joke was on the men's side this time.

While thorough in action, Ayer's Pills strengthen rather than stimulate the excretory organs. Leading physicians recommend them because they are free from calomel or other injurious drugs, being composed entirely of the best vegetable aperients.

Highest of all in Leavening Power.—Latest U. S. Gov't Report.

Royal Baking Powder

ABSOLUTELY PURE

Perpetual Whirligig.

Cut a thin section, about one-eighth of an inch thick, from the top of a vial cork, pass two fine needles through this at right angles to each other so as to form arms projecting from the circumference of the cork disk. To each end of these needles affix small rectangular pieces of cork of the same thickness as the disk, and to the left-hand edge of each of these apply a thin coating of sealing wax.

Cut small slices of camphor, slightly smaller in area than the waxed edge of each of the cork floats, and having softened the wax over a candle, affix the camphor slices. When the whole is completed it should be about the size and proportion shown in Fig. 2.

Now procure a perfectly clean basin or saucer and nearly fill it with pure water. As everything depends on entire freedom from grease, the basin

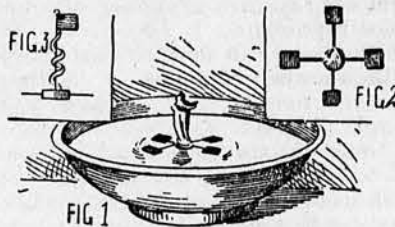


FIG. 1
PERPETUAL WHIRLIGIG.

must be carefully cleaned and the water above suspicion. For the same reason it is necessary to see that the cork-and-needle whirligig is free from even as much grease as may come from the hands, which should be very carefully washed; or, better yet, the whirligig may be immersed in ether for a moment just before placing it on the surface of the water.

When the whirligig is placed in position it will at once prove its right to its name by beginning to revolve at a rapid rate, and this it will keep up for from three to five days according to its size and the amount of camphor used.

To add to the novelty of the affair, thin paper waltzers appropriately colored, see Fig. 1, may be cut out and fastened on the cork disk; or a needle standard may be decorated with a paper spiral, see Fig. 3, and made to give an oddly screw-like motion to the whole apparatus. In fact, an ingenious boy or girl will find the perpetual whirligig a basis for many novel inventions.—Youth's Companion.

The Oat Had Sense.

In the mountainous districts of Pennsylvania two wrens had built their nests under the eaves of an old farmhouse, and there they reared a small, interesting family. Among the members of the farmer's household was a white cat, and when the wrens became so tame that they used to hop around the piazza in search of crumbs the cat would lie in wait for them, and several times came within a bit of catching the adult birds. When the farmer noticed this he punished the cat, and she finally learned that it was dangerous to fool with the wrens.

When the baby wrens grew larger one of them fell out of the nest one day, and, being too weak to run and unable to fly, lay helpless on the grass. The cat saw the accident and ran rapidly to seize the bird, but, seeming to remember the lesson taught her, when she reached the helpless little thing she only touched it daintily with her paw and then lay down and watched it.

Presently there came a black and yellow garden snake toward the fluttering birdling. The cat was dozing and was awakened by the fluttering of the bird. Instantly she rose and struck at the reptile with her paw. This was an enemy the snake did not appreciate, but it was hungry, and, darting for-

ward, attempted to seize the bird under the very shelter of the cat's head. Like a flash the cat seized the snake just back of the head and killed it with one bite. When the farmer happened along in the afternoon he found the cat crouching in the grass sheltering the bird, and ten feet away was the dead snake. This made it clear that the cat had carried the bird away from the snake. The young adventurer was soon restored to his anxious parents.—Harper's Young People.

Wonderful Philadelphia Girl.

Though only five and a half years old, Edna Grace Hain, of Philadelphia, with her tiny fingers can bring thirty different airs out of a piano. She has learned them all in the last month. If a key, invisible to her, be struck she can immediately sound the corresponding key of another piano. Let the entire keyboard be covered with cloth—not too heavy to muffle the sound—and she still makes good music by striking keys which she cannot see. Her first stroke on the unseen ivory may be a mistake, but in a moment she hits the right key, and then goes ahead without making an error. She cannot read music or words, but thoroughly understands the scale, quickly distinguishes half-notes and keeps good time. If she hears a strange air two or three times she can make her piano reproduce it.

All we have ever said of the curative virtues of Ayer's Sarsaparilla sinks into insignificance when compared with the statements made by those who have been benefited by the use of this wonderful blood-purifier. Many of the cures seem indeed almost incredible.

Best equipped, most thorough business training school in the Southwest. Wichita Commercial College, Y. M. C. A. building.

Beginning Sunday, October 7, a palace buffet sleeping car service will be inaugurated between Chicago and New York city via the Nickel Plate road and Delaware, Lackawanna & Western railroad. This in no way changes the former through car arrangement.

Home Visitors' Excursions.

On October 17 and November 14 the Nickel Plate road will place on sale at their ticket offices in Chicago and suburban stations, home visitors' excursion tickets to all points in Ohio and Indiana at one fare for the round trip where rate is not less than \$3. Tickets limited to return within twenty days from date of issue. Good going only on October 17 and November 14. City ticket office, 199 Clark street, Chicago. Depot, Clark and Twelfth streets.

When the Kicks Come In

Is not the title of a new song, nor does it refer to the backward action of that much-maligned animal, the mule.

It is a phrase used by the inhabitants of Oklahoma to designate the approaching opening of the fruitful acres of the Kickapoo Indian reservation.

If you wish to find out all about the Kickapoo lands, as well as those belonging to the Wichita and Comanche tribes—where cotton, wheat and fruits will pay handsomely—ask G. T. Nicholson, G. P. A., Santa Fe Route, Topeka, Kas., for a free copy of Oklahoma folder.

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KANSAS FARMER.

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Special reading notices, 25 cents per line.
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Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.
To insure prompt publication of an advertisement, send the cash with the order, however monthly or quarterly payments may be arranged by parties who are well known to the publishers or when acceptable references are given.
All advertising intended for the current week should reach this office not later than Monday.
Every advertiser will receive a copy of the paper free during the publication of the advertisement.
Address all orders
KANSAS FARMER CO., Topeka, Kas.

The beet sugar works at Chino, Cal., report that after a run of seventy-eight days they have brought the season's campaign to a close, having worked 43,773 tons of beets and made 9,086,538 pounds of sugar.

After five years of labor, with the help of 247 editors, and the enormous expenditure of nearly one million dollars, the Funk & Wagnalls Company announce that the last page of the second, the concluding, volume of the new Standard Dictionary, is now in type. This volume will be ready for delivery in November. This office has for several months had the benefits of the first volume of this great dictionary and has been impatient for the appearance of the other volume. It is difficult to conceive of a better or more satisfactory dictionary than the new Standard Dictionary.

In another place in this paper appears an exhibit of the world's production of wheat for six years, from the *Corn Trade News*, of Liverpool, England. It is a noticeable fact that in all recent estimates by commercial authorities the official estimates of crops in the United States are discredited and a very much higher figure is assigned. Thus the wheat crop of the United States for 1894 is placed at 520,000,000 bushels, which is 20,000,000 above the more liberal estimates of the American statisticians and at least 40,000,000 above those of the more conservative. But the tables presented are well worth studying and should be preserved by every producer, who should be a student of the markets.

Of all the sorghum sugar factories started with so much flourish a few years ago, but one—at Medicine Lodge—is in operation this season. In another place are given some figures showing that after paying \$1.50 per ton for the cane the actual cost of producing sugar is less than 2½ cents per pound. This allows \$2.10 as the cost of working up a ton of cane. In view of the great value of the cane seed it is certain that the farmer who can contract and sell his cane at \$1 per ton is far better off than he who has to depend upon wheat and corn. It is also reasonably safe to assume that the cost of manufacturing can readily be reduced to \$2 per ton, so that the total cost of producing the 150 pounds of sugar now found to be obtainable from each ton is readily reducible to \$3, making the actual cost of the sugar only 2 cents per pound. This fully justifies the prediction made about twelve years ago by Dr. Peter Collier, then Chemist to the United States Department of Agriculture, now Director of the New York Experiment Station, at Geneva, N. Y., who brought much ridicule upon himself by his estimates that sugar could be produced from sorghum at 2 cents per pound.

KEEP OUT OF THEIR NET.

The interest taken at the country's financial center in the details of production and consumption is indicated by Henry Clews' Wall street circular of October 27. Taken in its entirety, this circular manifests as great a feeling of discouragement, as to probable gains from speculation in corporation shares, as any that has been issued. Evidently the heroic efforts, heretofore made, to induce outsiders to invest in the various paper stocks, which have been denominated "properties," have fallen far short of their aim. It is well that people who earn their living by useful effort have learned to beware of the schemes of the schemers to unload these "properties" of their own creation, these papers, representing in many cases little of real value. Many of the fortunes of the wealthy were amassed by creating these paper properties and selling them to the unwary. Some of these "stocks" which were, a few years ago, sold to widows and to people who invested in them their savings for old age, at, say, \$150 per share, are now unsalable at \$5 per share, and are yielding no income, but, instead, are threatened with assessment to pay the debts of the corporations. It is not strange, in view of these facts, that the "ropers in" for Wall street find it impossible to induce outsiders to buy, and that transactions are small. That greater attention than formerly is given to the real value of the stocks offered, to the management and real earning power of properties represented, is now necessary, and that sales can now be made only on the showing of values is manifest from the tone of the circulars sent from Wall street. It is well, however, for those who are not inclined to gamble, to keep clear of the whirlpool of stock speculations and to devote their attention to such enterprises and industries as are not beyond their ability to manage.

The following from Henry Clews should itself serve as a warning:

"The principal event of the week affecting the stock market has been connected with the anthracite coal companies. For some time past, relations between the producers have been steadily working towards a tangle. On the one hand, the depression of business has been checking the demand; on the other, several producers have been exceeding their respective allotments of production. Under these circumstances, stocks have steadily accumulated and buyers have had the advantage over sellers; the natural result of such a situation being a cutting of price, until sales have been made at 70 cents per ton below the 'circular' figures. On Thursday, a meeting of the producers and carriers was held for considering the situation. The meeting showed considerable division of opinion and reached some very singular conclusions. It was determined to abolish all limitations upon production, each company determining its own output, and to advance prices 15 to 20 cents above the present official schedule. Two things Wall street has not yet been able to explain—how, with an existing over-supply, encouragement to increased production should be given; and how, with an increased production and diminished demand, the 'circular' price should be advanced, in the face of sellers being unable to get existing prices and being willing to accept large reductions. The logic of these conclusions excites a good deal of merriment, and the settlement is regarded as only momentary.

"In the consideration of this question, it is impossible to ignore certain existing factors of controlling importance. The position of consumers undoubtedly favors a low price for coal. The reduced earnings of the public at large necessitate a contraction of the use of fuel for domestic purposes; and, if prices are to be maintained, the demand from that quarter must be expected to be correspondingly reduced. The same rule applies to industrial consumption with still greater force. With the great fall in prices for all kinds of manufactured products, there is an unavoidable necessity for a reduction in the cost of motive power, in which coal constitutes the principal

element. The cheapening of power, indeed, is the foremost engineering problem of the day, not only in our factories but still more in every branch of transportation, whether on land or water. Electricity has not only done much already towards solving that problem but, through the remarkable discoveries of Tesla, promises to do far more; that inventor having, it is conceded, laid a basis for the early production of electricity at one-half its present cost. That discovery not only promises cheaper light, but a more economical power than steam, and also a source of heat that may prove cheaper than coal for either domestic or industrial uses. These factors place coal, both anthracite and bituminous, in a position of disadvantage to which it has never hitherto been exposed. While, in a certain sense it must still remain the chief basis of power and will be the chief agent in producing electricity, yet these changes must inevitably largely infringe upon its consumption. Thus, influences are at work which can hardly fail to compel a more or less permanent reduction in the price of anthracite. It is true that there has already been some reduction in its price, the present official quotations being about 17½ per cent. below those of 1892. It would, nevertheless, be a rather bold assumption to say that this decline is sufficient to satisfy these new conditions. Probably, a material further concession in price and some reduction in output will be found necessary; and that will call for economies in working the mines and in carriage and probably some curtailment in wages, for mining and handling. The coal companies have thus to face a rather serious situation, which calls for prudence and conservatism and certainly cannot be helped by reckless competition in either production or prices. Their interests will be best served by continued co-operation, coupled with a proper estimate of the difficulties they have to contend with. It would be wise to meet the necessities of industrial consumers liberally, for in that way alone can it be hoped to keep up the most important part of the demand to the normal standard. Manufacturers have to contend with unprecedentedly low prices, and matters smaller than the cost of fuel suffice, in many cases, to prevent them from keeping their machinery going. This condition in the coal trade indicates the sort of adjustment to reduce values that is required in every branch of our industries, and which has not yet been complied with in many of them.

"This situation in the coal stocks has had a somewhat depressing effect upon the market at large, but not to the extent of materially affecting the stocks of other roads. There is still a firm undertone to the market. The 'bears' fail to produce anything beyond a fractional impression by their raids, and the difficulty in getting stock to cover their sales discourages them. Between the reduction in the volume of floating stock and the large amount held off the market pending financial reconstructions, there is a real and very unusual scarcity of stock, which greatly strengthens the position of holders and gives a steady bullish drift to operations.

"The shipments of gold to Germany have not made much impression. This week the rates of exchange have discouraged further exports; and with the large supply available at London there is the less inducement for Berlin preferring to get the metal from New York.

"The unusual excitement connected with the canvass for elections has a tendency to divert attention from Wall street for the moment; but it can hardly be said to affect the tone of business. Considerable interest is felt in the prospect as to currency legislation; but the state of opinion on the question in Congress and in interior sections is so undeveloped that it is not an influential element on the business of the exchange."

Subscribe now for one year and receive the FARMER free for 1894. One dollar pays for the paper from now until January 1, 1896.

SORGHUM SUGAR AT SMALL COST.

In a carefully written letter to the *Sugar Manufacturer*, W. H. Revis, of Medicine Lodge, gives some interesting and important facts as to the operation of the sorghum sugar mill at that place. Careful observations have been made by Mr. Croxton, the chemist in charge, with a view to ascertaining in a definite manner what percentage of the sugar contained in the cane is actually extracted in the mill. He finds that in the case of the cane delivered during one week the leaves and trash show the proportion of 24.58 per cent. to the gross weight when delivered; that of the residue 11 per cent. must be deducted from the weight of the juice for fibre; and that again 4 per cent. of the balance consists of non-sugar.

These calculations show that there was a total of 1,289 pounds of juice containing the amount of sucrose indicated by the polariscope in each ton of cane on the average. This sucrose averaged 13.19 per cent. for the week in question. There would, therefore, be 169 pounds of sugar in each ton of cane. Of this 130 pounds were actually extracted in the first boiling, leaving a balance of thirty-nine pounds of sugar per ton in the molasses, a large proportion of which can be extracted as seconds.

These results, arrived at after very careful calculations, applying to a full week's operations, establish several facts of importance. Some of them are as follows: That (1) the polariscope test in the case of sorghum is reliable (a fact on which considerable doubt has been thrown); (2) that as a sugar plant sorghum takes high rank, especially when it is considered how comparatively short a period has been given to its cultivation; and (3) that the diffusion process as carried on in this mill is effective in the extraction of a satisfactory proportion of sugar.

