

THIS IS THE BEST OFFER YET MADE!

The New Improved "Kansas Farmer"

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.

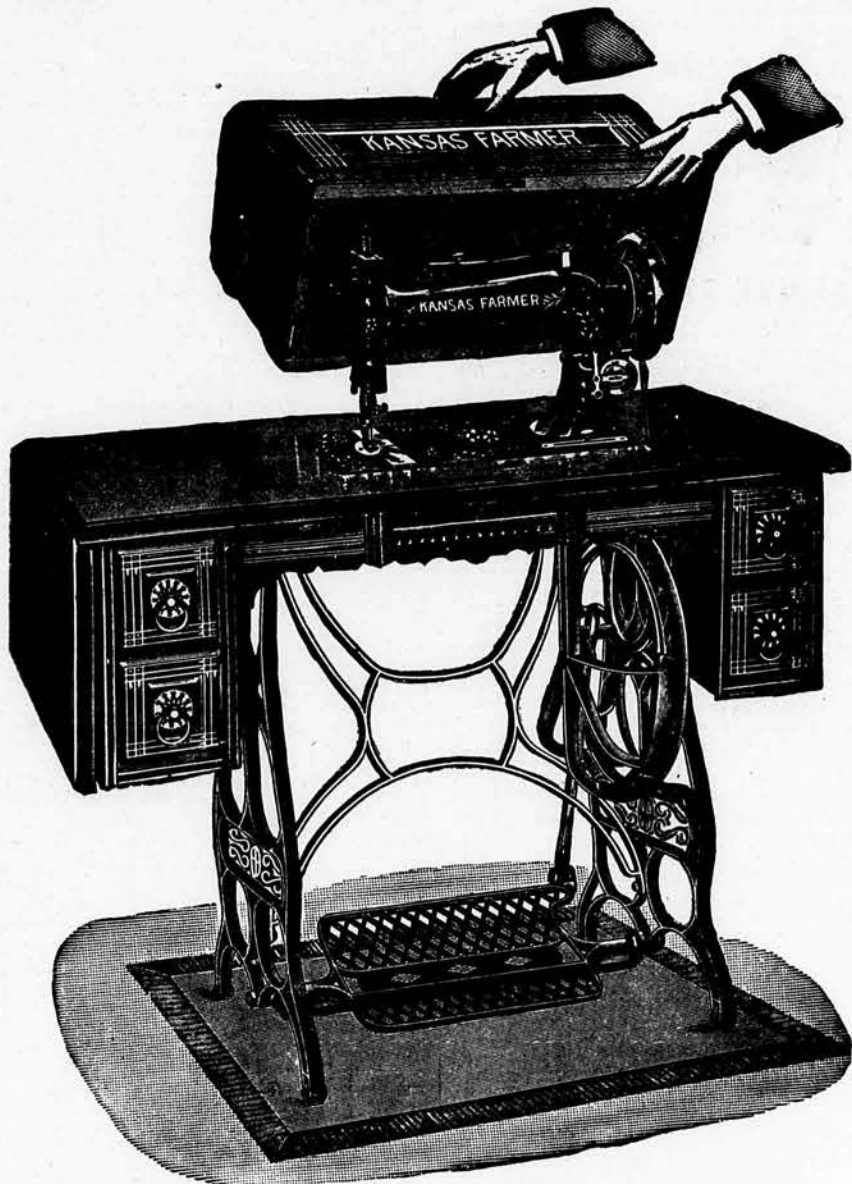
A \$65 Machine, Delivered, including a Year's Subscription to the **KANSAS FARMER**, for **\$20.**

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.

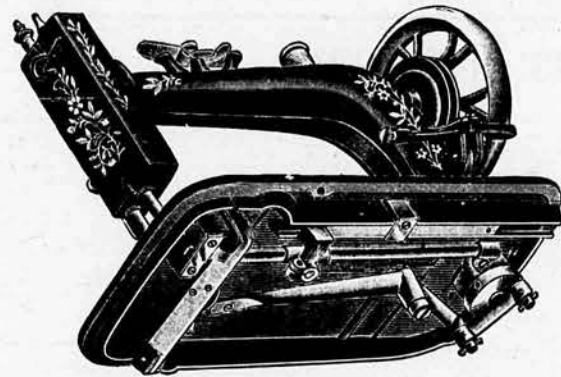
Traveling agents sell no better machines than ours, and half of them not as good, for prices ranging from \$50 to \$70. Agents will use their best arguments to convince you that our machine is not first-class, and at the same time insist upon your paying them a profit of from \$40 to \$50. Remember, 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.

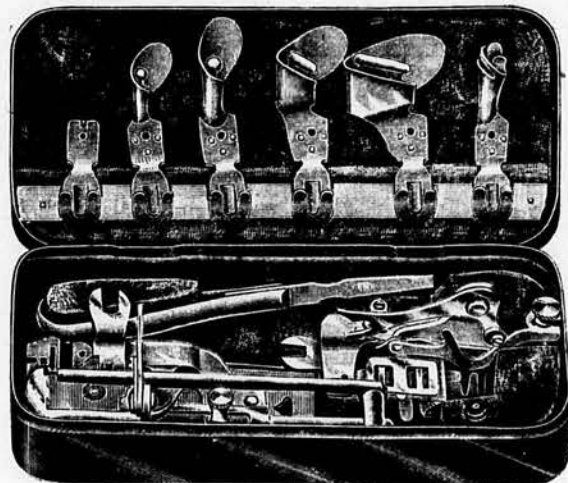


THE DIRECT FEED BAR.

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.

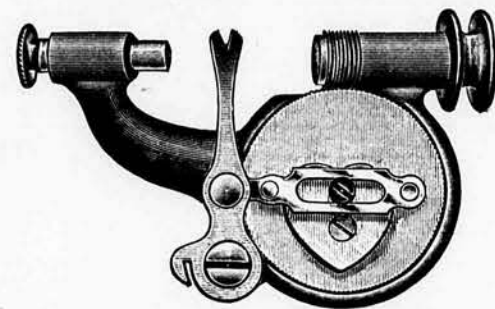


BOX OF SELF-ADJUSTING ATTACHMENTS.

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 feller, 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 Buys 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.

KANSAS FARMER

ESTABLISHED 1863.
VOL. XXXII, No. 39.

TOPEKA, KANSAS, WEDNESDAY, SEPTEMBER 26, 1894.

SIXTEEN TO TWENTY
PAGES—\$1.00 A YEAR.

KANSAS--ANDERSON COUNTY.

Special correspondence KANSAS FARMER.

Of all the States comprising our Union, none can compare with Kansas. She is the peer of them all. Her resources are as boundless as the waves of the sea. Her wealth of soil and mine are riches untold. Thousands have come to Kansas penniless and have become well-to-do, possessing productive farms and ranches, surrounded by

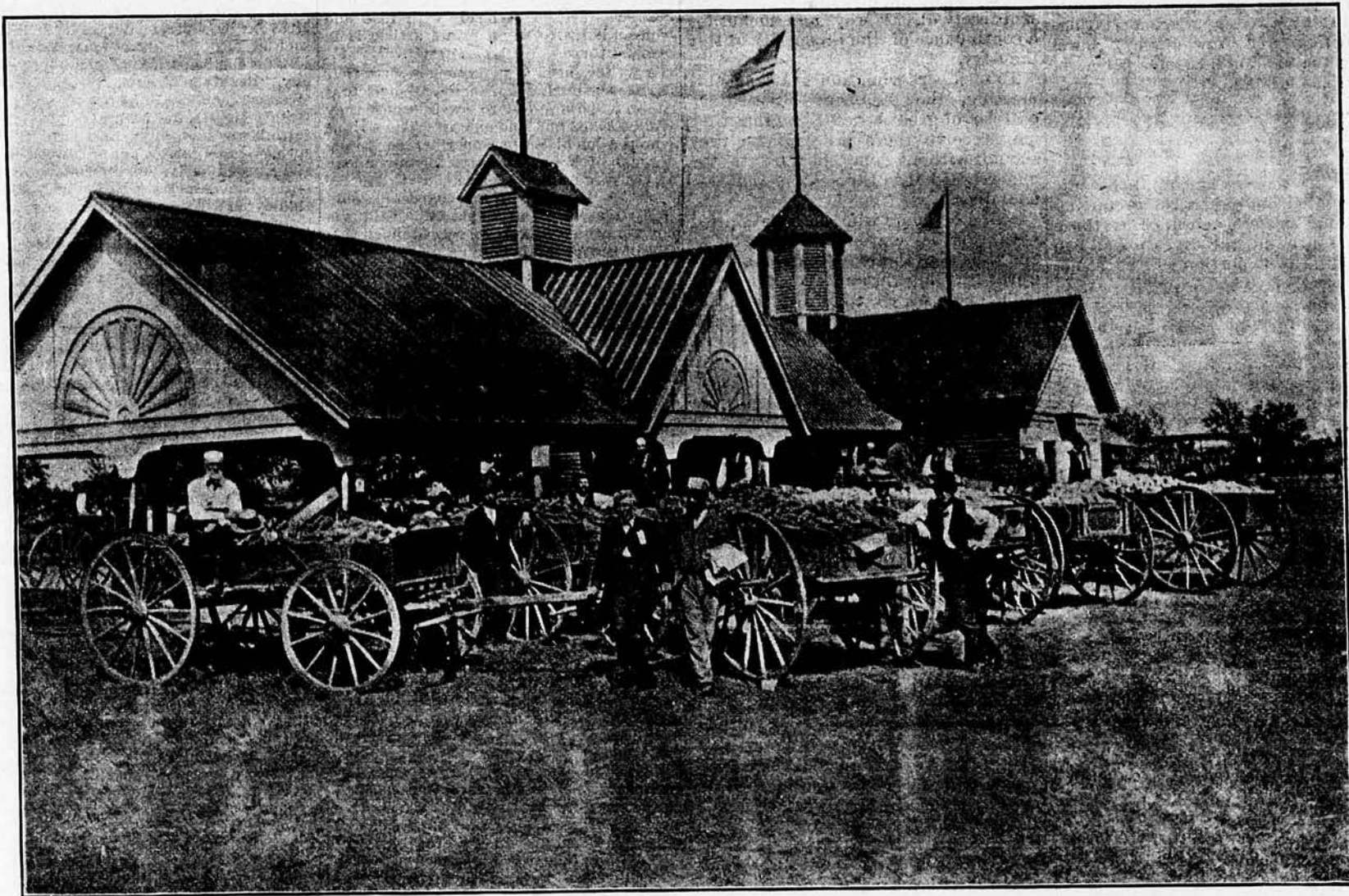
regular form, with a breadth of a little more than 200 miles from north to south, and a length of a little over 400 miles from east to west, and contains an area of 52,572,160 acres—room enough for every person in the United States to have three-fourths of an acre each, and still be land to spare. Of this area less than 20,000,000 acres are under cultivation, or included in farms.