The cost to the mill of this 13.19 per cent. sucrose cane is \$1.50 per ton; the cost of working may be taken at \$2.10 per ton, as this was the calculation made after the season of 1892. If, therefore, we take 150 pounds as the total amount of sugar procurable after first and second boiling from a ton of such cane, we arrive at the fact that the manufacture of the sugar costs 2.4 cents per pound. Setting aside for a moment the consideration of the present depressed state of the sugar market, we may fairly assume that the manufacture of sugar from sorghum cane is a success. As to how much of a financial success it will prove depends largely on the profitable utilization of the molasses and other residue.

An interesting table of the range of prices for wheat on the Chicago market has been compiled by the commission firm, H. M. Green & Co., Rialto building, Chicago. These are the prices for the contract grade of wheat. The red wheat of Kansas ranges a little higher. Following is the compilation for thirty-one years:

Yrs	Lowest in	Range.	Highest in
1868	August.....	\$0 80 @ \$1 15	October.
1864	March.....	1 07 @ 1 26	June.
1865	December...	85 @ 1 55	January.
1866	February.....	78 @ 2 03	November.
1867	August.....	1 55 @ 2 85	May.
1868	November...	1 04½ @ 2 20	July.
1869	December....	76½ @ 2 47	August.
1870	April.....	73½ @ 3 11½	July.
1871	August.....	90½ @ 1 39	Feb. Apr. Sep.
1872	November...	1 01 @ 1 61	August.
1873	September...	89 @ 1 46	July.
1874	October.....	81½ @ 1 28	April.
1875	February....	83½ @ 1 30½	August.
1876	July.....	83 @ 1 26½	December.
1877	August.....	1 01½ @ 1 70½	May.
1878	October....	77 @ 1 14	April.
1879	January.....	81½ @ 1 33½	December.
1880	August.....	86½ @ 1 32	January.
1881	January.....	85½ @ 1 43½	October.
1882	December....	91½ @ 1 40	April—May.
1883	October....	90 @ 1 31½	June.
1884	December....	69½ @ 96	February.
1885	March.....	73½ @ 91¾	April.
1886	October....	68½ @ 84¾	January.
1887	August.....	66½ @ 94¾	June.
1888	April.....	71½ @ 2 00	September.
1889	June.....	75½ @ 1 03¾	February.
1890	February....	74½ @ 1 08½	August.
1891	July.....	85 @ 1 16	April.
1892	October....	69½ @ 91¾	February.
1893	July.....	54½ @ 90	May.
1894	July.....	50½ @ 65½	April.

NOTE.—1894 only up to September 15.

We want our readers to secure for us thousands of new subscribers for the KANSAS FARMER and we will pay well for such work. If you will get up a list, write this office for liberal terms.

GOVERNMENT CROP REPORT FOR OCTOBER.

CORN.

The October returns make the general condition of corn 64.2 against 63.4 for last month. The postponement of frosts has been favorable to the ripening of areas ordinarily late in maturing. Although there have been some changes in condition, taking the States individually, the general condition has not materially differed from that of September, the variation, however, being for the better, even though slight.

The October condition in the year 1881 was 66 per cent., the lowest up to that date shown by any official record; the yield per acre of that year was 18.6 bushels. The indicated yield per acre for this year from a condition of 64.2 is 18.4 bushels per acre. The acreage of 1881 was 64,262,000. The acreage of this year which has been reserved for harvest, after an estimated abandonment, except for fodder, etc., of 15,500,000 has been deducted, is 60,500,000. The indicated crop will, therefore, be about 82,000 bushels less than that of 1881, and the lowest production since 1874.

In most of the Southern States the condition of corn has fallen since the last report, but in some of the Western States there have been slight gains in condition.

The averages of condition in the large and surplus corn-growing States are as follows: Tennessee, 88; Kentucky, 77; Ohio, 71; Michigan, 56; Indiana, 78; Illinois, 78; Wisconsin, 54; Minnesota, 59; Iowa, 47; Missouri, 70; Kansas, 45; Nebraska, 14; South Dakota, 44; North Dakota, 80; California, 94.

WHEAT.

The returns of yield per acre of wheat indicate a production of about 13.1 bushels, being 1.8 bushels greater than last October's preliminary estimate.

The rate of yield by States is as follows: New York, 14.8 bushels; Pennsylvania, 15.3; Ohio, 19.4; Michigan, 15.8; Indiana, 19.4; Illinois, 18.3; Wisconsin, 16.5; Minnesota, 12.9; Iowa, 14.8; Missouri, 15.6; Kansas, 10.4; Nebraska, 6.5; South Dakota, 3.4; North Dakota, 11.2; Washington, 16.6; Oregon, 17.7; California, 11.3.

The indicated quality for the country is 93.5. The quality in some of the principal wheat States is for New York, 93; Pennsylvania, 95; Kentucky, 95; Ohio, 100; Michigan, 92; Indiana, 98; Illinois, 97; Wisconsin, 90; Minnesota, 94; Iowa, 96; Missouri, 97; Kansas, 83; Nebraska, 78; South Dakota, 86; North Dakota, 93; Washington, 99; Oregon, 94; California, 95.

The yield of wheat as reported for this month in terms of bushels exceeds the estimates based upon the apparent condition of the crop at harvest by about one bushel per acre. In some of the States the yield is greater than that of the phenomenal crop year 1891. This is notably the case in the States of Ohio, Indiana, Illinois and Wisconsin. In that year Ohio shows a yield 17.1 bushels per acre against a yield of 19.4 in 1894; Indiana, 17.7 against 19.4; Illinois, 17.8 against 18.3, and Wisconsin, 13.5 against 16.5 for the year 1894. As compared with 1893 the indicated yield of 1894 is greater in nearly all of the large wheat-producing States. In 1893 New York yielded 14.5 bushels per acre, while the indicated yield of the report for October, 1894, is 14.8 bushels. Pennsylvania shows 15.3 this year against 14 last year; Texas, 15.1 against 10.5; Kentucky, 12.7 against 11.3; Ohio, 19.4 against 15; Michigan, 15.8 against 13; Indiana, 19.4 against 14.2; Illinois, 18.3 against 11.4; Wisconsin, 16.5 against 13.3; Minnesota, 12.9 against 9.1; Iowa, 14.8 against 11.5; Missouri, 15.6 against 9.5; Kansas 10.4 against 8.4; North Dakota, 11.2 against 9.5. In the States of North Carolina, South Carolina and Georgia, the indicated yield for 1894 is less than the yield of 1893. The yield of California is nearly the same as last year, being 11.3 against 11.2, while Washington and Oregon have fallen off—the yield of the former being 16.6 this year against 20.5 in 1893, and that of Oregon 17.7 against 19.4.

OATS.

The average yield of oats according to the correspondents' returns on yield

per acre, was 24.5 bushels, against 23.5 in 1893 and 24.3 in 1892. Condition was 87 on the 1st of June, 77.7 on the 1st of July, 76.5 on the 1st of August, and 77.8 when harvested, including those parts of the crop that were harvested early.

The yields per acre range from 7.6 bushels in South Dakota to 40.1 in Montana. In the States of largest acreage, the average yields, stated in bushels per acre, were as follows: Iowa, 25.6; Illinois, 36.1; Minnesota, 28.1; Wisconsin, 32.9; Nebraska, 12.6; Kansas, 17.9; New York, 22.1; Pennsylvania, 22.3; Indiana, 32.3, and Missouri, 23.3.

The returns as to quality show a general average of 90.5, the range being from 70 in Nebraska to 104 in Wyoming. For the States of largest acreage the returns as to quality were as follows: Iowa, 98; Illinois, 95; Minnesota, 94; Wisconsin, 92; Nebraska, 70; Kansas, 73; New York, 85; Pennsylvania, 88; Indiana, 96, and Missouri, 92. These are all the States whose area, according to the preliminary estimate, exceeded 1,000,000 acres.

POTATOES.

The present season has not been at all favorable to the potato crop. Starting with a July condition of 92.3, which is within a point or two of the average of July returns for a series of years, the figures fell to 74 on August 1, and thence to 62.4 on September 1. The loss between July and August was the greatest ever experienced by this product in a single month since the beginning of the present system of crop reporting, and the August condition was the lowest ever recorded for that month. The September condition, also, was the lowest reported for that month in ten years, and within less than 1 per cent. of the lowest October condition ever recorded. Everything pointed to another broken record for the present month, but the returns now consolidated show a favorable turn in affairs, and a condition of 64.3, two points above that of September. The October condition has been lower twice before, in 1887 and 1890, when it stood at 61.5 and 61.7, respectively.

The conditions in eleven States, producing more than 5,000,000 bushels each in 1893, are as follows: New York, 75; Pennsylvania, 59; Michigan, 51; Wisconsin, 42; Ohio, 69; Iowa, 43; Illinois, 51; Minnesota, 52; Missouri, 66; Maine, 96; Indiana, 64. Last year the October conditions in these States ranged from 50 in Indiana to 88 in Maine, but three of the number being below the 60 mark.

The present return is the last of the season relating to condition, and the percentage should closely foreshadow the yield per acre, which forms the subject of the November report.

SWEET POTATOES.

The condition of sweet potatoes is generally high in States of important production, and very general gains, due to timely rainfall, are noted. Percentages are, of course, less satisfactory in the Western than in the Southern and Pacific States.

The next annual meeting of the State Board of Agriculture convenes in Topeka on the second Wednesday of January (9th) and will continue through the two days following. The program is to be one of much practical interest to Kansas farmers and to producers generally. Hon. S. M. Shepard, of Indiana, author of "The Hog in America," and the World's Fair judge of the Poland-Chinas, will be present to discuss "Swine and Swine-Breeding;" Hon. J. B. Dinsmore, ex-President of the Nebraska Board of Agriculture and extensively interested in creameries, will talk of "Essentials of Success With Creameries in Nebraska and Kansas;" Col. Chas. F. Mills, ex-Secretary of the Illinois Board of Agriculture, is expected to have an address on "Horses and Horse-Breeding;" Senator Edwin Taylor, of Wyandotte county, known as the "potato king," will discuss "Raising, Harvesting and Marketing Potatoes in Kansas." Prof. Whitney, who was present last winter with such a valuable discussion of waters and soils, is invited again, and Gen. Roy Stone, who is at the head of the Bureau of Road Inquiry in the United States Department of Agricul-

THE WORLD'S WHEAT CROP FOR SIX YEARS.

The Liverpool *Corn Trade News* furnishes the following compilation, showing the wheat crops of all the chief countries of the world for six years, in bushels and the totals in quarters and hectolitres. The crops of former years are stated to be from the latest revised reports of the various foreign agricultural authorities. It is also stated that in one or two cases of obvious errors in the official returns, commercial estimates are given in preference:

	1894.	1893.	1892.	1891.	1890.	1889.
EUROPE—						
France.....	278,000,000	301,600,000	301,600,000	213,000,000	328,000,000	307,000,000
Russia.....	238,000,000	305,000,000	233,600,000	168,200,000	205,600,000	179,000,000
Poland.....	18,000,000	20,000,000	28,400,000	28,400,000	12,000,000	12,000,000
Caucasia.....	60,000,000	64,000,000	68,800,000	80,000,000	56,000,000	65,000,000
Hungary.....	140,000,000	150,000,000	141,600,000	139,200,000	143,200,000	94,000,000
Austria.....	46,000,000	42,000,000	46,400,000	39,200,000	49,600,000	38,000,000
Croatia and Solavonia.....	6,000,000	6,800,000	6,400,000	6,400,000	6,400,000	6,000,000
Italy.....	117,000,000	131,000,000	112,000,000	137,600,000	127,700,000	103,000,000
Germany.....	100,000,000	112,000,000	116,400,000	85,800,000	103,200,000	87,000,000
Spain.....	95,000,000	86,000,000	74,000,000	71,000,000	72,000,000	76,000,000
Portugal.....	10,000,000	6,000,000	6,400,000	7,000,000	6,500,000	9,000,000
Roumania.....	40,000,000	53,000,000	58,400,000	60,000,000	72,000,000	45,000,000
Rulgaria.....	25,000,000	29,000,000	29,000,000	30,000,000	20,000,000	25,000,000
Eastern Roumelia.....	2,000,000	3,000,000	4,800,000	4,700,000	4,700,000	3,000,000
Servia.....	9,000,000	10,000,000	9,000,000	8,000,000	7,000,000	5,000,000
Herzegovina and Bosnia.....	2,000,000	2,000,000	2,000,000	1,800,000	1,500,000	1,000,000
Turkey in Europe.....	25,000,000	24,000,000	25,000,000	30,000,000	25,000,000	40,000,000
Greece.....	5,000,000	7,000,000	7,500,000	8,000,000	6,900,000	5,000,000
United Kingdom.....	60,000,000	51,000,000	60,900,000	75,200,000	76,000,000	78,000,000
Belgium.....	20,000,000	17,000,000	20,000,000	16,000,000	19,200,000	19,000,000
Holland.....	4,500,000	5,000,000	6,200,000	4,600,000	6,000,000	6,000,000
Switzerland.....	5,000,000	2,400,000	4,000,000	1,800,000	2,200,000	2,000,000
Sweden.....	3,700,000	3,900,000	3,200,000	3,800,000	3,700,000	4,000,000
Denmark.....	4,800,000	4,800,000	4,800,000	4,500,000	4,800,000	5,000,000
Norway.....	400,000	400,000	300,000	300,000	400,000	400,000
Cyprus, Malta, etc.....	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Total Europe.....	1,420,200,000	1,420,300,000	1,367,700,000	1,205,700,000	1,361,600,000	1,216,000,000
AMERICA—						
United States.....	520,000,000	475,000,000	580,000,000	685,000,000	490,000,000	491,000,000
Canada.....	50,000,000	43,000,000	54,000,000	55,300,000	44,000,000	31,000,000
Mexico.....	15,000,000	12,000,000	10,000,000	12,000,000	12,000,000	10,000,000
Argentina.....	10,000,000	90,000,000	55,400,000	36,800,000	33,800,000	16,000,000
Chili.....	17,000,000	13,000,000	17,600,000	19,400,000	14,400,000	19,000,000
Uruguay.....	7,000,000	5,500,000	3,200,000	3,600,000	4,100,000	2,000,000
Total America.....	709,000,000	688,500,000	720,800,000	812,100,000	537,300,000	569,000,000
ASIA—						
India.....	230,000,000	240,000,000	206,400,000	285,200,000	225,600,000	236,000,000
Turkey in Asia.....	43,000,000	45,000,000	40,000,000	48,000,000	44,000,000	37,000,000
Persia.....	22,000,000	19,000,000	17,500,000	22,500,000	22,000,000	22,000,000
Japan.....	15,000,000	15,000,000	15,000,000	15,000,000	14,000,000	15,000,000
Total Asia.....	310,000,000	319,000,000	278,900,000	368,700,000	305,600,000	310,000,000
AFRICA—						
Algeria.....	18,000,000	14,400,000	18,500,000	25,600,000	28,400,000	22,000,000
Tunis.....	9,000,000	7,000,000	8,000,000	8,000,000	7,000,000	4,000,000
Egypt.....	10,000,000	10,000,000	8,000,000	11,000,000	10,000,000	8,000,000
The Cape.....	5,000,000	4,800,000	4,000,000	3,500,000	4,000,000	8,000,000
Total Africa.....	42,000,000	36,200,000	38,500,000	47,100,000	49,400,000	37,000,000
AUSTRALASIA—						
Victoria.....	14,000,000	15,300,000	13,600,000	12,800,000	11,200,000	11,500,000
South Australia.....	10,000,000	9,200,000	9,400,000	9,400,000	14,500,000	14,600,000
New Zealand.....	8,000,000	6,400,000	10,200,000	5,700,000	8,500,000	8,500,000
New South Wales.....	7,000,000	6,800,000	5,000,000	3,800,000	3,600,000	6,600,000
Tasmania.....	1,000,000	800,000	1,000,000	1,000,000	800,000	700,000
Queensland.....	500,000	460,000	200,000	200,000	200,000	100,000
Western Australia.....	400,000	400,000	300,000	300,000	300,000	500,000
Total Australasia.....	40,900,000	39,360,000	36,700,000	33,300,000	39,100,000	42,500,000
Grand total, bushels.....	2,522,100,000	2,453,300,000	2,442,600,000	2,461,900,000	2,293,000,000	2,174,500,000
" quarters.....	315,000,000	307,000,000	305,000,000	307,000,000	286,000,000	271,000,000
" hectolitres.....	913,000,000	892,000,000	888,000,000	895,000,000	828,000,000	789,500,000

N. B.—The crops are those harvested prior to September 1 in each year, excepting in the cases of the Australasian, Argentine, Uruguayan and Chilian, which are those of the December and February following.

The American and Indian official returns of the past two or three years have been discarded as obviously erroneous.

ture, has accepted an invitation to speak on "Roads and Road-Making;" John H. Churchill, of Dodge City, is preparing a symposium on "Fish Production by Kansas Farmers," and the much-neglected sheep will be treated by probably the most successful wool-growers in Kansas. These are but a few of the many topics to be treated at a meeting which it should pay every one to attend who can. Further, the ladies can consider themselves invited, and for their especial benefit, and for the benefit of the men also, Mrs. Kedzie, of the Agricultural college, will discuss matters directly pertaining to the home and domestic life.

It is suggestive of the estimate placed upon the September Quarterly of the Kansas Department of Agriculture in other States, that before it had been issued a week the authorities of Cornell university, the Massachusetts Agricultural college and the Oklahoma Agricultural college had asked for supplies of it to place in the hands of their classes. President Henry E. Alvord, of the Oklahoma Agricultural college, at once began negotiations for having 8,000 copies reproduced for distribution among farmers throughout his Territory, to whom he says "it would save thousands upon thousands of dollars." Prof. W. A. Henry, of the Wisconsin Agricultural college, says: "This report is one of unusual value and a great credit all around. It is the most complete summary of the wheat-feeding question extant and a most timely production." Prof. Voorhees, Director of the New Jersey Experiment Station, says "it will be of great use to me in my work." Prof. E. D. Porter, Dean of the Missouri Agricultural college,

writes also that "this symposium on feeding wheat has taken the wind out of my sails, as I have been working up the same subject, but yours is so much better than anything I can hope for I shall make use of your work." The editor of the Nebraska *Cultivator*, evidently made weary by some things observed in his own State, writes in one of his editorials like this: "Some State boards of agriculture that have devoted themselves to running an annual turnip show should wake up long enough to see what the agricultural department of Kansas is doing. Brains and a printing press are not a bad combination even as adjuncts of a board of agriculture." The *Breeder's Gazette* says editorially, "this report" (on Feeding Wheat to Farm Animals) "is one of the greatest of the many valuable services the Kansas department has rendered American agriculture, and should be in the hands of every one seeking light on this very vital question."

Quaint But Full of Meaning.

"A crick," "a stitch," "a twist," "a jam" "a halt," "a raw spot," "a blue spot," "dead aches," etc., are queer names well known among the ills of flesh, bone, muscle, nerves and joints, and are better understood as being so easily and surely cured by St. Jacobs Oil. The names are pointers to what it has done and always will do readily. None too readily, either, for many of the infirmities indicated by these queer nomenclatures, if neglected, often lead to very serious results, which the great remedy for pain stands ready to resist and prevent. None the less useful is it to have on hand always ready, for the sudden pain is very often the fatal one.

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.

SHAWNEE HORTICULTURISTS.

The October meeting of Shawnee County Horticultural Society was held last Thursday at the residence of W. L. Bates, the florist, in Auburndale. The spacious greenhouses were thrown open to the inspection of the society; the practical production of flowers for the market was inspected and explained, and the fragrance and beauty, by the production and sale of which Mr. Bates prospers, contributed no small share to the enjoyment of the occasion. This was, as are most of the gatherings of this society, a basket meeting. It was originally intended to open the baskets and to have the addresses on the lawn, but the strong wind was so actively transferring real estate from the west to the east that it became necessary to spread several large tables inside, and to seek the porch and the leeward side of the house for the speaking. That the wives of Shawnee county fruit-growers know how to prepare the bounties of the farm so as to be good for the palate, and satisfying to that disturber of peace, the stomach, was amply proven to the eye when the tables were surrounded, and was demonstrated to a certainty by the resulting good nature and jollity of the crowd.

The display of fruit and the naming of unknown varieties are, at this season, interesting, and call out the fun-loving spirit of the old orchardists who delight in puzzling the committee with new varieties and with sports and abnormally developed specimens. The exhibit of apples was very fine, consisting of over twenty varieties. At 2 o'clock President VanOrsdal called the meeting to order and the record of the last meeting was read by the Secretary, Mrs. K. J. McCracken.

The leading address of the day was a paper by Ed. Buckman on "Fruits of Ohio as I Saw Them." In his inimitable way Mr. Buckman related his observations of some of the old orchards, not forgetting to mention the lack of proper attention, on account of which many an orchard fails to do its best. The FARMER hopes that at no distant day it will be able to present this valuable paper in full.

President B. F. VanOrsdal discussed "Marketing Fruits." He classified markets as those near home and those far away. In many respects the home market is most desirable. Several points in the management of the home market were suggested. It is important that the fruit-seller know his home market, must be acquainted with his customers. To hold them he should be regular in making his rounds, so that they expect him. To suit the home market it is necessary to have the fruit in good condition, and good liberal measure must be given. Good fruit and good measure will hold customers. The market is never over-supplied with the highest grade of fruit. Where the home market is depended upon, location near a large city is desirable. The home market, properly handled, will be satisfactory to the small grower. The large grower will probably prefer a wholesale market to which he can ship large quantities. It is necessary in such a market to observe the same care as to quality of fruit as in the home market. Customers should be educated as to some matters. They should learn that it is not possible to have every season as large and perfect fruit as is furnished during the best seasons. This market, here at Topeka, has been over-supplied, and while neglecting it, growers must now reach out for more distant markets. This last is more easily done if we produce large quantities of fruit. If Shawnee county were a solid orchard buyers from the great markets would be more numerous and we should more easily sell our apples. The fruit-seller must learn his business, must know about the different varieties of fruits, their keeping and other qualities, and must also know about the various markets. He must, in fact, learn to be a salesman.

Discussing President VanOrsdal's address, Mr. Jackson remarked that, this

season, most of the buyers in eastern Kansas had come from Kentucky.

The next address was on "Experience with Grapes," by A. L. Entsminger. He stated that the grape harvest of 1894 was earlier than ever before. Picked his first ripe grapes July 26 and sent them to Iowa. Had grapes on the Topeka market July 28. Sold grapes every day for two months at 5 cents per pound. His first picking was Early Daisy, three days earlier than any other. Champion came next and Moore's Early third. Concord came in several days later. Of his latest grapes, Duchess, Catawba, Agawam and others of Rogers' hybrids, have fruit on the vines now. Thinks there is no doubt about being able to have a three months' grape season. Earliness depends much upon local conditions, as character of soil, protection, etc. Deep, sandy, river bottom land is best. Marketing was not very satisfactory. Everybody wanted 2-cent grapes. This is cheaper than it will pay to raise them, pay for careful picking, baskets and proper handling. New York grape-growers, whose fruit is now selling in Topeka at 15 cents per basket, are losing money. They can't produce grapes as cheaply as we can. If they don't spray their fruit is ruined. They have to spray often and it costs money. But spraying with Bordeaux mixture makes grapes keep. New York grapes are poisoned with Bordeaux mixture. Has had some experience in preserving grapes with Bordeaux. Kept them until February. Those large vineyards in New York are losing money and must go down.

Mr. Jackson inquired as to the Chandler seedling. Answer: It is a little more meaty than the Pocklington and is a better keeper. It is hardy.

Ed. Buckman inquired which is the best late grape for family use. Answer: My wife says the Agawam. I say the Catawba can't be beat.

Answering an inquiry as to the yield of grapes, Mr. Entsminger said that this year his vines produced only a little over one and one-half tons per acre. Has had four tons. Vines in good bearing at six years old should yield an average of twelve pounds each.

Thos. Buckman said that his vines this year yielded over twenty pounds per vine, and his land is not sandy bottom land, either. It is rather gumbo. He fertilizes heavily, especially with old bones, wood ashes, etc. Remarked that when prices go down consumption is enormously increased.

Mr. Entsminger thought 2 cents per pound for grapes about in accord with current prices for wheat and other farm products.

Thos. Buckman raised the question as to the effect of this year's drought on next year's fruit crop. Philip Lux thought it would not have much effect. Mr. — thought this season's growth of orchards favorable for a full crop next season. President VanOrsdal observed that when a tree is late coming into bearing it is not infrequently attributed to too much wood growth and it is often thought that a check of this too free growth brings the tree into bearing. This season's growth has not been excessive and perhaps the check may be followed by a full crop next season. Thos. Buckman observed that old trees have not made much wood growth this season. In 1882 there was a drought and 1883 was a good fruit year. Other dry years have been followed by good crops of fruit. His heaviest fruit crop was in 1887. Thinks there is a fair probability of fruit crop for next year.

The President appointed Philip Lux a special committee to arrange for Lincoln Post hall, in Topeka, for the Thanksgiving meeting, remarking that it will be like this, a basket meeting.

The committee on program for next meeting reported the following: "What Should We Be Thankful For?" Rev. F. S. McCabe, Topeka. "Storing and Care of Winter Fruit," A. M. Coleman, Menoken. "Home Literature," Mrs. K. J. McCracken, Vidette. "The Cherry," A. B. Smith. "Floriculture," W. L. Bates, Topeka. "The Orchard for the Small Farmer, and How to Care for It," C. J. Spreng.

Adjourned to meet on Thanksgiving day at Lincoln Post hall.

REMEMBER there are hundreds of brands of White Lead (so called) on the market that are not White Lead, composed largely of Barytes and other materials. But the number of brands of genuine

Strictly Pure White Lead

is limited. The following brands are standard "Old Dutch" process, and just as good as they were when you or your father were boys:

"Southern," "Red Seal," "Collier."

If you want colored paint, tint any of the above strictly pure leads with National Lead Co.'s Pure White Lead Tinting Colors, a pound of color to 25 pounds of lead. The best merchants sell them, the best painters use them.

A good many thousand dollars have been saved property-owners by having our book on painting and color-card. Send us a postal card and get both free.

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NATIONAL LEAD CO.

Fall and Winter Work for the Repression of Insect Ravages.

In the fall, when the fruits of the field are harvested, the gardener and the fruit-grower are apt to cease opposing their insect foes and are usually too ready to under-estimate the importance of a ceaseless warfare on these diminutive destroyers. During the growing season, when our crops are fruiting and in immediate danger of destruction by the hordes of enemies that swarm about them, we are diligent in our efforts to protect them, but after the harvest is over we are apt to pay no more attention to the matter until the new year. This should not be the case, for our best means of repression of some insects lie in fall and winter work.

Especially is the above true in regard to the apple leaf-crumpler (*Mineola indiginella*). During the growing season, when the trees are in full leaf, this insect is scarcely noticeable, but in the fall, when the other leaves drop, those occupied by the larvae of the moth will remain hanging to the naked boughs and are then easily gathered. The characteristic horn in which this larva is found will serve for its identification. When gathered, these leaves should not be burned, for if such be the manner of disposal, not only your enemies, the crumpler, will be destroyed, but you will at the same time cremate various parasites. These parasites, living at the expense of the crumpler, winter with it, and if the gathered leaves be burned they perish with the host. By a slight study of the habits of the leaf-crumpler we find that if in the spring it does not find green leaves near by for its sustenance the larva dies; therefore, if the leaves gathered in the winter be put in a box and placed in an isolated field the worms perish in the spring, while the parasites, being winged insects, fly away on their useful mission of destruction. In the case of this insect especially is winter work decidedly more effective than summer work, for though there are a number of spraying solutions which will do something toward their repression, they are practically proof against such modes of destruction. When collecting the crumpled leaves infested by the above insect, one can at the same time do considerable effective work in the way of preventing future insect depredations by collecting the cases of the bag worm—*Thyridoptery tephemeraformis*—the severed twigs of the twig-girdler, and twig borer—*Oncideres cingulatus* and *Amphicerus bicaudatus*—the bored twigs of the flat and round-headed apple tree borers—*Chrysobolus ferromato* and *Saperda bivittata*—and the large cocoons of the cecropia moth—*Platysamia cecropia*.

The cocoons of the cecropia moth are very conspicuous and should all be destroyed, for a single larva of this insect is capable of completely defoliating a young tree in one night. The twigs girdled by the twig-girdler will usually be found on the ground, but the holes of the various borers will require searching for in the trees. The cases of the bag worm will be found scattered promiscuously over the fields, hanging onto the trees and fences.

In localities where they occur some good may be done at this season of the year by detaching colonies of the oyster shell louse—*Mytilaspis pomocum*—from

the trunks and large branches of the trees.

The thrifty farmer or fruit-grower will keep his grounds free from litter and trash of all kinds, for these are but shelters for the hibernation of such insect pests as the squash bug—*Anasa tristis*—the harlequin cabbage bug—*Murgantia hesteronica*—and several others that might be mentioned. Keep your fence corners clear of accumulated trash and you will enjoy comparative immunity from these pests.

Another mode of procedure that should be recommended with an eye to insect repression is fall plowing. If the ground be turned over in the fall or winter, many immature insects will be exposed to the elements and so destroyed. Among the various insects that may be reduced in numbers by this form of treatment, I would mention the grasshopper—*Acrididae* and *Locustidae*—the May beetles—*Lachnosterna* Sps.—and all of the cut worm family—*Noctuidae*.

If one expects to enjoy even a partial immunity from the hordes of insect pests that are continually besetting him on all sides, he must be unrelenting in his efforts to meet their attacks and be forever on the lookout for new methods of diminishing their numbers. —A. N. Cavdell, of Oklahoma Experiment Station, in *Smith's Fruit Farmer*.

How's This!

We offer One Hundred Dollars Reward to any case of Catarrh that cannot be cured by Hall's Catarrh Cure.