The general surface of the State is an undulating prairie, gradually ascending in

Educational advantages of Kansas surpass those of nearly all the older States. Besides nearly 10,000 school buildings and private educational institutions, Kansas has a State University, State Agricultural College and a State Normal, at all of which students are instructed free. There are, also, in the State over thirty colleges and universities, which report an average yearly attendance of more than 5,000 students.

west from the Missouri State line, and the fourth county north from the Indian Territory. It was organized in 1855 and contains an area of 576 square miles, or 368,640 acres, with a population of 14,121, as per census report of 1890. The county is subdivided into ninety-seven school districts, in each of which is maintained an average term of nine months school each year.

The surface of the county is gently undulating, and the soil being mostly of a



CORN EXHIBIT, CROP OF 1894, AT THE ANDERSON COUNTY FAIR, GARNETT, KAS., SEPTEMBER 4-7. PHOTOGRAPHED BY HUNTER.

an abundance of everything found in connection with progressive farm life. What those have done, and are doing every day of the year, others can do as well and in a remarkably short time become monarch of enviable possessions.

It is true, the hard times have made many people dissatisfied, but the depression is the same all over the country. By comparison Kansas is in good shape, and will be the first State to take on renewed prosperity. There is a great future for Kansas, and within the next decade more people will find homes and plenty in Kansas than in any other like area on earth.

The true Kansan "never sits down" but is always "business," while the half-hearted resident "rushes things" for a time, he eventually goes back to his wife's people and the State is that much better for his having gone. Kansas is all right, and blessed is the man who possesses a portion of her fertile lands, for he shall not want nor shall any good thing be withheld from him. His prosperity shall be as a tree planted by living waters, and all who follow in his footsteps shall likewise prosper, wax strong and grow abundantly rich.

Kansas is situated in the geographical center of the United States, has a rectan-

altitude from the eastern border, presenting a succession of rich prairies, fertile valleys, hills and table lands, with their diversified scenery. Especially at this time of the year does all nature seem to vie with each element in trying to produce and present to our view, the beauties of Kansas landscape during autumnal days; and, as I ride over the State in my journeyings here and there, I cannot help noting the wonderful developments of nature. The late rains have caused a renewed brightness of pastures, prairies and wood lands, so that the country has more the appearance of spring-time than of autumn.

The government census report places our population, June 1, 1890, at 1,423,485. Of this number Anderson county is credited with 14,121. The people of Kansas are acknowledged, everywhere, as energetic, progressive, wide-awake, cultured, industrious, law-abiding citizens, and no State in the Union can discount her in the production of beautiful women and pretty children. And her babies—God bless them, they are the envy of mankind the world over; hence, the pardonable pride which comes from the Kansas mother, as she enfolds her darling, dimpled, prattling babe unto her bosom—a perfect picture of happiness, peace and contentment.

Kansas has, in addition to the many good things already mentioned, the best water and climate to be found in any country beneath the sun. And, as a fruit-producing State, she is unsurpassed, her apples, pears, peaches, plums, cherries, grapes and numerous small fruits taking first place wherever shown or exhibited. One gentleman, Mr. Wellhouse, will have of this season's crop over 25,000 bushels, mostly winter apples, for which he will get the "snug" amount of \$25,000. It pays to grow fruit in Kansas. And what is true of fruit, is also true of every other product, when properly attended to.

Kansas is practically out of debt, and land is cheaper here now than it will ever be again, so in purchasing Kansas property you are sure of big returns. Our pioneer days are past and he who secures a home in Kansas now, gets along with it every convenience of civilized life.

Now, reader, if you contemplate making a change in location, and desire to better your condition, permit me to call your attention more closely to Kansas, and especially to

ANDERSON COUNTY.

This county is situated in the midst of the best portion of Kansas, is the second county

rich limestone nature, makes it very productive and easily cultivated. The bottom lands, along the creeks, average from one to two miles in width, making about 20 per cent. of the entire county area, and are very fertile. The timber belts on the creeks average from one-half to one mile in width, and in them are found nearly all the varieties of timber known in Kansas.

Springs are found in parts of the county, and a few of them have developed into valuable ones. Streams of water are numerous, the largest of which is the Pottawatomie. Plenty of well water is easily obtained on every farm at reasonable depth and of best quality, pure and sparkling.

The county is well provided with railway facilities, having the Kansas, Nebraska & Dakota; Kansas & Arizona; St. Louis & Emporia—operated as part of the Missouri Pacific system; the Southern Kansas, and Chicago, Kansas & Western—operated as part of the Atchison, Topeka & Santa Fe system ("Santa Fe Route"), and the Kansas & Pacific, operated by the Missouri, Kansas & Texas company.

Limestone and sandstone are found in all portions of the county, except in the south-

(Continued on page 6.)

The Stock Interest.

THOROUGHbred STOCK SALES.

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

SEPTEMBER 27—June K. King, Berkshire swine, Marshall, Mo.
 OCTOBER 2—C. C. Keyt, Short-horn cattle and Poland-Chinas, Verdun, Neb.
 OCTOBER 3—W. H. Wren, Poland-China swine, Marion, Kas.
 OCTOBER 4—J. A. Worley, Poland-China swine, Sabetha, Kas.
 OCTOBER 5—Eli Zimmerman, Poland-China swine, Hiawatha, Kas.
 OCTOBER 10—George W. Null, Poland-Chinas, Chester Whites and Horses, Odessa, Mo.
 OCTOBER 24—F. M. Lall, Poland-China swine, Marshall, Mo.
 OCTOBER 24—J. B. Davis, Duroc-Jersey swine and cross-bred Short-horn and Red Polled cattle, Fairview, Kas.
 NOVEMBER 7—Martin Meisenheimer, Poland-China swine, Hiawatha, Kas.

Where the Value Lies.

EDITOR KANSAS FARMER:—M. M. Reeves, of St. Louis, inquires what per cent. of nutrition or feed value of the corn crop is in the ear and what per cent. in the rest of the plant, providing all be utilized to the best advantage.

Answer.—In general terms, the fodder contains a little more than one-third of the nutrition of the entire crop. The grain, therefore, contains a little less than two-thirds. But this will vary very much with the variety, vigor of growth, etc. It will, however, hold true, pretty generally, for all our Western corn.

To detail the matter further, I will say that I have averaged the results obtained by two experiment stations (Connecticut and New Jersey), representing the yield of nutrients per acre, which is as follows:

	Ears.	Stalks.
Ash.....	53.1	173.5
Albuminoids.....	315.7	167.5
Fiber.....	254.3	1020.8
Nitrogen free extract.....	2587.0	1523.0
Fat.....	143.7	40.2

These are the average total contents of nutrients from one acre, producing a medium crop of corn. But these amounts are not all digestible. The actual digestible portion will be somewhere between 60 and 75 per cent. of these figures.

This inquiry is timely and of importance. If our farmers could only realize the amount of nutrition that they yearly allow to go to waste in their corn fodder, they would take means to save it.

C. C. GEORGESON.

Sorghum Seed as a Feed.

EDITOR KANSAS FARMER:—"A. T. E." of La Harpe, Kas., asks for information in regard to the composition and feeding value of sorghum seed and broomcorn seed as feed for growing stock and laying hens, and also how these grains compare, pound for pound, with wheat and oats.

In view of the failure of the corn crop, this is an interesting question. It is the part of true economy to use as feed whatever the farm produces that may be suited for the purpose, and the rational feeder naturally desires to know what may be expected from untried grains, like sorghum seed and broomcorn. These two grains are by no means uncommon products of Kansas farms, but corn is usually so abundant that little else is thought of as feeding stuffs. Sorghum seed and broomcorn are very similar in their composition and feeding value and can, for all practical purposes, be considered equal. Their value will vary with different varieties, a light-colored and thin-shelled grain being usually better than dark-colored seed. The following table gives the digestible nutrients and the nutritive ratio of the grains named, and it will be noticed that, according to this analysis, the broomcorn will rank a trifle higher than the sorghum seed:

	Protein.	Carbohy- drates.	Fats.	Nutritive ratio.
Sorghum seed.....	6.84	53.00	2.99	1: 8.5
Broomcorn.....	7.10	56.80	3.00	1: 9
Wheat.....	9.5	60.90	1.90	1: 6.91
Indian corn.....	6.25	60.06	3.14	1:10.81
Oats.....	8.46	46.11	3.94	1: 6.5
Rye.....	8.37	63.16	1.69	1: 7.8
Barley.....	9.84	60.77	1.86	1: 6.7

It is to be noticed that sorghum seed and broomcorn seed are both of them slightly richer in protein, or flesh-forming material, than corn, and that they have on the other hand, slightly less of the carbohydrates and fat. This would indicate that as a feed for growing stock, concerning which information is desired, that they are, at least,

equal to corn, if not better. But they fall considerably below wheat, oats and barley in their contents of nutrients. I should say that sorghum and broomcorn seed can take the place of corn in all feeding operations on the farm, but the grains being small and hard, they should be ground before they are fed, but when compared with wheat, barley and oats, these latter grains take the lead, especially when fed to young growing stock and poultry.

C. C. GEORGESON.

National Swine Breeders' Meeting.

The twelfth annual meeting of the National Swine Breeders' Association will be held at 10 o'clock a. m., in the Sherman house, Chicago, Ill., on Thursday, November 29, 1894.

The program will include papers and addresses by leading breeders and writers. The discussions thereon, as well as ideas presented by those in attendance upon other matters pertaining to the swine industry, will make this meeting one of especial interest.

This meeting you are cordially invited to attend.

The swine industry of the country has been for two years past, and is now in more prosperous condition than any other of our live stock interests. It is expected that the meeting of the National Swine Breeders' Association, to be held in Chicago, on November 29, during the "fat stock show," will be largely attended, and that its members will freely discuss ways and means for a continuance of the prosperity of this industry.