F. J. CHENEY & CO., Props., Toledo, O. We, the undersigned, have known F. J. Cheney for the last fifteen years, and believe him perfectly honorable in all business transactions and financially able to carry out any obligations made by their firm.

WEST & TRUAX, Wholesale Druggists, Toledo, O. WALKING, KINNAN & MARVIN, Wholesale Druggists, Toledo, O.

Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system. Price, 75 cents per bottle. Sold by all Druggists. Testimonials free.

The Nickel Plate road now operates a through sleeping car service to New York city via West Shore road and after October 7 a daily buffet sleeping car service will be inaugurated via Delaware, Lackawanna & Western railroad.

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The vast fertile valleys of the two Indian reservations in northeastern Utah, soon to be open to settlers comprise about 3,500,000 acres of the finest agricultural and grazing lands. The direct line to Uintah and Uncompahgre reservations is by the Union Pacific system via Echo and Park City. E. L. LOMAX, G. P. & T. A., U. P. system, Omaha, Neb.

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California

is told in a beautifully illustrated book, entitled "To California and Back." Ask G. T. Nicholson, G. P. A., Santa Fe Route, Topeka, Kas., for a copy. It is free.

Personally conducted weekly parties leave Chicago every Saturday evening, and Kansas City every Sunday noon, for Pacific Coast, via Santa Fe Route. Special agents and porters in attendance. Pullman tourist sleepers are used, furnished with all conveniences for comfortable traveling. Second-class tickets honored.

You have been planning that California trip for several years. Why not go now, and take advantage of cheap rates? Santa Fe Route is positively the only line with Pullman tourist and palace sleepers, Chicago and Kansas City to San Francisco and Los Angeles, daily without change.

In the Dairy.

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

KANSAS STATE DAIRY ASSOCIATION.

The eighth annual meeting of the Kansas State Dairy Association will be held in Representative hall, Topeka, on Wednesday, Thursday and Friday, November 21, 22 and 23, 1894. A strong delegation from every local and county society is expected and most cordially invited to be present, as well as similar organizations from other States, and all persons who are interested in the general welfare of Kansas, and especially its rapidly growing dairy industry. Kansas, as a dairy State, has many superior advantages, as has been proven time and again, and to still further promote our mutual interests we believe that we can best bring this about by coming together at least once a year—the farmer, the private dairyman, the factoryman, the butter-maker, the cheese-maker, the commission man, and last, but not least, the creamery supply man.

Our list of premiums is much larger than it has ever been before, and should encourage every dairy and creamery in the State, since it offers to all an excellent opportunity to establish a world-wide reputation, and no one can afford to fail in competing for the many handsome premiums offered. Honest and fair judges will be appointed by the association to do the scoring, and only the men who are fully competent will be candidates for these places. Reduced rates on all railroads, on the certificate plan, will be secured. The National hotel will be headquarters for all delegates attending this meeting. Special rates have been secured, as follows: \$2 where only one person occupies a room; \$1.50 where two room together. Kansas creamery butter will be furnished at the table. Music during the evening sessions by the famous Modoc club and other noted singers. We anticipate a general good time. Any further information desired will be cheerfully furnished by the Secretary.

Following is the program:

FIRST DAY—WEDNESDAY.

- Opens at 10 o'clock a. m.
- 1. Invocation, Rev. J. M. Sheets.
- 2. Address of welcome, Hon. J. G. Otis.
- 3. Response, C. F. Dexter, of the M. D. T. Co., Chicago, Ill.
- 4. Appointment of committees.
- 5. President's annual address.

AFTERNOON SESSION.

- 6. "Hand Separator," Wm. Sutton, Table Rock, Neb.
- 7. "Raising Calves on Separator Skim-Milk," Elmer Essley, Moundridge, Kas.
- 8. "Test vs. the Pooling System for Buying Milk," L. A. Davis, Gypsum City, Kas.
- 9. "By-Products of the Creamery," G. E. Burham, Minneapolis, Kas.

EVENING SESSION.

- 10. "Silos," A. C. Pierce, Junction City, Kas.
- 11. "Environments of Farm Life," Wm. B. Sutton, Russell, Kas.

SECOND DAY—THURSDAY.

- 12. "Ripening Cream," A. W. Orner, Hesston, Kas.
- 13. "Progress of 'Oleo' Legislation in Kansas," A. E. Jones, Topeka, Kas.
- 14. "Private vs. Co-operative Creameries," J. L. Hoffman, Newton, Kas.
- 15. "Salting and Working Butter," B. F. Engle, Moonlight, Kas.

AFTERNOON SESSION.

- 16. "Kansas, Its Location, Its Possibilities as a Dairy State," J. Dixon Avery, Chicago, Ill.
- 17. "Creamery Management," Ira J. Stradling, Sedgwick, Kas.
- 18. "Have the Low Prices for the Past Season Been Due to the Universal Law of Supply and Demand?" Jno. K. Forney, Abilene, Kas.
- 19. "Alfalfa Clover," Noah G. Hershey, Belle Springs, Kas.
- 20. "Men Who Have Made Dairying a Success," I. D. Graham, Manhattan, Kas.

EVENING SESSION.

- 21. "Creamery Insurance," C. F. Armstrong, Clyde, Kas.
- 22. "Dairying in Denmark," Prof. C. C. Georgeson, Manhattan, Kas.

THIRD DAY—FRIDAY.

- 23. Election of officers.
- 24. Reports of committees.
- 25. Miscellaneous business.
- 26. "Reviving Defunct Creameries," F. B. Fees, Whiting, Kas.
- 27. "Marketing Butter," A. G. Eythe, Enterprise, Kas.
- 28. "Details in Creamery Work," E. C. Lewellen, Newton, Kas.
- 29. "Dairying in Anderson County," Hon. R. T. Stokes, Garnett, Kas.

AFTERNOON SESSION.

- 30. "Pay Day at the Creamery," Martin Zimmerman, Trousdale, Kas.
- 31. "Creamery Refrigeration," A. D. Campbell, Hanover, Kas.
- 32. "Progress of Skimming Stations," Ed. F. Davis, Kansas City, Mo.
- 33. Adjournment.

Prof. Henry, of the Wisconsin dairy school, will be present and deliver an instructive lecture some time during the meeting.

PREMIUMS ON EXHIBITS OF BUTTER.

Association medal for highest score, any process, valued at \$25.

\$100 PRO RATA PREMIUM.

- All creamery butter scoring 95 and over..... \$25
- All creamery butter scoring 90 and less than 95... 15
- All creamery butter scoring 85 and less than 90... 10
- All dairy butter scoring 95 and over..... 5
- All dairy butter scoring 90 and less than 95..... 3
- All dairy butter scoring 85 and less than 90..... 2
- All cheese, any make, scoring 95 and over..... 5
- All cheese, any make, scoring 85 and less than 90... 5

SPECIAL PREMIUMS.

The National Dairyman, of Kansas City, Mo., J. H. Monrad, editor, will give \$10 in gold to the person writing the best paper on "Cream Separator." All persons competing for this special premium must be actually operating some make of separator.

Creamery Package Manufacturing Co., Kansas City, Mo., will give 200 five-hoop, white ash, sixty-pound tubs to the party exhibiting the best sixty-pound tub of separator butter—provided, said butter is packed in their manufacture of tubs—valued at \$50. For the best sixty-pound tub of gathered cream creamery butter will give 100 sixty-pound, five-hoop, white ash, hand-made tubs—provided butter is packed in the Creamery Package Manufacturing Co. tubs—valued at \$25. For the best twenty-five-pound tub of dairy butter, will give 100 twenty-five-pound, white ash, hand-made tubs—provided butter is packed in their tubs—valued at \$20.

Price & Keith, Chicago, Ill., will give \$25 in cash as follows: \$12 to the person exhibiting the best tub of separator creamery butter; \$8 to the person exhibiting the best tub of gathered cream butter; \$5 in gold to the person securing sweepstakes.

P. M. Sharples, The Sharples Co., Council Bluffs, Ia., will give \$20 for the best tub of butter made from the Sharples separators, in any size tub. For the best tub of butter, made from the Sharples belt machines, any size, \$15. Will pay \$10 to the butter-maker that can prove to the association that he is the best looking butter-maker in the State.

Wells, Richardson & Co., Burlington, Vt., solid gold medal, valued at \$125, to the person exhibiting the butter securing sweepstakes, provided such butter is colored with Wells, Richardson & Co.'s color.

C. E. Hill & Co., Kansas City, Mo., will give 100 twenty-five-pound, white ash, hand-made tubs to the party exhibiting the best tub of butter—provided it is packed in their tubs—valued at \$20. Five 224-pound sacks of Genesee salt will be given to the party exhibiting the second best tub of butter, salted with Genesee salt, valued at \$18. To the party securing sweepstakes \$5 in gold will be given.

Francis D. Moulton Co., New York city, will give the creamery scoring the highest, five 224-pound sacks Ashton salt, valued at \$15. To the creamery scoring second highest, three 224-pound sacks Ashton salt, valued at \$9. To the creamery scoring third highest, one 224-pound sack Ashton salt, valued at \$3.

Coyne Bros., Chicago, Ill., will give \$5 in gold to the person exhibiting the most marketable tub of separator creamery butter.

The Standard Oil Co., Kansas City, Mo., to the creamery scoring the highest number of points, will give ten gallons of A separator oil, valued at \$2.80. To the creamery scoring second highest number of points, five gallons of Capital cylinder oil, valued at \$1.90. To the creamery scoring third highest, five gallons of Atlantic Red engine oil, valued at 80 cents.

To the creamery gaining sweepstakes, \$5 in gold.

Nash, Whiton Co., Chicago, Ill., offers to the separator butter scoring highest, using Worcester salt, \$20. To the separator butter scoring next highest, using Worcester salt, \$10. To the gathered cream butter scoring highest, using Worcester salt, \$10. And \$25 additional if butter scoring highest, securing sweepstakes, is salted with Worcester salt.

The Dairy World, Chicago, Ill., to each person exhibiting butter or cheese of any make that scores over 90 points, will give a year's subscription to the World.

All butter and cheese should be expressed, not freighted, and charges prepaid, directed to the Secretary, H. M. Brandt, Representative hall, Topeka, Kas., and shipped so as not to arrive later than November 21.

After the awards have been made the exhibitor can dispose of butter exhibited by him, and in case the exhibitor is not present the Secretary will take the liberty to dispose of same and remit upon receipt of returns.

Kansas creameries, factories and private dairies are eligible to compete for the above prizes as defined.

Creamery butter to be packed in tubs of not less than twenty-five pounds each. Dairy butter in not less than ten-pound tubs. H. M. BRANDT, Moundridge, Kas. Secretary.

If the hair is falling out or turning gray, requiring a stimulant with nourishing and coloring food, Hall's Vegetable Sicilian Hair Renewer is just the specific.

The Poultry Yard

Fancy Breeds.

There are some breeds that are really fancy, for they serve no purpose other than to please those who prefer the beautiful and the ornamental. Some of them are noted for their oddity of shape or peculiar feathering. Such breeds as Silkies, Frizzles, Sultans, etc., are almost worthless to the farmer, and unless he has the time to bestow on them, in order to breed something from them that excels his neighbors' birds in oddity, he should not indulge in them. Fancy breeds are rare, and the term "fancy" is really out of place as applied to pure-bred fowls that are useful. Farmers prefer to keep breeds that pay, and will not patronize the breeds that possess no other merit than oddity.

Some Points About Eggs.

A fresh egg will sink in water. It is not always safe to judge an egg by its appearance. It may be apparently fresh, yet if it absorbs enough air to permit it to float even a little above the bottom of the dish it may not be perfectly fresh. The white of a perfectly fresh egg cannot be beaten to a froth as easily as the white of an egg that is a day or two old, and if the egg is very cold the beating of the white will be accomplished more easily. It is considered an advantage by some when the shell of an egg will peel off if the egg had been hard-boiled. Such eggs are not fresh, as the contents of a fresh egg adhere closely to the shell and must be removed. When held to a strong light a fresh egg is clear, and if shaken in the hand no jarring or motion of the contents must be felt. Hundreds of persons who use eggs daily are unable to judge of their quality, and, indeed, it is difficult to determine the freshness of an egg by any one, but the above may be of use to some who are inexperienced.

Good Layers.

G. J. B. Lewis, of Jeffersonville, Md., writes to the Poultry Keeper an account of a very satisfactory experiment. He says:

"On March 30, 1893, I set fifteen Black Langshan eggs under a hen and secured fourteen fine, lively young chicks, and on the 20th of April, just four weeks and two days later, I set another hen on fifteen eggs from the same stock, and from those I got thirteen chicks. Out of the twenty-seven chicks hatched I raised to maturity twenty-three, two having drowned during a heavy rain storm, and we used three in the family after they had attained the size of two pounds dressed ready for the table. I selected of those twenty-three two cockerels and eleven pullets, which came up to my idea, according to my version of the standard of what a Langshan should be. On the 28th of November they began to lay, and up to April 25, 1894, those eleven pullets had laid 968 eggs, which I think is good, considering so many of them did not begin laying directly, and they did not have any extra attention, only being fed grain, no soft feed at all. I have kept no account since then, but have never, even during the sitting season, failed to get at least one egg a day, and some days even now, when they are beginning to moult, we get as many as six eggs from that yard.

"Then, on March 16, I secured a trio of White Plymouth Rocks and have

raised from them about fifty young ones, besides what the rats have carried off for me, which is not less than a dozen, and four of them weigh five pounds each.

"I have no gapes in my flocks. I feed whole wheat twice a day. I sold nearly all my Langshan eggs early and have only raised sixty-two young Black Langshans. Do you think the Langshan and White Plymouth Rocks are as good as I could get as breeding fowls? I do not mean as crosses, for I do not believe in crosses."

Spring and Winter.

One of the most difficult problems is that of keeping the flock in winter so as to afford all the conditions of spring, for upon this depends whether the hens will lay or not. There is a class of educated and intelligent poultrymen who affirm that the roosting of the hens in the tree-tops is not always an unwise system, and they even go so far as to state that they have known fowls that were left outside to be free from disease, when those that were given the most comfortable quarters were dying of roup. These facts do not convince the progressive farmer that the open air is better than shelter, for if the fowls can, by generations and decades of exposure, become inured to hardship, the same rule applies to the horse, cow, sheep and hog. That it has been the case with horses and gradually degenerated them, may be shown by the Shetland ponies and the wild ponies on the islands along the South Atlantic coast; and it is also a fact that animals that have become capable of withstanding exposure have lost in fecundity and are becoming fewer.

With the domestic fowls the exposed flock produces nothing in winter. Being long accustomed to applying all its energies to simply existing, the production of eggs by the hen that is exposed in winter is not expected. Only in the spring, after the severity of winter has passed, is the hen expected to begin laying. If she then begins to lay and gives a good report of herself until late in the fall, she may prove profitable because her ability to forage lessens her expenses.

It may be considered that one of the causes of disease in pure-bred stock is the procuring of fowls from elsewhere. As farmers who allow their hens to remain outside seldom procure new blood, their flocks are more exempt from roup than those of the poultryman who secures a choice hen wherever he finds her. Roup is contagious, and is more frequently the result of contact than of exposure, yet it will occur in flocks that are unable to endure the hardships of tree-tops in winter. The largest profits have been realized from flocks that have received the most attention and care.—Poultry Keeper.