To members who cannot attend this meeting, the published proceedings will be of great benefit. So that they may receive these proceedings, they should, without delay, forward to the undersigned \$1 in payment for their annual dues.

Swine breeders who have not united with this association, may now do so and thus give their individual aid towards the advancement of the great industry in which they are engaged. By the payment of \$1 for membership fee you will be placed on and published among the roll of members, and you will be entitled to a copy of the proceedings of our coming meeting when printed, and in addition there will be at once sent to your address the proceedings for five preceding meetings of the association that contain most excellent papers, addresses and discussions on matters of vital interest to the swine industry, and are alone worth more than the amount required for membership fee.

JNO. G. SPRINGER, Secretary,
Springfield, Ill.

Wheat-Fed Hogs.

The St. Paul Trade Journal has great faith in the expediency, in this northwestern wheat-growing region, of feeding that grain to stock, and insists further that to get the full value of this feed the wheat should be cooked, especially with hogs. The method it suggests is for the farmer who fattens a number of hogs to have a "farmer's boiler," with a tightly-fitting wooden cover, fastened down by set-screws and provided with a steam pipe which can be carried into barrels or tanks holding the grain to be steamed. The water placed in the boiler will cook in tanks or barrels double the quantity it can cook in the ordinary way, and will turn out clean, sweet, appetizing food, which can never be burned, scalded or wasted by any neglect in attendance. When thoroughly steamed the wheat will have gained largely in bulk, and be soft, glutinous and in perfect condition for digestion. It should be well mixed with skim-milk, water, cooked potatoes and other foods when fed to pork, lightly salted, and fed in regular rations when about lukewarm. A gain of at least 25 per cent. over raw or soaked wheat can be confidently expected, according to this authority. It would be more satisfactory, however, if reliable tests were adduced, as, in a general way, the cooking of food for fattening animals has afforded somewhat doubtful advantage. If wheat has been given a trial in this way the exact results should be had. The Journal, however, believes that a bushel of wheat thus cooked and fed should give from fifteen to twenty

pounds of pork when fed to good stock. Good bacon pigs are to-day worth 5 3-10 cents per pound, and the highest price to be paid this season, it is believed, will far exceed this figure. There is certain to be more profit in it than in almost any other apparent opportunity presented the farmer this year. The Canadian farmer, who largely feeds in this way, gets relatively better prices for his pork than the American farmer, says the authority quoted. Their pork is fed on wheat, barley, potatoes, oats, skim-milk, etc., with no corn to speak of—generally none at all. Northwestern wheat-fed pork is even now taking a higher place in the esteem of American and European retailers than the average Chicago or Cincinnati article.

Live Stock Notes.

The Chicago horse market showed improvement last week. There was an excellent demand for 900 to 1,100-pound horses for Southern trade. Choice heavy drafters and plain heavy horses sold well.

The Norwich Milling Company, of Kingman, Kas., has been shipping coarsely-ground wheat to Iowa for feeding purposes. Should the present high prices for corn continue much will be used for this purpose, which will have a tendency to make higher prices for wheat.

At a Canadian institute these were given as the points for a model steer for the English market: Good quality, with soft skins and as evenly fleshed as possible. A good straight, broad back, well sprung and deep in the rib, well filled behind the shoulders, good hams and brisket, short legs, a fine, clean-out neck and head, with nice and well-set horns. Only a prime article is in demand there.—Northern Farmer.

A writer out in Washington reports that parties are buying up horses all over that State, to be shipped to Paris, where they will be killed and sold as beef. The writer, who is a son of State Superintendent Pendergast, of Minnesota, says the buyers pay all the way from \$3 for bronchos to \$20 for good fat Percherons, and expect to ship 10,000 horses to Paris this fall. Still it is not an industry likely to spread much this side of the mountains.

This experiment in feeding wheat to pigs in Ohio, given by the Northwestern Miller, with others of similar purport, should encourage a very large use of the grain in this way. Twenty-one shoats were fed for a week on wheat. The weight of the hogs when feeding began was 1,990 pounds, and at the end of the first week it was 2,845 pounds, showing a gain of 855 pounds. The amount of wheat fed was twelve bushels. The wheat was soaked twenty-four hours before being fed. The hogs are sold to be delivered September 15 at \$4.80 per 100 pounds. It is figured that the wheat sold at \$1.88 per bushel.

Prof. Sanborn has a basis of successful experience for his work as an agricultural professor and experimenter. As a practical swine-grower he made over 100 actual feeding tests with hogs of various weights, using various foods and employing about 400 hogs. He found, on the average, a certain amount of food was required to make a pound of gain on pigs weighing thirty-five pounds; 3.3 per cent. more food was required to make the same gain on pigs weighing seventy pounds; 14 per cent. more on pigs weighing 125 pounds; 19 per cent. more on pigs of 175 pounds; 22 per cent. more on hogs of 225 pounds, and so on up until 71 per cent. more feed was required on hogs weighing 325 pounds. The experience of other experimenters heretofore given is of a similar character. So it appears that the period for most profitable hog feeding is before 200 pounds weight is attained.

Our field man, Mr. Brush, reports a visit last week to the Elm Lawn herds, owned by Geo. W. Null, whose farm is situated three and one-half miles northwest of Odessa, forty miles east of Kansas City, on the Chicago & Alton railway, in La Fayette county, Missouri, and among other things he says: "We found a general all-round farm stocked with horses, jacks and swine. Two stallions, one an imported Percheron that weighs 1,800 pounds, and a lighter one, a four-year-old saddler, bright bay in color and a getter of a very fine lot of high-class and well-gaited youngsters. In an adjoining paddock was the Kentucky Mammoth jack, Giant Jr. 177, foaled in 1889, a coal black in color, fifteen and one-half hands high, and an excellent breeder and good performer. The brood mares and colts are typical ones and the dams were selected from time to time for their individual merit and breeding. In the division for swine were about one hundred and twenty-five head, consisting of pure-bred and registered Poland-Chinas and Chester Whites. The Polands are a grand toppy lot and among them a strong set of among the best blood in the West. Among the several harem kings that were used during the past year is John L. 9517 S., sired by Imitator 7651 S., dam Minnie Cook (17416). He is a good individual and an excellent breeder and

GARLAND STOVES AND RANGES
The World's Best

You can easily have the best if you only insist upon it. They are made for cooking and heating in every conceivable style and size for any kind of fuel and with prices from \$10 to \$70. The genuine all bear this trademark and are sold with a written guarantee. First-class merchants everywhere handle them.

Made by The Michigan Stove Company.
 LARGEST MAKERS OF STOVES AND RANGES IN THE WORLD
 DETROIT, CHICAGO, BUFFALO, NEW YORK CITY.

will have about twenty-five sons and daughters in Mr. Null's coming sale, that will take place on the farm, on Wednesday, October 10, 1894. Another sire that is much thought of for his breeding is Holden Header (Vol. 9), by M's Wanamaker 12188 S., dam Elwood Maid 4235, that will have to his credit in the sale several youngsters and brooders in farrow by him. The Colonel 8236 S., by Commander 3005 S., and out of Jewell (12217), reports a lot of youngsters of both sexes and among them some show yard individuals. Sable Wilkes 21955 A., by George Wilkes 5950 S., that sold for \$750, will have four, two of each sex, for the inspection of the buyer on sale day. Beauty's Wanamaker 11686 S., by C. Wanamaker 8772 S., and out of Maid's Black Beauty (19941), has several fall of 1893 farrow, boars and gilts, also two litters of spring of 1894 farrow out of Elwood Beauty and Elwood Girl (Vol. 9), that are hard to beat. Klever's Choice, a son of the \$1,000 Hadley, M's Wanamaker 12188 S., and the younger fellow, Nebraska Boy, will have representatives and females bred in the sales ring. Among the string of brooder's is the noted harem lady, Miss Lord Corwin 28498 S., that was farrowed April 18, 1890, sired by Lord Corwin 4th 901 S., dam Mazy 3d (6121). She was developed in Nebraska and weighed in her show ring dress 1,000 pounds. Her fall of 1893 farrow consisted of eleven, ten boars and one sow, and will have five of her last spring's farrow of seven in the sale. Lady A. (23047), by King Perfection 7013 S., dam Hallie (5585), that was bred by Vivian & Alexander, of McCredie, Mo., is a show yard queen and something the visitor will want. Elwood Beauty (Vol. 9), by The Colonel, and out of Elwood Maid, won second prize at the late Holden fair in a strong competitive ring of eleven, is sure to attract attention. She will have four in sale by Beauty's Wanamaker 11686 S. Elwood Girl (Vol. 9), a full sister, will send in six, three of each sex. One of the most attractive ones in the bevy of females is Vinette 73316 A., by Klever's Choice 2355 A., and out of Lady Nash 53406 A. She is very full and strong in head, heart, rib, back, flank, ham, bone and feet, with a very even, smooth-finished exterior conformation in all essential points. She will have four, two boars and two sows, in sale that are growthy, broad-backed, low down little youngsters. Lady S. (Vol. 9), by Billy 7751 C., dam Belle 19692 C., she by Alex L. 6273 A., will have some last fall farrow and spring of 1894 farrow for the inspection of the visitor. Space forbids that full description that the herd merits, hence will leave the further description of the swine herd to the personal inspection of the visitor and the complete description of the Poland herd that may be had by writing Mr. Null, who will cheerfully forward free by mail a copy of his catalogue. The Chester Whites, of which fifteen are registered or eligible, are from foundation stock bred by W. H. Maule, of Philadelphia, Pa., and are good ones. The fifty head of Polands, fifteen of pure-bred Chesters and about fifty head of stock hogs, ought to bring out from eastern Kansas, especially south of the Kansas river, where the larger and better corn crop was raised this year than was grown in Nebraska, Iowa or Missouri. The poultry-raiser will find, if he look about the Null premises, that Mrs. Ella Null, George's better half, is making a success at raising Plymouth Rocks, Light Brahmas and Indian Games. She started with the best strains and recruits from the most popular in the West and East, and makes it a rule to send out to her customers only the very best."

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.

Agricultural Matters.

Conserving Fertility of the Land.

Scientists are always scaring farmers about the exhaustion of the fertility of the soil. In new countries their showings are usually regarded as mere alarms of theorists and of no practical importance. As years come and go, and diminishing crops show that the scientists were right, and as the boys abandon the old, worn-out farm, the value of the scientists' advice to save the manure is realized.