Home-Seekers' Excursions.

The Baltimore & Ohio Southwestern Railway is now selling excursion tickets for home-seekers to points in Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi and Louisiana at one fare for the round trip. The dates of these excursions are October 2, November 6 and December 4. Tickets will be good for twenty days.

Home-seekers tickets are also being sold to points west and southwest, dates of sale being September 25 and October 9; good returning within twenty days. Liberal stop-over privileges will be granted on all tickets. For rates and further information apply to agents Baltimore & Ohio Southwestern Railway, or address A. C. Goodrich, Western Passenger Agent, P. O. Box 264, Kansas City, Mo.

J. M. CHESBROUGH, General Passenger Agent.

Creamery Package Mn'fg Company,

DEPT. B, KANSAS CITY, MISSOURI

We Carry the Largest Stock in the West of

Engines and Boilers,

from 2 to 75 horse-power.

Feed Cookers,

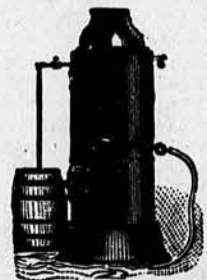
of any desired capacity.

Creamery Supplies, Etc.

of every description.



Upright Engine & Boiler.



"Eureka" Feed Cooker

NEW ILLUSTRATED CATALOGUE and Special quotations Free of charge upon application.

When Writing to this Advertiser, Please say you saw their Advt. in this Paper.

GOSSIP ABOUT STOCK.

Mr. Geo. W. Null, of Odessa, Lafayette county, Missouri, who lately made a very successful clearance sale of Poland-Chinas, topped Mr. Lail's sale last week in buying the noted breeding boar, Lail's Victor 4298 S., for an even \$200.

H. W. Cheney, of North Topeka, announces that he will sell at public auction fifty head of Holstein-Friesian cattle and twenty head of horses and colts, besides lots of pure-bred Poland-China and Chester White hogs, during latter half of November. Look for his sale advertisement in next week's FARMER.

The veteran and successful Poland breeder, Mr. Geo. W. Falk, of Richmond, Mo., bought at the Sparks sale last week a very promising young fellow that was farrowed March 8, 1894, sired by Haine's Black U. S. 32013 O., and out of Miss Black U. S. (29025). George W. is to be congratulated in getting so good an individual for the money, an even \$60.

Among the toppy individuals dispersed at the Sparks-Davis sale at Marshall, Mo., last week, was a young boar farrowed February 28, 1894, and sired by Haine's Black U. S. 32013 O.; dam U. S. Bess (29026), that went to Viyan & Alexander, of Fulton, Mo., for even \$70. His breeding, as well as his individuality, reflects credit on the judgment of his new masters.

J. W. Ingram, of Pleasant Hill, Mo., topped the C. G. Sparks sale last Thursday by bidding an even \$100 for the eight-months boar sired by Square Quality 7918, and out of Admiral Maid (24675). His pedigree shows him to be one of the best bred youngsters in Poland lore, and is just as promising as an individual. Mr. Ingram is a young man and is founding a herd of Polands second to none in the West.

S. R. Jeffrey, Vice President of the Beckham National bank, Graham, Tex., made a raid upon Kansas last week and bought of D. P. Norton, of Council Grove, four two-year-old Short-horn heifers and one bull calf, and of W. H. Riggs, six Short-horn cows and two calves, and of the Agricultural college, at Manhattan, two young bulls, sons of Craven Knight. Mr. Jeffrey evidently knows good stock and where to get it.

Among the foreign breeders at the Missouri swine sales last week were H. G. Sims, of Pawnee City, Neb., Dan W. Evans, of Fairview, Kas., J. A. Worley, of Sabetha, Kas., H. M. Kirkpatrick, of Hoge, Kas., and J. D. Ziller, of Hiawatha, Kas. All bought something to add to their respective herds. Martin Meisenheimer, of Hiawatha, was represented by proxy and carried away a February gilt by Pontiac 10564 S., and out of Admiral Queen (29023). Among them they secured some of the cream of the sales.

C. A. Cannon, of Harrisonville, Cass county, Missouri, was in attendance at the several Missouri swine sales last week, and at the Lail sale bought four head, one young boar of April, 1894, farrow that was sired by Roy Wilkes 25491 A., and out of Daisy Darkness 75798 A. He got him for \$32.50. Of the three gilts the best one was secured for even \$70, and the others for \$42.50 and \$35. His Kansas neighbors may expect something extra next year, as two of the gilts are by Lail's Victor and the other one by Hide Stretcher (Vol. 16).

W. S. Tough & Son, managers of the Kansas City Stock Yards Co.'s horse and mule department, report the horse market at that place as showing the effects of the glut and over-supply in the East and South. Receipts were much smaller and buyers were rather scarce. Prices, in consequence, were some lower. As usual, nice, shapely drivers and Southern mares sold the best, but cheap, pluggy stock hardly brought freight and expenses. Prospects for the coming week are much brighter, as advices show that there will be quite a number of buyers present. Mule market fairly active, several bunches having changed hands at prices fairly good. Feeders will take advantage of this little spurt to close out their bunches and save a winter's feed, but it is hard to tell how long the present activity will continue.

The closing-out sale previously announced by Mr. J. B. Davis, of Fairview, Brown county, took place on his farm last Wednesday. After about 200 buyers and onlookers did ample justice to the regulation sales-day lunch, Col. Eli Zimmerman, of Hiawatha, announced the usual preliminaries and conducted the sale very satisfactorily to all parties concerned. The horse stock sold well considering the demand for them, ranging in price up to \$80. The Holstein cattle, especially the cows, brought fair prices, ranging from \$40 to \$60. The principal feature of the sale was the herd of Duroc-Jersey swine, that was a well-bred lot of individuals and showed that they had been judiciously cared for by their master, Mr. Davis. As is well known the "Red" hog has not been pushed to the front in Kansas, as have the black breeds, consequently their merits are not as well known by the general farmer as are the blacks or whites. About one-fourth of the sixty

offerings were aged ones and young gilts ready for service, while the larger portion of the balance were late spring and summer farrowings. The older individuals ranged from \$12 to \$30 each and the youngsters from \$6 to \$16. The general average was \$10.12. The buyers were principally from northeastern Kansas, while quite a number went to northwest Missouri, and a few of the best ones went to Texas. The sale doubtless had a good effect as an educator, as the individual make-up of the herd was of the square, broad-backed, well down to hock and even top and bottom lined sort, showing that the breeders of the "Red" have made wonderful advancement in conformation and type during the past few years. Mr. Davis made many friends for the Duroc-Jerseys and the results that will grow out of the excellent outcome in the way of cross-breeds in northeastern Kansas will, we predict, materially aid other "Red" breeders in Kansas and result eventually in a higher and better grade of cross-bred porkers for the markets.

J. R. Killough & Sons, of Richmond, Franklin county, Kansas, in a late letter to our live stock field man, write: "We sold two gilts last week to D. M. Cherry, of Paola, who is re-enforcing his herd of Poland-Chinas. Another one went to J. N. Kirkpatrick, of Ottawa, and a young male to Thomas Gowdy & Son, of Garnett. We have several good ones yet which are toppy enough to head herds, and some excellent young gilts, not akin, that would be good company for them. Our prize-winning show animal, Queen Bess, has brought us a litter of eight, by Upright Wilkes, that we think are hard to beat, and the first litters from five of our specially reserved gilts by him are all marked according to the regulation Poland standard. The fall farrowings out of our aged brooders are, to date, as follows: Sealskin, seven; Little Bess, six; Black Bess, seven, and Nugget, seven. Others are due in the near future. We have had a very satisfactory trade and can say that it is largely due to our advertisement in the KANSAS FARMER, strongly backed by the very natural result of sending out first-class, well-bred individuals. Where one goes others are sure to follow."

KANSAS FARMER readers no doubt noticed the advertisement in last week's issue of the great dispersion sale to be held at Hazelhurst farm, near Hoge, Kas., on November 7. This sale is the only one for the season at which Shropshire sheep are offered at auction, and quite probably will be the only one before values shall have advanced again. The Shropshire sheep being valuable both for mutton and wool are the kind for farmers to invest in, as they will prove profitable whether we have "free wool" or the "protected" variety. A chance to buy from one hundred and twenty-five Berkshire and Poland-China hogs is one to be appreciated and improved by every one who desires to introduce the best blood of these strains into his herd. Mr. Kirkpatrick will offer the animals advertised to be sold without reserve, and whoever attends the sale may be assured of fair treatment and a fair chance to get superior animals at reasonable prices. "Royal Champion," one of the finest Berkshires ever owned in the West, besides many elegant "show pigs," will be offered. These all were "born in the purple," to use a royal figure of speech, and are of the most successful modern families. Write H. M. Kirkpatrick, 402 Exchange building, Kansas City Mo., for catalogue, which will give full description of all animals to be sold, together with full directions how to reach Hoge station, where the sale is to be held. The sale will be held on the farm, one mile north of Hoge station, on the Lawrence and Leavenworth branch of the Union Pacific. Parties coming from the north and east via Leavenworth must reach Leavenworth in time to take 8:36 a. m. train on Union Pacific railway for Hoge, twelve miles distant. By wagon road the farm is ten miles south of Leavenworth, twenty miles from Lawrence and same from Kansas City. Guests from a distance who find it convenient to come to the farm on the evening train day before the sale will be cared for at the farm. In conclusion, it might be well to observe that this sale, to be held on November 7, at 10:30 a. m., is one in which every farmer in the West might well feel an interest, owing to the great variety of first-class stock offered. Berkshire and Poland-China swine, Shropshire Down sheep and Sussex cattle.

The Makin Bros., proprietors of Walnut Grove stock farm, near Florence, Marion county, among other things concerning their coming sale, state: "We have catalogued twenty-six head of Hereford cattle, outside of calves, for our sale on November 15, 1894, representing the blood of Lord Wilton, Anxiety, Grove 8d, Fortune and others. We hope to have all the females safe in calf by day of sale, excepting, of course, the cows which will have young calves by their side, and they have not calved long enough ago to have been bred again. We would draw special attention to the following cows, that have proved themselves extra good breeders and are good individuals themselves:

SILVERETTE For CHEAPNESS and QUALITY

WARE... Nothing Surpasses, Nothing Equals.

Silverette is a solid combination of metals, so named by reason of its similarity to silver, produces the same effect.

WILL NOT TARNISH IS NOT PLATED WILL NOT WEAR OUT

LOOKS LIKE SOLID SILVER WEARS AS LONG

SILVERETTE

COSTS ONLY ONE-SIXTH AS MUCH.

Read--Think--Act--

On the following offer. In order to induce you to try our SOLID SILVERETTE WARE we make this generous offer:

6 "Solid Silverette" Tea Spoons, \$1.00 OR THE ENTIRE CASE OF 24 Pieces
6 "Solid Silverette" Table Spoons, 2.00
6 "Solid Silverette" Forks, 2.00
6 Finely Silver Plated Knives, 2.00

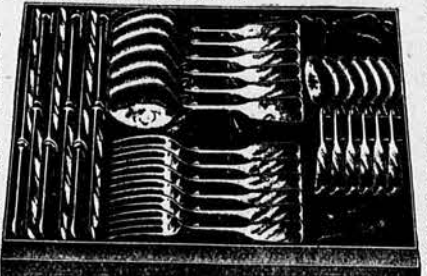
All packed in a neat Plush Lined Case. **\$4.00**

SPECIAL. We will send any one of the sets separately at price named and if you then desire the balance of case, remit us the \$4.00, less amount previously sent, and we will forward case at once.

COSTS YOU NOTHING to see and examine the case. Cut this out and send to us and we will send the case C. O. D. subject to examination. If found perfectly satisfactory pay the agent \$4.00 and express charges, otherwise PAY NOTHING. We refer you by permission to the United States Express Co., and thousands of purchasers of our goods.

IF YOU HAVE ANY DOUBTS as to the genuineness of this advertisement we refer you to the following religious papers who have personally indorsed the goods in their columns, viz: INTERIOR, UNION SIGNAL, BAPTIST UNION, RAM'S HORN, NEWS, CLEVELAND; HERALD AND PRESBYTER, CINCINNATI; PRESBYTERIAN, PHILADELPHIA.

LEONARD MFG. CO., Department 456 20 Adams St., Chicago, Ills.



Rosa Washington 27837, sired by Washington 22615. This cow is due to drop a calf November 10, sired by Vincent 16691. She is a great breeder of bulls, and if her calf should prove to be a bull, somebody will get a dandy. Rachel 30116, sired by Hesiod 11975, with a good bull calf by her side calved October 24, 1894, sired by Vincent 16691. Pearl Rufus 42937, sired by Rufus 6562. She is due to drop a calf by Anxiety Boy 47708, and we look for something good. Rosalind 42938, sired by Juryman 30279. She is due to drop a calf by Anxiety Boy, and if it is as good a calf as her last by the same bull we hope it will get into good hands. We consider this cow one of the best in the sale. She is 4 years old and has made a very promising start in the breeding ranks. Princess 2d 31223, sired by Prince Edward 7001. She is also due to calve after Anxiety Boy. She is a seven-year-old cow and this will make her sixth calf, and so far all have been bulls. Perhaps this time she will change off and give us a heifer. Ellen Wilton 2d 42928, sired by Royal 16th 6459. She is safe in calf to Juryman, but will not calve till February; her dam is Ellen Wilton 12110 by Lord Wilton 4057, who is also the dam of our prize-winning bull Anxiety Boy 47708. Among the younger things worthy of special mention are Stately 10th A. 52703, 2 years old, sired by Good Luck 38282, bred to Vincent 14th 52710, a son of Vincent 16691, out of our noted cow Burlington 2d. This heifer was one of four heifers making up our young herd that we exhibited at the World's Fair and which won second prize in grand sweepstakes at Kansas City fair last fall. Miss Vincent 2d (Vol. XIV.), yearling heifer, sired by Good Luck 38282, dam by Vincent 16691, is the making of a good heifer. Miss Steward (Vol. XIV.), yearling heifer, sired by Juryman 30279, dam by Prince Edward 7001. We have endeavored to offer a good, useful lot of breeding cows and heifers in their every-day dress. Everything we offer are guaranteed to be breeders and over one-half of the offering will have calves by side or will calve very shortly after the sale. Our sires in service, viz., Vincent 16691, Juryman 30279 and Anxiety Boy 47708, are well and favorably known in the show ring, with the exception of Juryman, whose get have held up his end of the string for him, as he has never been exhibited."

Farmers' Beef Clubs.

EDITOR KANSAS FARMER:—I send you a report of our beef clubs, Nos. 1 and 2, for the season just closed. Our two clubs use the same slaughter house and kill two beeves per week during the summer season, commencing the first week in June. This is the third year for No. 1 and the second year for No. 2. The rule of the clubs is not to take any under 3 or over 6 years old. The average of club No. 1 was 441½ pounds, of No. 2, 465½ pounds. The average price of dressed beef was 4 cents per pound; there was distributed over 12,000 pounds of beef among seventy-five families during the twenty weeks, each share of twenty-two and one-half pounds costing only 90 cents per week, which lasted, on an average, about four days in the week. By the time it would come around again we would not get tired of it. Now, you farmers that want to relish a good thing during the summer, organize your beef clubs this winter and be ready next summer to enjoy your fresh beef as Pioneer Beef Clubs Nos. 1 and 2 have done in the past three years.

JOHN W. WILLSON.
Talgo, Kas., October 26, 1894.

Commission Merchant's Views as to Corn.

EDITOR KANSAS FARMER:—The secret of success doubtless resides in the information one possesses, hence in the interest of our customers we have interrogated 17,000 correspondents in the different States in reference to this year's corn crop, the amount of old corn left over from 1893, and the use of wheat as animal food, which we consider the key, not only to our market, but the different markets of the world. We have faithfully compiled the result of this investigation and our weekly market review will enable any one to see and to judge the situation, as it is spread before him from innumerable sections of country and reflects the honest opinions of unnumbered intelligent people. The report is, therefore, worthy careful study, as it may aid in reaching conclusions that will prove profitable.

As this report speaks for itself, deductions are unnecessary, but we conclude:

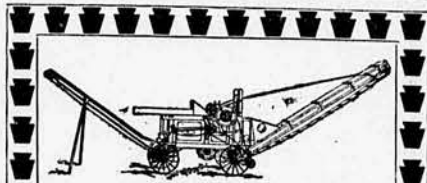
1. The drought has been unprecedented and the corn crop of 1894 will not exceed 1,000,000,000 bushels, against 1,600,000,000 last year.
2. That wheat is being fed to stock generally and to the extent of 25 per cent. at least, and will net feeders about 80 cents per bushel, while the same wheat if sold here would bring only about 53 cents.

II. M. GREENE & Co.
Chicago, Ill., October 27, 1894.

5/A HORSE BLANKETS
ARE THE STRONGEST.
Made in 250 Styles.
For either road or stable use.
All shapes, sizes and qualities.
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(From U. S. Journal of Medicine.)
Prof. W. H. PEEKE, who makes a specialty of Epilepsy, has without doubt treated and cured more cases than any living Physician; his success is astonishing. We have heard of cases of 20 years' standing cured by him. He publishes a valuable work on this disease which he sends with a large bottle of his absolute cure, free to any sufferer who may send their P. O. and Express address. We advise anyone wishing a cure to address, Prof. W. H. PEEKE, F. D., 4 Cedar St., New York.



"Keystone" Corn Husker and Fodder Cutter

(or Shredder)

husks the corn and at the same time crushes and cuts, or shreds the stalks into the best of feed. Made for Engine or Horse Power, for job work or home use.

Get catalogue quick.
KEystone MFG. CO., Sterling, Ill.
(Mention this paper.)

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.

LUMP ON NECK.—I have a mare that has had a hard lump on the top of her neck, under the collar, for about two months; it is getting larger all the time. What can I do for it?

Answer.—The proper treatment will be to remove the lump with a knife, which can be most safely done by a competent veterinarian. It can then be treated as an ordinary wound.

To the Producers, Manufacturers and Merchants of Kansas.

You have long been aware that there has been something wrong with the methods of transporting the products of this great State to the markets of the world.

The products of this State and of the West that have sought foreign markets have too long been forced out of their channels and have been compelled to seek seaboard ports by way of long and expensive railway hauls across the country to the Atlantic coast.

Therefore, the Board of Trade of Wichita inaugurated a movement, the object of which is to bring the South and West into more intimate and closely allied commercial relations.

They issued a call to the States of the South and West to meet in Wichita on the 17th day of April last, in a "South and West Grain and Trade Congress." The call was very freely responded to, especially by the cities on the Gulf and South Atlantic coast.

There will convene in the city of New Orleans, on invitation of her commercial organizations, the second session of this congress, on the 21st, 22d and 23d of November, next.

I appeal to the grain-producers, the shippers and merchants of Kansas to send delegates to this congress. All commercial organizations and all cities should be well represented.

G. W. CLEMENT, President South and West Grain and Trade Congress.

Every farmer in Kansas, and especially the breeders and stock-raisers, should have the greatest live stock journal in the world, the Breeder's Gazette, of Chicago, price \$2 a year.

Horse Owners! Try GOMBAULT'S Caustic Balsam

A Safe Speedy and Positive Cure The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Oatmeal. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish.

THE LAWRENCE-WILLIAMS CO., Cleveland O.

Publishers' Paragraphs.

With the issue of October 27, American Gardening (New York city) completes its first twelve months of existence under the new management. The occasion is celebrated by the adoption of a newly designed and appropriate cover, and also by the introduction of a department with the title of "Woman's Realm."

One of the most useful of the practical books recently published has just appeared from the press of the J. H. Sanders Publishing Co., of Chicago, under the title "American Dairying," by H. B. Gurler.

Biggie Berry Book is number two of the Biggie Farm Library, published by Wilmer Atkinson Co., Philadelphia. It is edited by Judge Jacob Biggie, a practical berry-grower and berry lover, who has arranged in a systematic and attractive way not only what he has to say himself, but also the valuable advice and experience of many leading berry experts of the country who have contributed to its pages.

What a Woman Can Do.

I want my lady friends to know of the new field now open for them. In the past six months we have made a profit of \$907.02 after paying all expenses. All our sales have been made at home, not having canvassed any. My official duties calling me away most of the time, I left the Dish Washer business in my wife's control with the above results.

Get up a Club for KANSAS FARMER.

GEO. W. CAMPBELL. A. B. HUNT. J. W. ADAMS.

Campbell, Hunt & Adams, LIVE Stock Salesmen.

Stock Yards, Kansas City, Mo.

Rooms 31-32—Basement of East Wing

MARKET REPORTS.

Kansas City Live Stock. KANSAS CITY, Oct. 29.—Cattle—Receipts since Saturday, 7,632; calves, 514; shipped Saturday, 4,074; calves, 388. The market was very dull and steady throughout. The following are representative sales:

WESTERN COWS. 40 Phd. 810 \$2.15 52 Phd. 778 1.85 TEXAS AND INDIAN STEERS. 182 871 \$2.05 27 872 2.45 88 963 2.45 10 1,030 2.35

STOCKERS AND FEEDERS. Hogs—Receipts since Saturday, 1,962; shipped Saturday, 1,643. The market was about steady. The top was \$4.60, the same as Saturday, and the bulk of sales were \$4.30 to \$4.40, against \$4.25 to \$4.55.

Receipts of wheat to-day, 73 cars; a year ago, 304 cars. Car lots by sample on track at Kansas City at the close sold as follows: No. 2 hard, 47@48c; No. 3 hard, 46@47c; No. 4 hard, 45@46c; rejected, 45c; No. 2 red, 44 1/2@45 1/2c; No. 3 red, 44@44 1/2c; No. 4 red, 43c; rejected, 42@43c.

Chicago Live Stock. CHICAGO, Oct. 29.—Hogs—Receipts, 35,000; official Saturday, 13,127; shipments Saturday, 38,140; left over, about 5,000; quality not so good; heavy lots scarce, market rather active; good lots steady; other grades lower.

Chicago Grain and Provisions. Oct. 29. Opened High'st Low'st Closing Wh't—Oct. 58 1/2 58 1/2 51 1/2 52 1/2

St. Louis Grain. ST. LOUIS, Oct. 29.—Receipts, wheat, 23,700 bu.; last year, 83,993 bu.; corn, 26,000 bu.; last year, 77,000 bu.; oats, 40,700 bu.; last year, 59,400 bu.; barley, 36,000 bu.;

Kansas City Produce. KANSAS CITY, Oct. 29.—Eggs—Receipts light; the market has a better feeling; strictly fresh, 14 1/2c. Butter—Receipts large; the market is exceedingly dull for common; choice feeling better; extra fancy separator, 20c;

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The SHAWNEE FIRE INSURANCE COMPANY of TOPEKA, KANSAS. Insures business and farm property against Fire, Lightning, Cyclones, Wind Storms and Tornadoes.

CRIB * YOUR * CORN IN ADAM'S PORTABLE CORN CRIB. FOURTH YEAR AND A SUCCESS. THE ONLY CRIB WHICH IS COMPLETE. NO TOOLS NEEDED TO ERECT IT.

stockers and feeders, \$2.00 to \$3.50; calf market slow. Hogs—Receipts, 4,000; market 5 to 10c lower; heavy, \$4.40 to \$4.55; mixed, \$4.00 to \$4.45; light, \$3.25 to \$4.50. Sheep—Receipts, 1,000. Market unchanged.

Chicago Grain and Provisions. Oct. 29. Opened High'st Low'st Closing Wh't—Oct. 58 1/2 58 1/2 51 1/2 52 1/2

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SHIP Your Butter, Eggs, Poultry, Veal, Beans, Potatoes, Hides, Pelts, Wool, Hay, Grain, Green and Dried Fruits, or ANYTHING YOU MAY HAVE TO SHIP. Quick sales at the highest market price and prompt returns made.

1892 TEXAS 1893 \$323,430,000 \$335,060,000 The above figures represent the value of agricultural, horticultural, stock and kindred products of Texas for 1892 and 1893.

Texas Farm and Ranch, DALLAS, TEXAS, twenty pages weekly, now in its thirteenth volume, and acknowledged the peer of any agricultural weekly published, tells how to secure a home in Texas and make it produce wealth, happiness and health.

W. J. ADAM, JOLIET, ILLS. CRIB * YOUR * CORN IN ADAM'S PORTABLE CORN CRIB. FOURTH YEAR AND A SUCCESS.

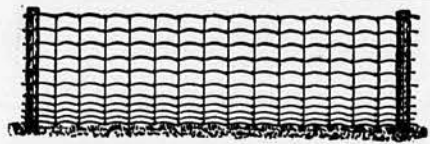
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All kinds of tools. Fortune for the driller by using our Adamantine process; can take a core. Perfected Economical Artesian Pumping Rigs to work by Steam, Air, etc. Let us help you. THE AMERICAN WELL WORKS, Aurora, Ill.; Chicago, Ill.; Dallas, Tex.

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STEEL WEB PICKET LAWN FENCE, Steel Posts, Steel Rails and Steel Gates; Steel Tree, Flower and Tomato Guards; Cabled Field and Hog Fence; Steel Wire Fence Board, etc. Catalogue free.
DeKALB FENCE CO., 23 High St., DeKalb, Ill.



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A friend, who is a successful business man in a large city, said he had watched our advertising for years and approved of our methods. But, said he, "Now, honestly, is there anything in that **Coll Business**, and the elasticity you talk so much about?" As there may be others equally skeptical, we will say here, that we honestly and firmly believe that abundant elasticity is absolutely essential to the efficiency and durability of a wire fence. And, furthermore, the **PAGE** is the only elastic fence on the market.

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Cuts everything in roots and vegetables for stock. Only Root Cutter with a self-feeding device. Send for circulars and price.
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Freeman's ENSILAGE AND FEED CUTTER

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In writing to advertisers please state that you saw their advertisement in the KANSAS FARMER.

PROPOSED AMENDMENT TO THE CONSTITUTION.

Substitute for Senate Joint Resolutions Nos. 1 and 2.

Be it resolved by the Legislature of the State of Kansas: two-thirds of the members elected to each house thereof, concurring therein.

SECTION 1. The following proposition to amend the constitution of the State of Kansas is hereby submitted to the qualified electors of the State for their approval, or rejection, namely: That section one, article five of the constitution of the State of Kansas be amended so that the same shall read as follows: "Section 1. Every person of the age of 21 years and upwards belonging to the following classes, who shall have resided in Kansas six months next preceding any election, and in the township or ward in which she or he offers to vote, at least thirty days next preceding such election shall be deemed a qualified elector. 1st: citizens of the United States. 2d: persons of foreign birth who have declared their intentions to become citizens of the United States conformable to the laws of the United States on the subject of naturalization."

SEC. 2. This proposition shall be submitted to the electors of this State at the general election of the Representatives to the Legislature in the year eighteen hundred and ninety-four, for their approval, or rejection; those voting in favor of this proposition shall have written or printed on the ballots "For the suffrage amendment to the constitution" those voting against the said proposition shall have written or printed on their ballots "Against the suffrage amendment to the constitution;" said ballots shall be received and such vote taken, counted, canvassed and returns made thereof, in the same manner and in all respects as provided for by law; as in the case of the election of Representatives to the Legislature.

SEC. 3. This resolution shall take effect and be in force from and after its publication in the statute book.

I hereby certify that the above resolution originated in the Senate January 16, 1893, and passed that body February 8, 1893.

FEROY DANIELS, President of Senate.
W. L. BROWN, Secretary of Senate.
Passed the House March 1, 1893.
GEO. L. DOUGLASS, Speaker of House.
FRANK L. BROWN, Chief Clerk of House.
Approved March 6, 1893, 3:50 p. m.
L. D. LEWELLING, Governor.

STATE OF KANSAS, OFFICE OF SECRETARY OF STATE, ss.
I, R. S. Osborn, Secretary of State of the State of Kansas, do hereby certify that the foregoing is a true and correct copy of the original enrolled resolution now on file in my office, and that the same took effect by publication in the statute book May 18, 1893.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my official seal.
Done at Topeka, Kansas, this 25th day of July, A. D. 1894.
R. S. OSBORN, Secretary of State.

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THE MISSOURI, KANSAS & TEXAS RAILWAY.

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Great Rock Island System
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T. J. ANDERSON, Assistant Gen'l Ticket and Pass. Agent, TOPEKA.
H. O. GARVEY, City Ticket and Passenger Agent, 601 Kansas Ave., TOPEKA, KAS.

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In San Luis Valley, Colorado, the Garden Spot of the Rocky Mountains. Sixty thousand acres of fine land, all under first-class irrigation canals, with perpetual water rights, for sale cheap, six years time, 6 per cent. interest. Grains, Grasses and Vegetables Grow Here to Perfection. Crops sure; no droughts, no cyclones, no blizzards; abundance of pure artesian water; climate unequalled. We have churches, schools, railroads and good markets. For maps, circulars and full information, address **JAMES A. KELLY & CO., Agents Colorado Valley Land Co., Monte Vista, Colo.**

Bargains for Sale.
I am selling excellent farms of 100 acres in Rooks county, Kansas, and in central Nebraska from \$5 to \$10 an acre, and most of them improved. I have 8,480 acres in Lincoln county, Nebraska. If sold quick \$3 per acre, spot cash, will take it, which is only half its value. One of the best stock and grain farms in Kansas, well and extensively improved, and other great bargains. Don't pay rent any longer, but own your own farm. Write what you want to
B. J. KENDALL, Room 507 Brown Block, Omaha, Neb.

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I own the town site of Halsey, Thomas Co., Neb. It has depot and other railroad improvements located on the 160 acres. It is clear and will be sold for half its value or exchanged for Omaha property or a clear farm. Write for particulars. I have several fine lots near the Methodist college at University Place, Lincoln, Neb., for sale cheap, or will exchange them for farm lands.
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Fine Rolled Gold. Two letters 15c, 3 letters 25c. Address W. A. Dunham, Box 74, Rock, Mass.