Prof. Geo. L. Holter, chemist of the Oklahoma Experiment Station, has presented, in a way to be easily understood, some figures of the value of the ingredients taken from the soil by standard crops. He says:

"Should our farmers continue to raise crops year after year without paying any attention to fertilization, it will be a few years only until exhaustion will be plainly seen. The sooner we recognize this necessity of fertilization the better. It is not a question for the upland farmers alone, but for their neighbors on the bottom lands as well.

"The three fertilizing ingredients of most importance are nitrogen, potash and phosphoric acid. Nitrogen is worth, we will say, 18 cents per pound; potash, 5 cents, and phosphoric acid, 8 cents. In one ton of wheat straw there are 11 pounds of nitrogen, 12 pounds potash and 4½ pounds phosphoric acid. At the above valuation these are worth as manure \$2.94.

"In one ton of corn stalks there are 17 pounds nitrogen, 18 pounds potash and 10 pounds phosphoric acid, worth as a manure \$4.76.

"Too frequently the straw and stalks are burned or disposed of in some other manner and not utilized as a manure. These products usually remain on the farm.

"Let us consider a few products that are sold. When the farmer has disposed of 35 bushels of wheat at 75 cents per bushel, he has in hand \$26.25. If we care not for the value of our land and the necessity of maintaining fertility, the above statement is correct; but let us go a little further. In disposing of 25 bushels of wheat the farmer has taken from his soil 36 pounds nitrogen, 16 pounds potash and 10 pounds phosphoric acid, and has taken from his land \$3.08 worth of fertilizing ingredients. If he sells the same number of bushels of corn, he has taken from his land 30 pounds nitrogen, 7 pounds potash and 10 pounds phosphoric acid, containing \$6.55 worth of fertilizing ingredients. Should he sell 72 bushels of oats, he has taken from his land 37 pounds of nitrogen, 8 pounds potash and 13 pounds phosphoric acid, which, in manurial value, is worth \$8.10. What has been said of wheat, corn and oats may be said of everything that is raised on a farm.

"While it is not advisable to use wheat, corn and oats for fertilizing purposes, it should not be forgotten that the ingredients they draw from the soil should be returned if we would maintain the fertility. The wisest thing for our farmers to do is to begin right now, and carefully and intelligently consider the question of how to best retain the present fertility of their soil.

"Work all the straw you possibly can through your stables, and when this is done do not be afraid to haul manure. Do not have your stables located on the bank of a creek in such a way that every time it rains the water from your barnyard will drain into said creek, for in this way the water soluble portion of the manure is carried off and nothing remains but fibrous matter, which, as a fertilizer, is of little value."

A Lesson.

EDITOR KANSAS FARMER:—This year tries the strength of Western grit. If now all the farmers of Kansas and elsewhere will try next year a new system of farming it will not be without some good results. I have tried for several years to raise corn by giving it one more cultivation than usual, and increased the crop largely by so doing.

Made good corn some years when others failed. This extra cultivation wants to be done after it is too large for a two-horse cultivator, when it is "laid by" as most do, and then use any kind of five-tooth cultivator. The purpose is to make the ground mellow on top—not deep.

Another improvement is to plow the land in the fall and spread the manure on it very thin—not half as much as you would plow under—and you will get the best results of the plowing and full benefit of the manure. This manure can be spread in a corn field after it is up, and you will insure a crop there if it dries up elsewhere. I have tried it. A. H. G.

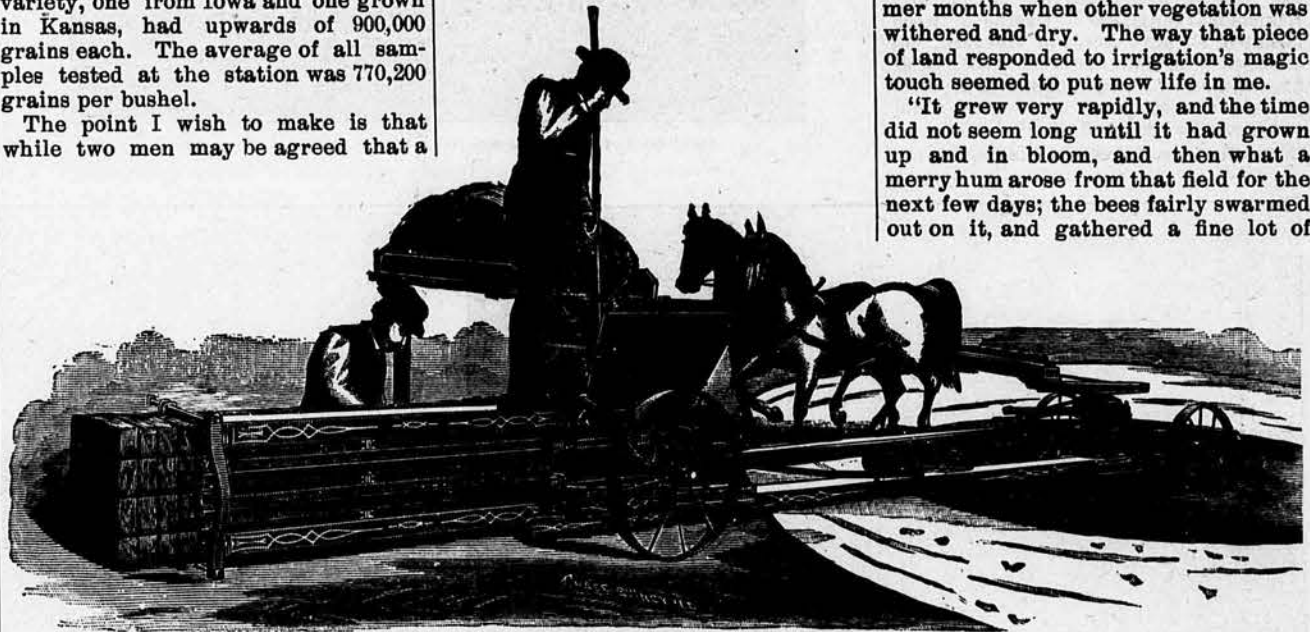
How Much Seed Wheat Per Acre?

EDITOR KANSAS FARMER:—As the season for wheat-sowing is at hand and the subject of how much to sow per acre is one of no small importance, permit me to call attention to the wide difference in the quantity of actual seed there may be in bushels of different wheat, resulting from the size of the grains, even when of the same variety. It has been noted at the Iowa Experiment Station that one bushel of a variety grown in California contained only 489,879 grains, while a bushel of Turkey Red from Iowa had 1,184,693 grains, or about two and one-half times as many. Other bushels of the same variety, one from Iowa and one grown in Kansas, had upwards of 900,000 grains each. The average of all samples tested at the station was 770,200 grains per bushel.

The point I wish to make is that while two men may be agreed that a

The Question of Extension of the Wheat Area in Russia.

Consul General Crawford writes to the government that at the expense of considerable pains he has succeeded in securing trustworthy information as to the probable extension of the wheat area in southern Russia during the next two or three years. "I have talked with the heads of the departments of the Ministry of Agriculture, and especially with Count Rostovtsev, of that ministry, who has studied the question with his colleagues very carefully for the past few weeks. The result of this investigation is a report to the effect that it is absolutely impossible to make any definite estimate on this point. In fact, it is stated that there are so many adverse forces at work that it is considered doubtful if there will be any increase whatever in the wheat area during the next few years. In many instances the soil is said to be so much exhausted by overwork that it has been advised to rotate the wheat crop less often than has been the custom in recent years. Again, it is claimed that the prices realized by the peasants of late have been very discouraging to them. During the last few years, especially, the discrimination in import duties against Russian cereals by Germany and Austria has tended to produce an unwholesome effect on Russian agriculture. Now that



THE LIGHTNING HAY PRESS. MANUFACTURED BY KANSAS CITY HAY PRESS CO., KANSAS CITY, MO.

"bushel" of wheat is about the proper quantity to sow on an acre or some other given area, and proceed on that basis, one may be seeding twice, or more than twice as heavily as the other. Topeka, Kas. F. D. COBURN.

In answer to an inquiry as to the best tools to use and how to treat the Russian thistle, the *Dakota Farmer* says: "If the thistles are on land that can be cultivated the proper tool to have used is a cultivator. In any other fields in which the thistle predominates the proper tools are a lot of sheep or cattle. If the weeds have been allowed to mature, the best tool we know of for dealing with them is the mowing machine. They should then be raked and burned as soon as dry. If they are in such a compact body that they will not become loosened and blow away they may be allowed to stand as they are till spring, when they may be gathered up with a harrow and burned. If the harrow is of steel it is sometimes possible to have the fire and harrow keep company in crossing the field and so clear the ground at a single operation. A bar of railroad iron with a horse hitched to each end by means of a long chain and dragged over the ground can sometimes be used for scraping the weeds into a windrow, which is constantly burned, the fire keeping pace with the progress of the iron. By leaving the weeds standing on the ground through the winter a large quantity of moisture in the form of drifting snow will be retained on the land."

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

Russia is admitted with her grain on an equal footing with the most favored nations, it is hoped that stimulus will be given to the industry. However, the officials in charge of the wheat statistics have assured me that they cannot estimate, even approximately, the amount of benefit to be derived by the Russian farmer under the new Russo-German treaty. It is claimed that the method so long in vogue in this country of mortgaging grain to speculators or middlemen will do more injury to the farming industry than will be offset by the advantages given to Russia under the above-named treaty.

"Because of the foregoing and other uncertainties relating to this subject, the officials of the Ministry of Agriculture, who have carefully studied the questions propounded in order to assist me in furnishing reliable information, have reported that it is impossible to furnish any trustworthy estimate of the future wheat area in Russia."

Plant Alfalfa.

Now and then you will find a man who is quick to recognize a good thing when he sees it, not only to recognize it but to take hold of and appropriate it to his own advantage. That is why you will find, now and then, a man who can show you a fine alfalfa field on his ranch. One of these farmers, in response to my inquiries recently made of him in regard to the above subject, spoke much as follows:

"Get along without it? why bless you, no; without that alfalfa field I would be unable to hold down my place. Let me tell you what it has done for me. Four years ago I was clear discouraged and concluded to leave the ranch. I worked hard, but there seemed to be no returns for my labor. The amount

of hay my little ranch produced would soon be eaten by the stock, my horses were poor, my cows dried up early, the hogs seemed to have a case of chronic squeal, while my bees, generally speaking, produced only a limited amount of honey. To say the least, I was disheartened, for I had settled here with the intention to make this a permanent home for myself and my family. One day the happy thought came to me, why not try an alfalfa field? but then, I argued, it must be irrigated; it will cost a good deal to get water, reservoir and pipes, still I concluded to try it. There was a nice little spring in the pasture a short ways above the house and at that place I immediately started to develop more water. In due time I had a good stream flowing down the side-hill. I then went below this to the summit of a slight elevation above the ground I wished to irrigate, and here, with team, plow, scraper, pick and shovel, broke ground for the reservoir, which I made round, with sloping sides and about five feet deep in the center. As soon as completed the pipes were laid and water carried to the field, and now you would like to know the results. Well, they have been very satisfactory, indeed.

"I soon enjoyed the sight of a brand new ten-acre field of alfalfa; and what a grand, good sight it was to see that bright green spot, like an oasis on the desert, shine out through the dry summer months when other vegetation was withered and dry. The way that piece of land responded to irrigation's magic touch seemed to put new life in me.

"It grew very rapidly, and the time did not seem long until it had grown up and in bloom, and then what a merry hum arose from that field for the next few days; the bees fairly swarmed out on it, and gathered a fine lot of

beautiful alfalfa honey, which in point of quality is second to none produced by any honey plant in this country. The chickens thrived on the green feed, the hogs grew and fattened on it, my cows came out in their milk, in fact, everything about me gave evidence of its superiority as an all-round article of food for stock. As the result of my experiment with that field, I am still living on my ranch and am now making a good living. I have more than doubled up my stock, have considerable butter and eggs to sell, turn out several hogs for market each year, besides selling some hay now and then. Of course, I always grow some beets, piemelons, pumpkins, etc., for a variety feeding, and also a little barley or oat hay for my horses, as I don't think it a good plan to feed alfalfa to horses all the time without change. Yes, sir; I am well pleased with my experiment, and my advice is to all ranchers who can get water with which to irrigate to plant alfalfa."—A. Teen 9 T 4, in *South California Farmer*.

"Charlie Beckett has not lost faith in alfalfa by his experience with it this year," says the *Sterling Bulletin-Gazette*. "He got 112 bushels of seed from fifteen acres, besides two cuttings of hay. This will likely net him \$50 per acre from land which could be bought ordinarily for \$15. These fifteen acres have brought more revenue this year than 600 acres he had out in wheat and corn."

If Grown in Texas, It's Good.

The Texas coast country vies with California in raising pears, grapes and strawberries. The 1893 record of H. M. Stringfellow, Hitchcock, Tex., who raised nearly \$6,000 worth of pears from thirteen acres, can be duplicated by you. G. T. Nicholson, G. P. A., Santa Fe route, Topeka, Kas., will be glad to furnish without charge an illustrated pamphlet telling about Texas.

KANSAS—ANDERSON COUNTY.

(Continued from page 3.)

western part, and it is of the best quality. The stone is easily quarried and many quarries are in operation. The southeastern part of the county is underlaid with coal; and, by drilling, a supply of oil and gas could doubtless be obtained, as the indications are favorable.

I find from the report furnished to the State Board of Agriculture, that in 1893 Anderson county produced 78,000 bushels winter wheat, 1,316 bushels spring wheat, 2,188,340 bushels corn, 534,135 bushels oats, 1,928 bushels rye, 1,215 bushels barley, 120 bushels buckwheat, 39,410 bushels Irish potatoes, 660 bushels sweet potatoes, 496 bushels castor beans, sorghum sirup 21,720 gallons, 59,008 bushels flaxseed, 16,500 pounds broomcorn seed, 5,389 tons millet and Hungarian, 144 tons milo maize, 806 tons Kafir corn, 50 tons Jerusalem corn, 17,876 tons prairie hay, 10,027 tons tame hay. The number of acres in tame grasses are: Timothy, 18,673; clover, 2,926; blue grass, 1,828, orchard grass, 9; other tame grasses, 311 acres. Prairie under fence in 1893, and not in cultivation, 68,575 acres.

The live stock statistics for 1893 are: 9,250 horses, 1,255 mules and asses, 5,906 milch cows, 15,087 other cattle, 782 sheep, 15,787 swine. The products of live stock for the same year were: Wool clip, 8,275 pounds; cheese, 19,390 pounds; butter, 251,093 pounds; value of animals fattened and slaughtered or sold for slaughter, \$695,699; value of milk sold, other than that sold for butter and cheese, \$5,403; value of poultry and eggs sold, \$37,977.

Value of garden products marketed for 1893, was \$4,378; value of horticultural products marketed, \$25,217; value of wood marketed, \$13,619. Acres in vineyard, 45; gallons of wine manufactured, 3,066; value of wine, \$3,066. Number of stands of bees, 984; pounds of honey produced, 8,213; pounds of wax produced, 60.

Number of fruit trees in bearing for the

religious denominations there are eleven. The manufacturing interests of Garnett are represented by one flour and grist mill, one planing mill, one furniture factory and one canning factory. The company oper-

the company are, President, Geo. W. Iler; Secretary, Samuel Crum; Treasurer, John R. Foster. The furniture factory is conducted by the DeWolf Manufacturing Company, with a paid in capital of \$20,000;

see, Louisiana, Colorado and other points. Garnett has three banks. The First National bank, capital paid in \$50,000, surplus fund \$12,500; established in 1870; Edward L. Foster, cashier. The Bank of Garnett, organized in 1888; capital paid in \$50,000; Walter Latimer, cashier. Anderson County National bank, paid up capital \$50,000; Geo. W. Hunley, cashier. Each of these banks does a general banking business, and makes the interests of stockmen a specialty.

The real estate interests are in the hands of reliable men, such as M. L. White, Geo. W. Iler, E. Sewell, S. B. Rohrer and others. Prompt attention is given to inquiries concerning Anderson county property. The Oak Leaf and St. James are the leading hotels. The Missouri Pacific and "Santa Fe Route" furnish railway communication to all parts of the country.

In illustrating this article I have endeavored to give a showing from "real life," believing it to be the best way to reach the mind and impress thereon the fact that it is good to live in a land where such things are in actual reality. The cuts explain themselves, and the photographs from which they are made is the work of Garnett's peerless artist, Mr. Hunter. The execution of the cuts seemed to be first-class, yet they do not show out as clear and distinct as I would like to have had them.

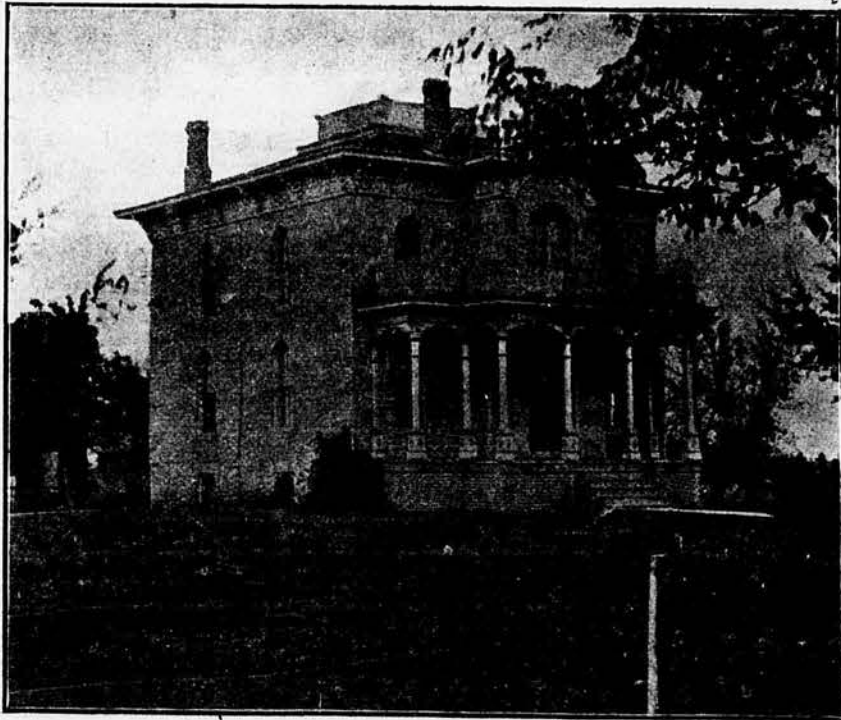
Garnett is well supplied with newspapers and sample copies will be sent to any address upon postal card request. They are the *Republican-Platdealer* (official county paper), by Howard M. Brooke; *Garnett Eagle*, by W. A. Trigg; *Garnett Journal*, by J. T. Highley; *Kansas Agitator*, by W. O. Champe.

THE COUNTY FAIR.

Elsewhere is presented a view of the corn exhibit made at the recent county fair. The exhibit consisted of eleven loads of Anderson county corn, the product of 1894. The four loads appearing nearest to the front, with rear end of wagons abreast are the premium loads, and they run from



Residence of Walter Latimer, West Fourth Avenue, Garnett, Kas.



Residence of Joe Cary, District Clerk, West Fourth Avenue, Garnett, Kas



Residence of John R. Foster, in southwest part of Garnett, Kas.

year 1893: Apple, 165,455; pear, 2,030; peach, 40,204; plum, 6,708; cherry, 18,150. Number of fruit trees not in bearing for the year 1893: Apple, 59,777; pear, 1,805; peach, 5,741; plum, 5,140; cherry, 4,536. Small fruits in the county: Raspberries, 15 acres; blackberries, 33 acres; strawberries, 19 acres. Artificial forests: Walnut, 15 acres; maple, 75 acres; honey locust, one acre; cottonwood, nine acres; other varieties, 1,025 acres.

There are in the county over fifty church organizations, representing the African Methodist, Baptist, Christian, Congregational, Dunkard, Free Methodist, Methodist Episcopal, Presbyterian, Roman Catholic, Seventh Day Adventist, Lutheran and United Presbyterian. Church edifices number over thirty.