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TELLS ALL ABOUT THE WEST. Will be sent free to you and your friends. Address **JOHN SEBASTIAN, Gen. Ticket and Passenger Agent, Chicago, South Street and Pacific Railroad, Chicago, Ill.**

POOR TEA One pound of "Sample Tea" mailed for 40 cts. Free Illustrated Price List of Family Supplies
JACOBY BROS., 206 N.2d St., St. Louis, Mo.

IF A FARMER Your name and address should go in the Farmers' Directory. Seedsmen, publishers and merchants will send sample goods in abundance to you. It is the only DIRECTORY of its kind. Ten cents in silver will put your name in it. Try it, and see the results. Address **G. E. WALSH, P.O. Box 1189, New York City.**

THE KEYSTONE Dehorning Clipper, The most humane, rapid and durable knife made. Fully warranted.
A. C. BROSIUS, COCHRANVILLE, Pennsylvania.

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K. C. HAY PRESS CO., KANSAS CITY, MO.
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MFD' BY COLLINS PLOW CO. QUINCY, ILL.

PERINE'S New Subsoil Plow
Can break and loosen up the soil 24 inches deep, which stores up all the rainfall in the soil just where it is most needed.
Write for Illustrated Catalogue.

Perine's Plow Works, Topeka, Kas.
When writing advertiser mention FARMER.

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Your Horse is always clean, it keeps the Hair smooth and glossy. No surcingle required. No tight girth. No sore backs. No chafing of mane. No rubbing of tail. No horse can wear them under his feet. **NO COME OFF TO THEM.**
We confine our Sales to Jobbers only. But! IF YOUR DEALERS DO NOT KEEP THEM We will, in order to convince you of the superiority of the Burlington "STAY ON" over all imitations and old style blankets, send only one blanket to any address, express paid on receipt of price. (Write for Catalogue and Prices.)
BURLINGTON BLANKET CO., BURLINGTON, WIS.

MISSOURI PACIFIC RAILWAY
THE GREAT Southwest SYSTEM.
Connecting the Commercial Centers and rich farms of **MISSOURI,** The Broad Corn and Wheat Fields and Thriving Towns of **KANSAS,** The Fertile River Valleys and Trade Centers of **NEBRASKA,** The Grand, Picturesque and Enchanting Scenery, and the Famous Mining Districts of **COLORADO,** The Agricultural, Fruit, Mineral and Timber Lands, and Famous Hot Springs of **ARKANSAS,** The Beautiful Rolling Prairies and Woodlands of the **INDIAN TERRITORY,** The Sugar Plantations of **LOUISIANA,** The Cotton and Grain Fields, the Cattle Ranges and Winter Resorts of **TEXAS,** Historical and Scenic **OLD AND NEW MEXICO,** and forms with its Connections the Popular Winter Route to **ARIZONA AND CALIFORNIA.**
For full descriptive and illustrated pamphlets of any of the above States, or Hot Springs, Ark., San Antonio, Texas, and Mexico, address Company's Agents, or **H. C. TOWNSEND, Gen'l Passenger & Ticket Agent, ST. LOUIS, MO.**
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**A Large, Handsome, Noiseless,
Five-Drawer Machine,**

With oak or walnut stand, gothic cover, drop leaf, locks to cover and drawers, nickel-plated rings to drawers, dress-guards to wheel and a device for replacing belts.

A \$65 Machine, Delivered, including a Year's Subscription to the KANSAS FARMER, for

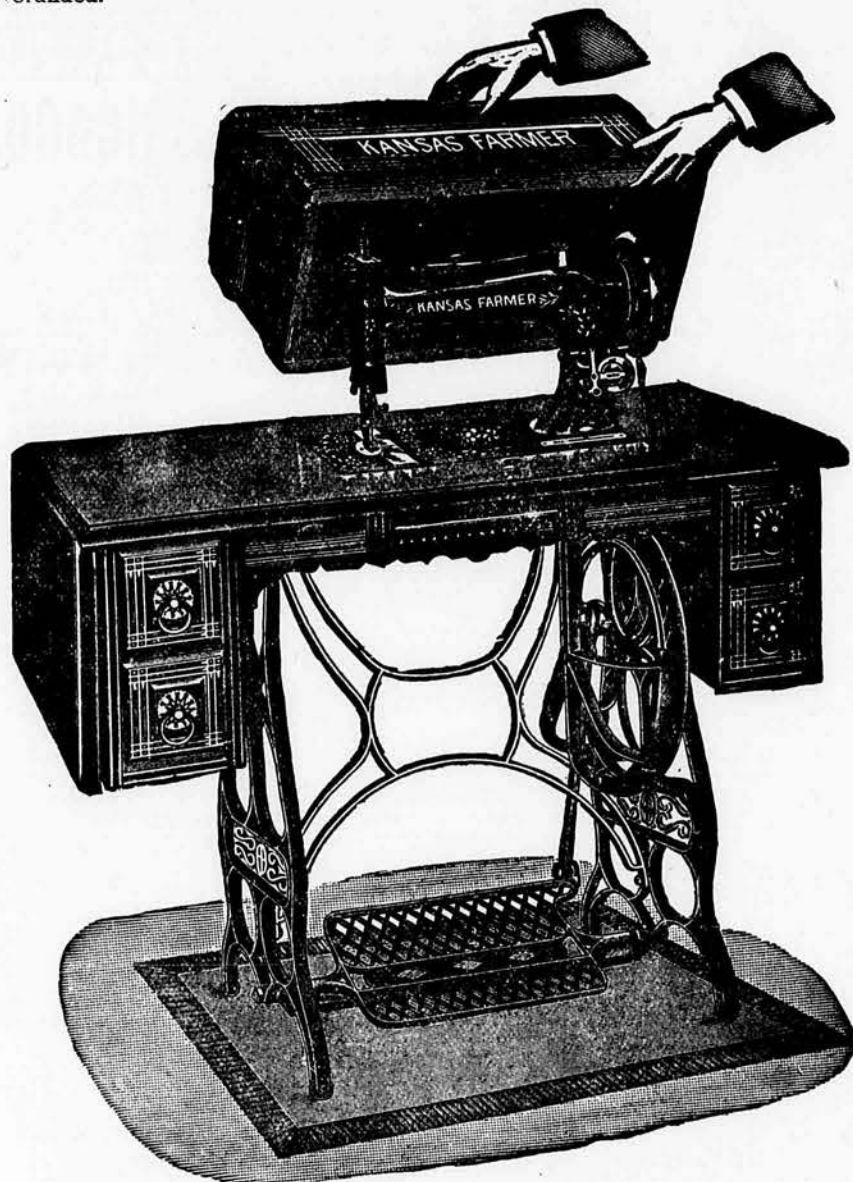
\$20.

LOOK AT THIS!

Arrangements have just been completed by which we are enabled to furnish this latest improved high-arm machine to our readers for the remarkably low price of \$20. This is an unprecedented offer that we are enabled to make only by contracting for them in large quantities for cash. A complete set of attachments in elegant velvet-lined box is furnished with each machine, with all the modern improvements, such as automatic bobbin-winder, self-threading shuttle, self-setting needle, tension-releaser, together with the usual outfit of bobbins, needles, oil can, screwdriver, and illustrated book of instructions.

OUR WARRANTY.

Read our new ten-year guarantee and terms under which you can buy one of these machines without a possible risk. We will warrant every new improved KANSAS FARMER high-arm machine for ten years from date of purchase, and after ten days trial, if perfect and entire satisfaction is not given the machine may be reshipped at our expense and the money paid will be promptly refunded.



You Will Make No Mistake in Buying this Magnificent Sewing Machine.

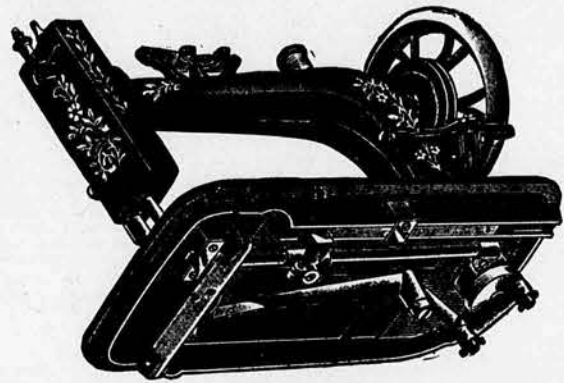
Traveling agents sell no better machines than ours, and half of them not as good, for prices ranging from \$50 to \$70. Agents will use their best arguments to convince you that our machine is not first-class, and at the same time insist upon your paying them a profit of from \$40 to \$50. Remember, it costs more to sell sewing machines through agents than it does to make them. We are at no big expense in selling our machines. No agents; no high-priced salaried officers; no fancy store rents and no loss through credit sales. We contract for these machines in large numbers, they are manufactured by one of the oldest sewing machine companies in the United States. We pay cash and are in this way enabled to furnish them to our readers at bottom wholesale prices, and but a trifle above cost, thus saving them all middlemen's profits. Do not confound the new improved KANSAS FARMER with sewing machines offered at lower prices than named for the new Kansas Farmer, but keep in mind that in the purchase of one of these machines you are buying an article that will compare with any sewing machine in the American market retailing at \$65, and thus discouraging the formation of pools.

SOME OF THE ATTACHMENTS

that go with

Our New Improved Sewing Machine

Money Saved is
Money Earned.

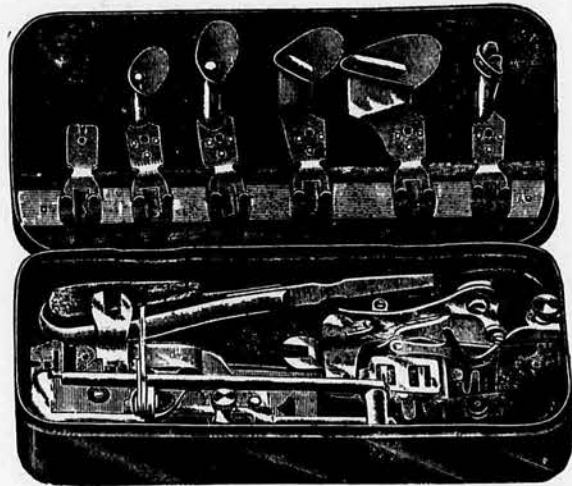


THE DIRECT FEED BAR.

The Cheapest
and the Best.

All wearing parts are case-hardened steel, possessing great durability, and by the turning of a screw all lost motion can be taken up. All parts are fitted so accurately that these machines are absolutely noiseless and as easy running as fine adjustment and best mechanical skill can produce. No expense or time is spared to make them perfect in every respect, as every machine passes a rigid inspection by competent men before leaving the factory.

It Pays to
Buy the Best.

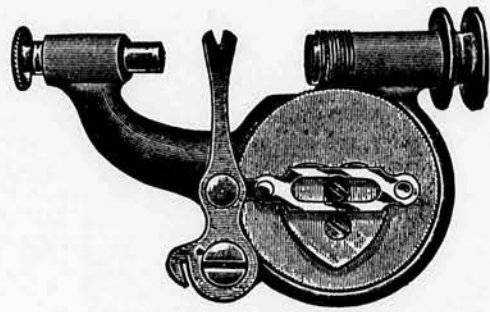


BOX OF SELF-ADJUSTING ATTACHMENTS.

We Break Down
Monopoly Prices.

The above illustration shows extra attachments in a velvet-lined case, sent free with each machine; one tucker, one ruffler with shirring-plate, one hemmer set, four widths, and binder, one braider, foot and slide, one thread-cutter. Each machine is also supplied with the following accessories: One hemmer and faller, one piece, ten needles, six bobbins, one screwdriver, oil can filled with oil, cloth-gauge and thumb-screw, and a book of instructions, which is profusely illustrated and answers the purposes of a competent teacher.

One Machine
Sells Others.



THE AUTOMATIC BOBBIN-WINDER.

\$20 Elys
Our Machine.

The improved automatic bobbin-winder shown in half size in foregoing cut, is so simple that a child can easily operate it—winding the thread automatically on the bobbin as evenly and regularly as the thread on a spool. This valuable attachment renders possible a perfect control of the shuttle tension, and all annoyance resulting from shuttle thread breaking while the machine is in motion.



THE NEW SELF-THREADING SHUTTLE.

A self-setting needle and self-threading cylinder shuttle shown in accompanying picture are used with our machines and are among its strongest features. The self-threading shuttle is so simple that with two motions of the hand, backward and forward, shuttle is threaded.

We want all our patrons to assure themselves that our machines are perfect in every particular. While we are not in the sewing machine business, we have gone into the supplying trade merely as an assistance to those who desire a first-class machine at factory prices and no middlemen's profits.

Remember, we deliver this machine to your nearest railroad station, with all attachments and a year's subscription to the KANSAS FARMER, for only \$20.

Send for brochure giving fuller particulars.

KANSAS FARMER CO., Topeka, Kansas.

TWO-CENT COLUMN.

"For Sale," "Wanted," "For Exchange," and small advertisements for short time, will be charged two cents per word for each insertion. Initials or a number counted as one word. Cash with the order. Special:—All orders received for this column from subscribers, for a limited time, will be accepted at one-half the above rates, cash with order. It will pay. Try it!

BERKSHIRES.—Wm. B. Sutton & Sons, Rutger farm, Russell, Kansas. Special prices to immediate buyers on young boars, ready for service, and young sows bred or unbred. Splendid individuals and choicest breeding.

REGISTERED BERKSHIRES.—In finest condition. Large stock and no feed. Special prices to immediate buyers. Wm. B. Sutton & Sons, Russell, Kas.

FOR SALE OR EXCHANGE.—Eleven good cows, one thoroughbred Holstein bull, four horses, 750 bushels corn, 350 shocks fodder, twenty tons mill-let hay. Will sell cheap or exchange for good forty acre farm. John G. Howard, Topeka, Kas.

\$420 PER YEAR.—For thirty-three years pays for 160 acre farm. All bottom land; timber; running water; orchard. Six miles from Topeka. John G. Howard, Topeka, Kas.

THOROUGHBRED POLAND-CHINA PIGS.—For sale, both sexes, cheap. Call or address Wm. Maguire, Haven, Reno Co., Kas.

WILL EXCHANGE.—Water power flouring mill for a good farm or cattle. Kauffman & Son, Virgil, Kas.

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

READ.—Famous Duroc-Jersey and Poland-Chinas for sale cheap. Great breeders, rustlers and growers. D. Trott, Abilene, Kas.

FOR SALE.—Seventy-four three-year-old steers, now being fed corn on good pasture. H. H. McCormick, Yates Center, Kas.

FOR SALE.—Eighty acres in Cloud county, Kansas. Sixty-five acres in cultivation. A good frame house and out-buildings. Will take horses or mules. Farm is clear. H. Gaudreault, Campbell, Neb.

ONE DARK RED HEIFER.—Dehorned, white marks on legs, white belly and white tip of tail. One pale red heifer, dehorned, white spot on forehead, white spot on hips and white mark on left side. Both 1 year old last spring. Advertised in Abilene Reflector May 3, 1894. Can be found in Chever tp., S. 30, T. 11, R. 2, E. Andrew Kropff, Talmage, Kas.