Garnett, the county seat, is situated north and east of the center of the county, and has a population of about 3,000. She occupies a commanding site, from which the country round about can be seen for miles distant, in almost every direction. Her streets are broad, well-arranged and lined on each side with beautiful shade trees; and the blue grass lawns, of "emerald hue," are neatly kept, presenting an attractive appearance to all passers-by. The business part of the city is substantially built, mostly of brick and stone, while the resident portion will compare with older and larger cities. School and church privileges show clearly that the people of Garnett are abreast with the times in every respect. In her schools, thirteen teachers are employed, and of the



Residence of Peter Brandt, West Fourth Avenue, Garnett, Kas.

ating the canning factory was organized in 1886, with a capital of \$20,000; they can peas, corn, tomatoes and other vegetables in their season, and employment is given to from 100 to 125 persons. In a full run the daily output is 15,000 cans. Officers of

they make a specialty of church and bank furniture and fixtures. This company began work six years ago and have built up a profitable trade. Besides supplying Kansas trade, they are filling orders from Nebraska, Iowa, Missouri, Texas, Tennes-

left to right, first, second, third and fourth. The first premium went to Geo. B. Wagner, four miles east of Garnett, yellow corn, planted the last of April, fifteen acres, average yield per acre fifty bushels. Second premium was given to J. R. Killough & Son, two miles east of Richmond, white corn, planted April 10, ninety acres, average yield per acre fifty bushels. Third premium went to Jacob Askins, five miles northwest of Garnett, white corn, planted about the middle of April, thirty acres, average yield per acre fifty bushels; he also exhibited a load of yellow corn, of which he had fifteen acres, average yield forty bushels. Fourth premium was awarded to W. L. Morris, six miles northwest of Garnett, white corn, planted 1st of April, sixty acres, average fifty bushels per acre. The other exhibitors were J. J. Wagner, six miles east of Garnett, load of white corn, thirty acres, average forty-five bushels; L. N. Lewis, three miles southeast of Garnett, load of mixed corn, thirty acres, average sixty bushels; G. W. Wehmeyer, four miles southeast of Kincaid, load of yellow corn, sixty-five acres, average forty bushels; F. Hobart, five miles southeast of Garnett, load of yellow corn, forty acres, average fifty-five bushels; L. J. Fuller, three miles northwest of Garnett, load of yellow corn, six acres, average sixty bushels; A. W. Bennett, five miles southwest of Richmond, load of white corn, twenty acres, average sixty bushels, planted 8th of May. From this display a person can readily see that Anderson county is a "sure enough" corn country.

The fair was well attended, exhibits

good, and resulted in financial success to the management. Receipts from tickets and other sources amounted to \$2,292.22. Paid out in premiums and other expenses, \$2,192.10, leaving net cash in treasury of \$100.12.

The county has quite a number of fine stock breeders, in horses, cattle, sheep, swine and poultry. More concerning them will be given in a subsequent issue of this paper. I will say here, however, that the breeders of Anderson county handle none but the best, so that those who expect to locate here will have no trouble in procuring choice stock in starting their herds.

Colony, Westphalia, Greeley and Kincaid are the leading towns of the county, outside of Garnett. Each have newspapers and a good trade, and are in the midst of choice lands. Besides these there are several smaller trading points of more or less note, but lack of space prevents me from going into detail. Suffice me to say that the business men of Garnett, and the county, are conservative, yet are wide-awake, energetic and progressive in everything that will add to or create values for the interests of this part of the State.

Business, in all branches, is beginning to improve, and with the revival of commercial interests, real estate cannot and will not remain at the prices now held. There is more inquiry for real estate now than there has been at any time for the past several years, and lucky, indeed, is the person who invests his surplus money in Anderson county lands at prices as they now range.

Garnett and Anderson county are only two hours' ride from Kansas City, the greatest stock market in this country outside of Chicago. With the best of markets at your very door, ready sales can be made at any time and top prices the result. The receipts of live stock at the Kansas City stock yards during the month of August (last month) were: Cattle, 200,663; calves, 16,421; hogs, 224,309; sheep, 40,642; horses and mules, 4,077. It took 11,248 cars to bring this stock to the Kansas City market. The average weight of the hogs marketed was 199 pounds. The receipts of cattle at Kansas City for eight months, from January 1 to September 1, were 1,014,851 head, and the only market in this country that showed an increase of cattle receipts over and above the corresponding period of 1893.

Money is plentiful despite the talk of its scarcity, and the opportunity to place it with profit to the owner was never better than at the present time. And, as Mr. Chas. S. Gled says: "The time is at hand when there is to be a general and steady inflow of people seeking better land, better climate and better conditions generally than they have hitherto had in this country or in Europe. There are few more entirely new regions to be opened by new railroads or acts of Congress, and everywhere there is a rapid closing up of the ranks. Room is wanted, and we have it here in Kansas. It is bound to be applied for, and every citizen should feel a large degree of personal responsibility in the matter of getting only the best class of new-comers. Every Kansan knowing a good farm that may be had at a bargain should make a personal attempt to have it purchased by some newcomer who really knows the farming business, and who has thrift, energy and clear grit. A half million such people added to our population in the next five years is by no means an impossibility." HORACE. September 22, 1894.

Allen County Fair.

EDITOR KANSAS FARMER:—The Iola (Allen county) fair is now over. It was a good fair in every respect, and the exhibitions surprised the officers.

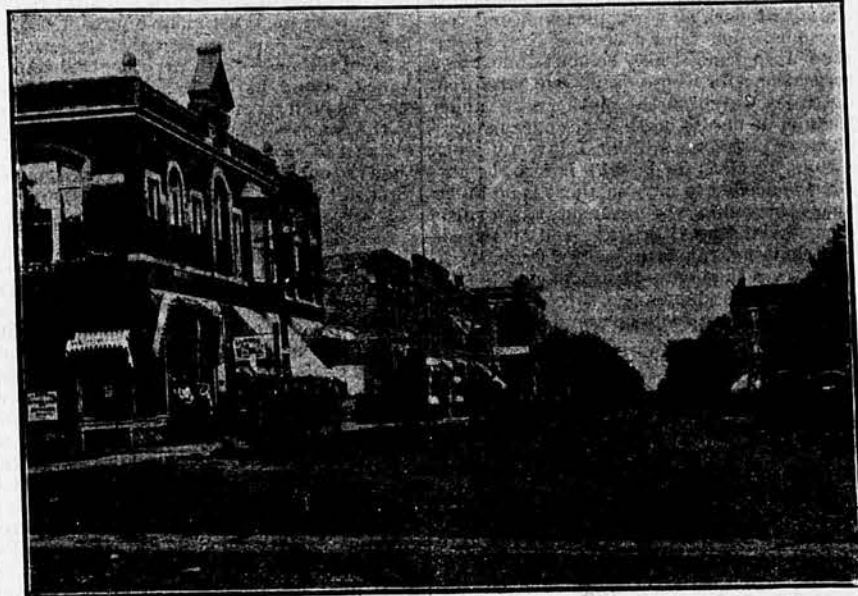
The Iola Register had an office on the ground and issued a smart daily "fair edition," which was an honor to the fair.

The association had four large tents that were filled with exhibits. One held the grain, another the fruit, another the fine arts and fabrics, flowers, etc., and in the other one the merchants of Iola made a display.

The exhibit of fruit cannot be excelled in Kansas and was under the control of the horticultural society and was arranged by their expert, Mr. Pancost. The display of corn was something wonderful. A wagon load of twenty-five bushels, that was husked from three shocks that were cut from one-fourth of an acre, was shown by D. Sims. Mr. Connell showed three bushels of white ears, measuring fourteen inches and over. Mr. Mull had fifty-six entries and had some mammoth beets. Norton & Son, of Moran, won on best vegetable exhibit, which was an honor to their township. Among their specialties was the best shaped Early Golden sweet potatoes I ever saw, some mammoth onions and mammoth specimens of the Georgia Iron-clad, Cuban Queen, White and Green Seminole and the new wonderful sugar melon, the McIver, also some Early Hackensack muskmelons. These attracted lots of attention, as they were the largest and best raised in the county. They also had a full line of field

seeds and eleven varieties of fine potatoes. Mr. Norton raises the Early Freeman for early, Early Kansas for medium and market and the new Late Irish Daisy for late. We have never seen the equal to the Early Freeman for lack of waste and beauty. Mr. Norton raises his melons on old ground and afterwards transplants them. One Cuban Queen produced a twenty-two pound melon sixty days from the planting of the seed. A forty-pound Iron-clad, seventy-four days from transplanting, and a Seminole of twenty-five pounds in seventy days.

J. T. Treadway showed twenty-one head



Garnett, Kansas.—Oak Street, looking north, from west side of square.

of Duroc-Jerseys. Harry Bolsen, ten horses, ten Durhams and ten Poland hogs. C. A. Jabbett two fine stallions; Abe Mull had fifty-six entries—twenty-two stock, thirteen grain, grass and seeds and eighteen vegetable entries.

Twenty-four entries in all in the cattle department; seventy-three horses; poultry, twenty entries; sheep twenty; hogs about sixty; textile fabrics, 299; horticulture, 185; eleven varieties of grapes and thirty-six varieties of apples.

The agricultural exhibit consisted of 275 entries.

The exhibit to attract the most attention was the Shropshire sheep exhibited by Norton & Son. These are the only specimens of the breed in the county and are the ones shown at the Moran fair and commented on two weeks ago in the FARMER. They won all in class and sweepstakes. One of the rules laid down to the judges was that they must consider the best breed for Allen county, and the rain storm the night before they were judged played sad havoc with the coarse-wools, while the fat, closely-wooled Shrops shed the water like a duck. It was a great boom for the Shrops (nine of them) and Mr. Norton is to be congratulated upon being the owner of so choice a pen. They made their original purchase through the medium of the

The Lightning Hay Press.

Reports from almost all grass districts in this country show that there will not be an average of over 50 per cent. of the hay raised that there has been in former years. This will, of course, create a high market to start with, and the tendency will be upward all this winter, and it will pay those of our readers who are interested in producing this article to carefully save all they possibly can of this crop. The only way to do this successfully is by baling same early, while it still retains the color.