VIRGINIA PLANTATION.—735 acres for \$7,000. Buildings alone worth more than asked for farm. Must be sold to close an estate. 400 acres cleared, 350 fine timber. Large amount of river bottom lands of inexhaustible fertility, all level and smooth. Three-fourths mile to postoffice. Best of neighborhood. Churches of all denominations. Frame house, eight large rooms, perfect repair. Orchard. Fine view. Detached kitchen, large barn, stables, six tenant houses and fourteen other buildings. Easy terms of payment. Full particulars. W. G. Stephens, Lynchburg, Va.

FOR SALE.—Choice bunch of thirty-five Galloway and Short-horn steers coming 2, four full-blood Galloway bulls coming 2. Inquire of Oscar Tammler, one mile northeast of Kildare, Oklahoma Ter.

CALIFORNIA FRUIT AND FARM LAND.—For trade for Kansas land. J. S. Brooks, Delano, California.

WE CAN FURNISH CORN, OATS, MILL FEED, bran, flour, ground wheat or feed wheat in car lots. Write or wire. Hodges & Seymour, Wichita, Kas. Mention Kansas Farmer.

WANTED, FEEDERS.—I would like to feed one hundred head of cattle for five months. Have plenty of corn fodder, kafir corn and straw on my farm. Cattlemen address me. D. K. Beshore, Cleveland, Kingman Co., Kas.

FOR SALE CHEAP.—Fifty to sixty well-bred Shropshire ewes and lambs, as feed is scarce. R. Fowles, Wakefield, Kas.

BLACK MINORCAS.—Both sexes, Northrup strain, for sale at farmer's prices. A few to exchange for S. C. White Leghorns. J. R. Cotton, Stark, Kas.

WE MAKE A GOOD FARMER'S SPRING WAGON, two lazy backs and let-down end-gate, for \$55. Warranted. Kinley & Lannan, 424-426 Jackson street, Topeka.

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

SEND TO-DAY FOR FREE SAMPLE COPY OF Smith's Fruit Farmer, a practical Western horticultural journal, 50 cents a year. Smith's Fruit Farmer, Topeka, Kas.

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

WANTED.—Buyers for Large English Berkshires. One hundred pure-bred pigs, farrowed in March and April, are offered for sale at from \$10 to \$15 each. Farm two miles west of city. Riverside Stock Farm, North Topeka, Kas.

FRESH ALFALFA SEED. Crop of 1894. MCBETH & KINNISON, GARDEN CITY, KANSAS.

POLAND-CHINA MALES.—Tecomseh, Square Business strain, cheap. J. D. Ziller, Hiawatha, Kas.

SUNNYSIDE.—YAKIMA VALLEY.—Irrigated lands. Produce apples, pears, prunes, peaches, hops, alfalfa. Worth \$30 to \$600 per acre. "Twenty acres enough." For map, prices, particulars, write F. H. Hagerty, Sunnyside, Washington.

TIMBER TO BE HAD FOR THE CLEARING.—A tract of timbered land in south Missouri must be cleared for fruit. Heavily timbered with oak suitable for lumber. No underbrush. Owner will give timber for the clearing. Railroad passes through land. A reliable tenant with two good teams wanted on same place. Address "C. C. G.," care KANSAS FARMER.

JERSEY AND HOLSTEIN BULL CALVES FOR J sale. Royally bred, well marked, prices low. Also a few Jersey heifers and cows. Wm. Brown, Lawrence, Kas.

RED KAFFIR CORN FOR SALE.—One and one-half cents per pound. J. R. Cotton, Stark, Kas.

CLOSING OUT.—Entire stock of Hamburgs, incubators, brooders, bone-mill, clover-cutter, etc., on account of death of wife. J. P. Lucas, Topeka, Kas.

WANTED.—To trade a \$50 scholarship in Pond's Business college for a good milch cow. W. B. Roby, 816 west Eighth St., Topeka.

IRRIGATION PUMPS.—For prices of irrigation pumps used by the editor of KANSAS FARMER write to Prescott & Co., Topeka, Kas.

THE STRAY LIST.

FOR WEEK ENDING OCTOBER 17, 1894.

Stanton county—J. W. Tout, clerk.

MARE—Taken up by Grant Raney, in Mitchell tp., August 27, 1894, one light roan mare, 4 years old, both hind feet white, no marks or brands; valued at \$12.

Woodson county—H. H. McCormick, clerk.

STEER—Taken up by G. E. Brenner, in Liberty tp., October 1, 1894, one red yearling steer, branded O on right side just behind shoulder and R on left hip; valued at \$10.

Franklin county—J. K. Bailey, clerk.

STEER—Taken up by J. B. Horn, in Williamsburg tp., one red dehorned steer, 2 years old, medium size, branded W. I. on left side, ends of ears clipped.

FOR WEEK ENDING OCTOBER 24, 1894.

Sedgwick county—M. A. Carvin, clerk.

TWO MULES—Taken up by Jay C. Dix, in Ohio tp., two mules—one dark brown mare mule, 5 or 6 years old, about sixteen hands high, and one sorrel horse mule with black mane and tail, about fourteen hands high, 4 or 5 years old; no marks or brands on either; valued at \$100.

Finney county—T. C. Laughlin, clerk.

THREE STEERS—Taken up by Chas. Drussell, in Garden City tp., September 20, 1894, three red spotted steers, medium size, 3 years old, branded with characters resembling 2 X; valued at \$30.

STEER—By same, one medium size red steer, 3 years old, branded HUB; valued at \$10.

STEER—By same, one medium size spotted steer, 3 years old, branded T L; valued at \$10.

TWO STEERS—By same, two medium size spotted steers, 2 years old, branded L J; valued at \$15.

STEER—By same, one medium size spotted steer, 1 year old; valued at \$5.

Allen county—Jas. Wakefield, clerk.

STEER—Taken up by J. H. Thompson, in Maraton tp., October 9, 1894, one roan steer, 2 years old, dehorned, no marks or brands; valued at \$15.

COW—Taken up by John B. Smith, in Maraton tp., October 18, 1894, one pale red and white spotted cow, about 5 years old, branded B A on left side; valued at \$10.

FOR WEEK ENDING OCTOBER 31, 1894.

Cherokee county—P. M. Humphrey, clerk.

FILLY—Taken up by J. H. Galpine, in Pleasant View tp. (P. O. Waco, Mo.), September 8, 1894, one sorrel filly, fourteen hands high, left hind foot white, white spot in forehead; valued at \$20.

FILLY—By same, one sorrel filly, thirteen hands high, white spot in forehead, left fore foot white; valued at \$15.

FILLY—By same, one bay filly, thirteen hands high, black mane and tail, white spot in forehead, white strip on nose; valued at \$15.

FOY—Taken up by J. H. Hensley, in Lola tp., P. O. Hallsville, August 23, 1894, one bay mare pony, small white mark on left hind leg near foot; valued at \$15.

Sheriff's Sale.

In the District Court, Third Judicial District, Shawnee county, Kansas.

D. C. Nellis, Plaintiff, Lydia Bell, M. L. Bell and George E. Curtis, Defendants. Case No. 16089.

By virtue of an order of sale, issued out of the District court, in the above entitled case, to me directed and delivered, I will,

On Monday, November 26, 1894,

at a sale to begin at 10 o'clock a. m. of said day, at the front door of the court house, in the city of Topeka, in Shawnee county, State of Kansas, offer for sale at public auction, to the highest bidder for cash in hand, the following described real estate and appurtenances belonging thereto, to wit:

The premises described in the mortgage set forth in plaintiff's petition as follows: In Shawnee county, Kansas, commencing at a point 2,100 feet northerly of the southeast corner of Jackson street and Gordon street, in the city of Topeka, and on an extended line of the west side of Jackson street and parallel with Kansas avenue; thence westerly at right angles 170 feet; thence northerly at right angles 75 feet; thence easterly at right angles 170 feet; thence southerly at right angles 75 feet, to place of beginning, in Shawnee county, Kansas. Said real estate is taken as the property of said defendants and will be sold to satisfy said order of sale.

The purchaser will be required to pay cash for said property at the time of sale.

Given under my hand, at my office in the city of Topeka, Shawnee county, Kansas, this 17th day of October, 1894. D. N. BURDGE, Sheriff. D. C. NELLIS, Attorney for Plaintiff.

GEARHART'S FAMILY KNITTER. Knits a stocking heel and toe in ten minutes. Knits everything required in the household from household factory, wool or cotton yarns. Most practical knitter on the market. A child can operate it. STRONG, DURABLE, SIMPLE, RAPID. Satisfaction guaranteed. Agents wanted. For particulars and sample work, address, J. E. GEARHART, Clearfield, Pa.

DOUBLE BREACH-LOADERS \$5.00. RIFLES \$1.75. WATCHES. BICYCLES \$15. All kinds cheaper than elsewhere. Before you buy send stamp for 60 cent catalogue. POWELL & CLEMENT CO. 168 Main St., Cincinnati, O.

Farmers, Spay Your Sows. For fall fattening. Also your Nannies, Ewes and Gyp Dogs, with Howsley's Spaying Mixture. Easily used, quick, absolutely certain and safe. Price, \$3 per bottle; \$2 half bottle. One bottle spays one hundred head. Write for testimonials and particulars. THE HOWSLEY SPAYING CO., Kansas City, Mo.

FREE. A fine 14k gold plated watch to every reader of this paper. Cut this out and send it to us with your full name and address, and we will send you one of these elegant, richly jeweled, gold finished watches by express for examination, and if you think it is equal in appearance to any \$25.00 gold watch pay our sample price, \$3.25, and it is yours. We send with the watch our guarantee that you can return it at any time within one year if not satisfactory, and if you sell or cause the sale of six we will give you five Free. Write at once, as we shall send out samples for 60 days only. Address: THE NATIONAL MFG & IMPORTING CO., 334 Dearborn St., Chicago, Ill.

WANTED.—A farm near Topeka. Dr. H. W. Roby, Topeka, Kas.

In writing to our advertisers please say you saw their advertisement in the KANSAS FARMER.

SEEDS J. G. PEPPARD 1400-1402 UNION AVE. MILLET A SPECIALTY. Red, White, Alfalfa and Alsike Clovers, Timothy, Blue grass, Orchard grass, Red Top, Onion sets, Tree seeds, Cane seed. KANSAS CITY, MO.

PUBLIC SALE!

Of Twenty-five to Thirty Pure-bred Hereford Cattle To be held at our farm, near FLORENCE, MARION CO., KANSAS, THURSDAY, NOVEMBER 15, 1894.

Send for Catalogues—ready November 1. COL. S. A. SAWYER, Auctioneer, Manhattan, Kansas. MAKIN BROS., Florence, Kansas.

GREAT DISPERSION SALE,

Hoge, Leavenworth Co., Kas., on Wednesday, Nov. 7, 1894, Of pure-bred stock at Hazelhurst farm, one mile north of HOGUE station, on L. & L. branch of U. P. railway, Leavenworth county, Kansas, ten miles south of Leavenworth.

125 head of Berkshire and Poland-China Hogs, 125 head of Shropshire Down Sheep, 25 head of Sussex Cattle, 35 head of Grade Cattle and Grade Draft Horses. We have sold the farm and must sell the stock. Our hogs are bred Most of our pigs are the product of our first-prize herd at Kansas City Inter-State Fair, won over all the prize-winners of the Western circuit. Line bred Tecumseh and Corwin. King Perfection, the St. Louis sweepstakes winner, a sample of our productions. 45 Shropshire Rams, the West. OVER 300 HEAD OF STOCK to be sold in one day means sacrifice. Don't miss the greatest opportunity of the season. Send for catalogue for particulars and how to get there.

H. M. KIRKPATRICK, KANSAS CITY, MO. COL. F. M. WOODS, Auctioneer.

HORSES! SOLD AT AUCTION. On Tuesday, Wednesday, and Thursday of each week. Private sales every day. At the KANSAS CITY STOCK YARDS, HORSE & MULE DEPT.

THE LARGEST & FINEST INSTITUTION OF THE KIND IN THE UNITED STATES. 85107 head handled during 1893. All stock sold direct from the farmer, free from disease, and must be as represented or no sale. Write for market report, mailed free. Address, W. S. TOUGH & SON, Mgrs., Kansas City, Mo.

THE UNION STOCK YARDS, CHICAGO.

(Consolidated in 1865.) The largest live stock market in the world. The center of the business system from which the food products and manufactures of every department of the live stock industry is distributed. Accommodating capacity: 50,000 cattle, 200,000 hogs, 30,000 sheep, 5,000 horses. The entire railway system of Middle and Western America center here, rendering the Union Stock Yards the most accessible point in the country. The capacity of the yards, the facilities for unloading, feeding and reshipping are unlimited. Packing houses located here, together with a large bank capital and some one hundred different commission firms, who have had years of experience in the business; also an army of Eastern buyers, insures this to be the best market in the whole country. This is strictly a cash market. Each shipper or owner is furnished with a separate yard or pen for the safe keeping, feeding and watering of his stock, with but one charge of yardage during the entire time his stock remains on the market. Buyers from all parts of the country are continually in this market for the purchase of stock cattle, stock hogs and sheep. Shipper should ask commission firms for direct information concerning Chicago markets.

The Greatest Horse Market in America, the Dexter Park Horse Exchange. N. THAYER, President. JOHN B. SHERMAN, Vice President and Gen. Manager. GEO. T. WILLIAMS, Secretary and Treasurer. J. C. DENISON, Ass't Secretary and Ass't Treasurer. JAS. H. ASHBY, General Superintendent. D. G. GRAY, Ass't Superintendent.

The Kansas City Stock Yards

Are the most complete and commodious in the West and the second largest in the world. Higher prices are realized here than further east. This is due to the fact that stock marketed here is in better condition and has less shrinkage, having been shipped a shorter distance; and also to there being located at these yards eight packing houses, with an aggregate daily capacity of 9,000 cattle, 40,000 hogs and 4,000 sheep. There are in regular attendance sharp, competitive buyers for the packing houses of Chicago, Omaha, St. Louis, Indianapolis, Cincinnati, New York and Boston. All of the eighteen railroads running into Kansas City have direct connection with the yards.

Table with 6 columns: Category, Cattle and calves, Hogs, Sheep, Horses and mules, Cars. Official Receipts, 1893: 1,746,828; 1,948,373; 569,517; 35,097; 99,755. Slaughtered in Kansas City: 956,702; 1,427,763; 872,385. Sold to feeders: 249,017; 10,125; 71,284. Sold to shippers: 860,237; 519,469; 15,200. Total sold in Kansas City: 1,566,046; 1,948,357; 458,869; 22,522.

C. F. MORSE, General Manager. E. E. RICHARDSON, Secretary and Treasurer. H. P. CHILD, Assistant Gen. Manager. E. RUST, Superintendent.

Everything that is NEWEST and BEST in REPEATING RIFLES, REPEATING SHOT-GUNS, SINGLE-SHOT RIFLES. ALL KINDS OF AMMUNITION, ARE MADE BY THE Winchester Repeating Arms Co. OUR MODEL 1893 SHOT-GUN. Is now used by all the most advanced trap and game shooters. Send for 100-page Illustrated Catalogue, FREE. Winchester Repeating Arms Co., New Haven, Conn.