The illustration on page 5 is of the cel-

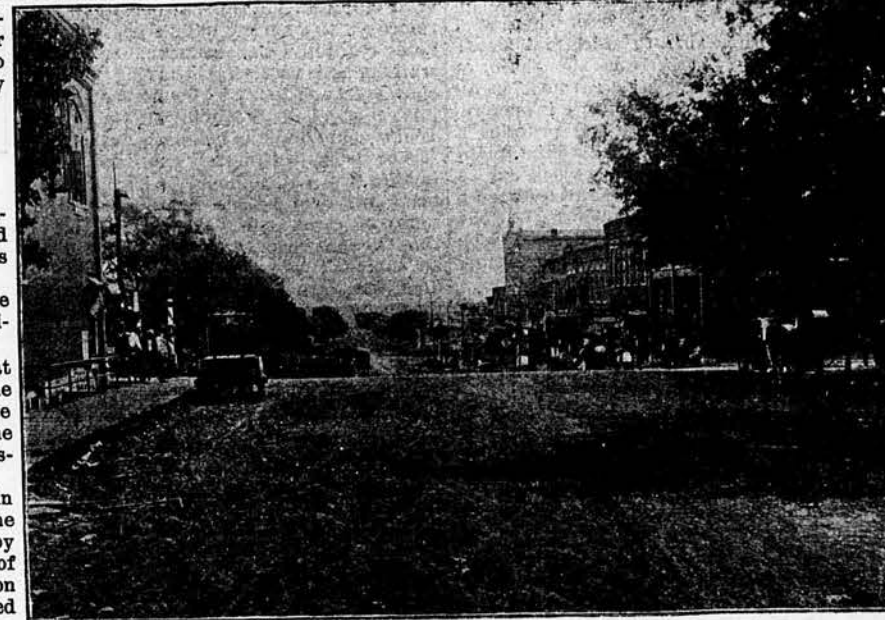


brated Lightning hay press, manufactured by the Kansas City Hay Press Co., of Kansas City, Mo. This press was the first full-circle all-steel press ever placed on the market, and its success wherever it has been introduced is as good a testimonial as could possibly be secured.

The manufacturers claim that it has the largest feed opening in use, enabling the feeder to make unusually large charges, especially is this important when baling in long and rank timothy and slough grass. Also that the power, which is the most important part of all presses, is the simplest, strongest and most powerful. No links, cogs, slides, chains, pulleys or other intricate machinery to get out of repair or to retard free action of the pitman. The baling-case and tying-chamber are made of steel throughout. The Lightning is the simplest, strongest, most durable and most rapid baler put on the market. This is a very strong claim but they follow it with a guarantee that "the Lightning shall give perfect satisfaction in every respect."

The Lightning, though made of metal throughout, is yet the lightest press on the market, either in weight or in draft, whether in operation or on the road. The pressure exerted each time the pitman is in is equal to about 30,000 pounds. Thus it is necessary that every part of it should be well made and of good material. This is guaranteed fully.

If any of our readers are interested in



Garnett, Kansas.—Fifth Avenue, looking east, from south side of square.

KANSAS FARMER, of Kirkpatrick & Son, of Hoge, Kas., and will soon add some more from the same flock.

The races were good. Bud Dille and Col. Bruce paced on Wednesday. Dille won, time 2:25, 2:30 and 2:30.

Political speaking by the big guns of the State was also an important feature.

The association made money and every one is well pleased.

CLARENCE J. NORTON.

Morantown, Kas.

Get up a club for KANSAS FARMER.

this class of machinery we are pleased to recommend the firm as one worthy of your business, and the goods they make as reliable and to be just as represented by the Kansas City Hay Press Co.

GEORGE W. ILLER,
Real Estate, Loan and Insurance Agent,
GARNETT, KAS.

I have farms and unimproved land for sale in Anderson county, ranging from eighty to 1,000 acres. Also, improved and unimproved city property in Garnett. Call on or address me for descriptive list and prices. I also pay taxes, make collections, examine titles and make abstracts. Established 1871.

J. T. LONG,
LANE, KANSAS,
General Immigration Agent
FOR THE
Missouri Pacific and Baltimore & Ohio R'ys.
I deal exclusively in bargains. Write or wire me for prices.
J. T. LONG, Lane, Kas.

Reform is The Watchword
XXXXXXXX

But please remember that, in these uncertain times, the cautious investor wants to buy something he can stand upon and that does not fade away under the pressure of panics.

The undersigned has broad acres for sale, in tracts and on terms to suit rich or poor.

These lands are situated in the identical locality where Adam and Eve made their great mistake—eighty miles southwest of Kansas City, in Eastern Kansas. Part payment can be made on some of these lands in thoroughbred stock—horses, cattle, hogs or sheep. Send for circular. Mention FARMER.

XXXXXXXX
WALTER LATIMER, GARNETT, KANSAS.

F. S. BENNETT,
Real Estate and Immigration Agent
WESTPHALIA, KANSAS.

I have choice timothy, clover and blue grass lands, near markets, for sale very low and on favorable terms.

Good markets, roads, climate, fruit and tame grasses. No crop failures. Grand stock and grain country.

STUDY OUR LOCATION.

See the bargains. Land purchased now will double its value in five years. Send for lists.

P. S.—Send for free copy "Eastern Kansas Emigrant."

List of Bargains!

FOR SALE BY

M. L. WHITE
REAL ESTATE, LOAN
AND ABSTRACT AGENT,
GARNETT, - - KANSAS.

1—A fine farm of 1,200 acres, situated half mile from Kincaid, on the Missouri, Kansas & Texas and Missouri Pacific railroads. 400 acres in cultivation, 400 acres in meadow and 400 acres in pasture. Two large dwellings and barns; good orchard and forest trees. The improvements on this farm cost \$6,000. This is one of the best locations in the county, situated in one of the best locations in the Eastern part of this State, on the Missouri, Kansas & Texas railroad, running from Kansas City to Texas.

2—I have the farm described below, for sale, consisting of 1,120 acres: 400 acres in cultivation, 380 acres in meadow, and 240 acres in pasture; one large two-story dwelling, in good repair; two large barns. This is a fine farm, well located, four miles from Welda, a station on the Atchison, Topeka & Santa Fe railroad.

3—A farm of 200 acres for sale. 150 acres in cultivation; good orchard and fair house; two and a half miles from station on the Missouri Pacific railroad.

4—A fine farm of 330 acres; good stone house with seven rooms and cellar; barn, 40x60; 10 acres of orchard, 90 acres in timothy, 80 acres of timber; never-falling water; situated seven miles from Garnett.

5—160 acres of unimproved land, two and a half miles from Garnett. A bargain.

6—165 acres, improved farm in Sugar Valley, eight miles from county seat. Five acres timber, 100 acres in cultivation; good orchard; fair house and stable; two good living springs and two wells.

7—160 acre farm, three miles from station on Southern Kansas railroad. This farm is enclosed with a good fence; a good artificial pond on the land. About 40 acres in cultivation. This is a fine piece of land and will make a good farm; all tillable.

8—265 acre farm, 180 acres of which is in cultivation, 40 acres timothy and clover, balance of farm pasture and meadow; story and a half frame dwelling, a fine large barn. One of the best improved farms in the township; four miles from the county seat. This will make a nice home and is a bargain.

9—One of the best stock and grain farms in the country; 880 acres, 400 acres in cultivation, 200 acres in meadow and 280 acres in pasture. Good two-story frame dwelling with eight rooms. Fine large barn 50x100 feet; corn-crib 8x100 feet; granary 14x16 feet. The above farm joins the town of Westphalia. Is for sale cheap and on easy payments.

I also have several smaller farms, from 40 to 160 acres, improved and unimproved, ranging in price from \$12.50 to \$25 per acre.

The farms above described can be bought cheap for cash or on easy terms.

Any special information wanted in regard to the list above described, write and I will explain fully as to price, terms and quality of soil.

I have been a resident of Anderson county since 1857, and have been engaged in the real estate and abstract business for the past ten years, and feel competent to make estimates as to value and quality of real estate in this part of the State.

Address M. L. WHITE, Garnett, Kansas.

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.

The Reign of Law.

BY HENRY W. ROBY, M. D.

[The following ode was written for and read on the occasion of the laying of the corner-stone of the new Shawnee county court house, at Topeka, September 22, 1894, by Henry W. Roby, M. D., editor of the "Family Doctor" department of the KANSAS FARMER.]

It was God's first thought on creation's morn,
When the sun was lit and the stars were born,
When the deep foundations of earth were laid
And the glorious firmament displayed,
When the mountains were rolled to their resting place

And the valleys curved on the planet's face,
When the rolling seas, with their ebb and flow,
Were called from the caverns down below,
That an endless sequence of law should run
From atoms up to the central sun.

The Master Builder who formed a mind
Like to His own for all mankind,
From the molten quarries of chaos old,
And cast it, quickened, in beauty's mould,
Surveying the works of His own hand, saw
That the Ruler of worlds must be maker of law;
And men have seen in the lapse of time
That the thing on earth that is most sublime;
The thing that betokens no break nor flaw
In the frame of things, is the reign of law.

And great souls burdened with deeper thought,
With wisdom and inspiration fraught,
Galileo, Kepler and Plato saw
That the corner-stone of the world is law,
With statutes graven on orbs of light;
Statutes brodered on robes of night;
Statutes flashing from rolling waves;
Statutes calling from yawning graves,
While over the universal whole
God's thunders of execution roll.

Down the ages we see them come,
The lightning's banner, the thunder's drum,
The rolling sea and the river's flow,
The summer's green and the winter's snow,
Moses' wisdom and Aaron's rod,
All executing the laws of God.

Down the ages we see them go,
The summer sky with its banded bow,
Clouds that lower and storms that rage,
Lisping infant and limping age,
Falling leaves and the browning sod,
All executing the laws of God.

Down the ages we see them come
With blare of trumpet and roll of drum,
With shotted cannon and gleam of steel,
While furious foemen charge and reel,
And silent messengers leap and run
That the high behest of the law be done.

Down the ages we see them come
From soundless silence, from city's hum,
Beggars and bondmen, clowns and kings,
Reaching alike for that such of things
That shall lead them leaping from endless night
To the midday glory of law and light.

Down the ages we see them come,
A countless people—all dead, and some
Wrapped in their ornaments old and gray
Are struggling back to their primal clay;
Some from the conquering hero's track,
Some from the deep sea flowing back,
Some smiling to us from the blooming sod,
All executing the laws of God.

Down the ages we hear them call
Zoroaster, Mohammed, Paul,
And that greater than Paul, with the high
decree,
Of "Peace, be still!" unto Galilee.

Round about us we see them stand,
A sacred order in every land,
Sworn to be ever true and just,
In the least as well as in the greatest trust.
They are the members of bench and bar,
For God's vicegerents, these true men are,
And peace shall reign in this glorious land
While these lions of law at the gateway stand.

As our banner floats in the autumn breeze,
Midway 'twixt the morn and the sundown seas
In this fertile valley beside the Kaw,
In the name of eternal truth and law,
This Temple of Justice we dedicate
To the great I Am, the Increate,
Author of law, and the source of good
To our universal brotherhood,
And our brethren tarry while you and I
Stretch forth our hands to the arching sky
And crave in the humblest human way
A blessing on all that we do to-day,
And a blessing on all that shall yet be done
In the name of Justice, beneath the sun.

THE SEWING MACHINE.

While this useful article is one of woman's greatest blessings, it is oftentimes made her greatest curse. Many a woman spends hour after hour, day after day, on sewing that is really useless and that would never be done but for the machine. I sometimes think that sewing occupies as much time now as in the days of our grandmothers. And as all necessary garments were worn then as now, and many more of them home-made, it follows that the saving of time on necessary work is consumed by that that is unnecessary. When such is the case the machine is far from a blessing, for if there is no economy in time there is none any other way. Surely not in strength, that so many need to save. Machine running is especially fatiguing to

weakly women and often followed by most disastrous results, as I know from sad experience. For some years I did common sewing by hand, hiring other done, because I was afraid to own a machine. Consequently, when I did venture to place one among my household possessions, I sought to use it judiciously. And it has proved to me a great help and one which I am not afraid to use in all family sewing, and if more women would take similar precaution less harm would arise from its use.

"I've run the machine steady all day and my back, or side, does ache so!" is the too frequent cry. Now, I never do a continuous day's sewing. It is not necessary. A change of work is more pleasant and less tiresome, and family sewing can be arranged so that it may be done almost as a recreation; for there is no one who does not enjoy watching the cloth speed under the nimble needle, until it becomes monotonous or tiresome. Then I lay my work away. If cloth is bought before the garment is needed to put on there is no hurry about the making. I never buy three yards of material for a little dress and two yards for trimming. It is a lack of economy in more ways than one—in a money outlay for extra goods, and even the thread bill for so much trimming foots up alarmingly. And much worse than the cash expenditure is that of time and strength, that are often sadly needed elsewhere. It is not only the making of such garments that takes the time, but think of the future hours that will be consumed in ironing these fancy creations of tucks and ruffles and puffs.

To be sure, we all like to see our little ones look dainty and nice, but could not this extra time be otherwise devoted to them with more real benefit than by bedecking them with furbelows, and sowing seeds of vanity in their young hearts? When the sewing machine is thus employed it is put to abuse rather than use.

Make all garments neat, but plain, and quit sewing at the first sign of fatigue. Keep the machine well oiled and it can be easily kept in motion with one foot. Then change occasionally from one to the other. In this way I do not think a moderate amount of machine sewing will injure the most delicate. In cold weather place the machine near the fire a while before beginning work. If for any reason it begins to run hard, determine the cause at once and remedy it. Friction is not only wearing on your own constitution but on that of your faithful employe.

Where time is an important item, as in my own case, and as it seems to me it always ought to be when there is so much in this world to do, it is well to plan so as to save time, even with the plain sewing. It is more expeditious to make two similar garments at a time than to make each by itself. The hemming, the gathering, can be done with only the one change of attachments. I rarely cut the thread from the needle from the time I begin work until I quit. I have seen young sewers—old ones, too, but they are usually of the kind that won't learn—who take the work from the machine with every seam. This is a great waste of thread, as well as time. Even if but one garment is being made, a plain child's dress, for instance, one can run from a skirt seam to sleeve, then to an under arm seam, across both shoulders, down the other side, to skirt and sleeve again, cutting pieces from the chain of work as needed, and lo! a garment is almost finished before the work is once removed. With a little skill and practice a simple dress or apron, a man's shirt, plain under-garments and all such work can be done without any basting. I rarely touch a needle in common sewing except for buttons and button-holes, although I have seen those who baste until the machine seems entirely superfluous.

Yes, the sewing machine is one of woman's greatest blessings; but to be so she must use her brain in conjunction with it.

IDA KAYS.

A Country Luxury.

Cream, which is within the reach of country people, should be liberally supplied at meals. Here, however, the good housewife is apt to mistake, and stints in its use at table, that the churning may be larger, not reckoning that cream in the preparation of vegetables, or on fruit, or as sauce with puddings, is quite as delicious and even more healthful than its equivalent in the butter it would make, while the slightly augmented sale of butter that may be the result of such saving is poor pay, if it be to give, as it usually is, a superior for an inferior article, and that, too, with the added expense of time and labor.

I know no vegetable that is not improved by a dressing of cream, while other ways for its use are multitudinous. Besides the indescribable deliciousness of fruits of every kind imbedded in its richness, there is cream toast, and poached eggs in cream, and pie made of it. For, with the crust made of cream, all opprobrium attached to the "national pie" must be removed. It is then no longer the dyspepsia-encouraging, lard-and-water mixture that it has the reputation of being, but healthful and inviting

enough to be eaten with impunity by the child as well as the adult, and even the dyspeptic could partake of this when any other would be forbidden.

To make the pie crust put into enough flour for one pie a pinch of salt and nearly a teacupful of thick cream. Mix, working the flour into it until it can be rolled easily and is of the consistency common to pie crust. Pies made in this way should be eaten—as all pies are the better for being—on the day that they are baked. Unless in the case of mince—and mincemeat may be so constructed as to preclude all fear of ancestor-haunted dreams—it is not the filling, but the crust of pies which is objectionable. Then, with the crust made of cream, tender and sweet, but not greasy, a sensibly treated filling of fruit or other substance, behold a pie fit for an epicure and wholesome enough for a hygienist; so simple also in the construction of its pastry—the hardest part of cookery to many a learner—that the tyro cannot despair at perfection in the "knack" of it.—*Jenness Miller Monthly.*

Punishment of Children.

It is said of the mother of Murillo that she loved her children into obedience. There are some women who have a genius for loving and for inspiring love, as others have a genius for painting. They are the rare and noble souls sent, perhaps, to show us of what human nature is capable could it always be at its best. These are able to govern their children through their affections. It may be that through the subtle influence of heredity the youthful minds are peculiarly susceptible to this gentle guidance. Happy, indeed, are those who can make love the fulfilling of the law. It is the goal toward which we should strive. If we do or abstain from doing any action because we wish to please or fear to displease one we love, we act from a far higher motive than if we simply desire to gratify ourselves or to escape from punishment. It is the ideal that we should keep before the children, leading them from the seen to the unseen, from the wish to please us to the endeavor to do right because it pleases God and is in conformity with His laws. If we can find their obedience upon the rock of principle we need not fear for them in after life.

The question sometimes arises whether children should be punished by others than their parents. Punishment is not an end, but a means to an end—the curing of the fault. If I see the property of another in peril, is it not my duty to save it if he be not near to take care of it himself? Yet I must be very careful not to injure it so as to make him wish I had left it alone. If he has made me responsible for it, it is for me to do the best I can under the circumstances. When parents delegate their authority, as they do to teachers and to relations and friends with whom they leave their children in charge, the power of correction or punishment, for the words ought to be interchangeable, goes with it. Otherwise it is best that the offender should be dealt with at headquarters. Under our present school system it is difficult for the parents to select the persons to whom they must entrust the education, so-called, of their children. In this hard strait the only remedy is to keep the child's confidence, to note carefully the influence which the training he is receiving is having upon his character, and to try to counteract any injurious effects by redoubled efforts at home. While upholding the teacher's authority as far as it is legitimately exercised and no farther, the child should be encouraged to bring his own actions to the test of his sense of right and wrong, which by the time he has reached the school age should be sufficiently developed to guide his conduct with some degree of certainty. The teacher means to do her duty faithfully, but she is often tried beyond her strength. Having more pupils than she can properly teach or care for, she is apt to be hasty in her decisions and unwise in her judgments. It would help her very much if, instead of criticising afar off, the parents were to go to the school occasionally or to ask her to their homes and talk over with her the dispositions and idiosyncracies of her pupils and let her into the secret of what they had found the best means of managing them.

As punishment is such a delicate and difficult operation that it taxes the wisdom of parents to the utmost to perform it so that it may effect the object in view, the power to inflict it should be jealously guarded. Elder brothers and sisters should not be allowed to tyrannize over younger ones, and servants should be forbidden to punish except by reporting the culprit. Punishments other than a verbal reproof should be administered only by the parents.—*Ladies' Home Journal.*

"Five years ago I was taken so ill with rheumatism that I was unable to do any work," writes Peter Christensen, Sherwood, Wis. "I took three boxes of Ayer's Pills and was entirely cured. Since that time I always keep them in the house." They are easy to take.

IVORY SOAP

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FOR THE BABY.

THE PROCTER & GAMBLE CO., CINCINNATI.

Trifles in the First Year's Nursing.

The family physician is usually a reliable sanitary authority, frequently the only one in the place, but it is not always that his advice is available, and, perhaps, more often, it is not sought. Hence it is proper and necessary that the mother should have a ready and well-arranged fund of knowledge of her own from which to draw at all times, in order that the hygiene of the nursery may be perfect, and that many of the ills and vicissitudes which seem now to be inevitable to early childhood may be averted, or at least their evil consequences mitigated.

It has been said by one eminent in the practice and teaching of pediatrics that "so serious are the diseases of childhood that one child in five dies within a year after its birth, and one in three before the completion of the fifth year. These facts afford conclusive arguments for enforcing the importance of closely watching every attack of illness that may invade the body while it is so frail."

In order to properly estimate the signs of disease and approaching illness, a careful and constant study must be maintained of the well child, and every attention given to those minutiae which will insure a healthy and uninterrupted bodily growth and development.

Perhaps improper feeding is responsible for more disease among babies and young children than all other causes. Every child, if possible, should be nourished with mother's milk, at least until the eruption of the first teeth indicate such development of the digestive organs as is necessary to carry on the digestion of a simple diet. If, however, the child be fed with artificial food, the best of which is, beyond doubt, cow's milk, scrupulous cleanliness is required to prevent the formation of mischievous ferments.

The care of the bottle itself is a matter of no small importance; it should always, after use, be thoroughly scalded and rinsed, a little soda being added to the water, and two or three bottles kept in use, to insure against the use of one containing ever so small an amount of ferment. The rubber tube should never be used, on account of the impossibility of thorough cleansing; but instead, a large nipple which fits over the mouth of the bottle, care being taken, in case of young or sick babies, that the hole through which the milk issues be very small, so that at least twenty minutes be consumed in drinking an ordinary allotment of milk—two to three or more ounces, the advantages being that the food is admitted into the stomach in very small quantities at one temperature continuously, and in the presence of the mother or nurse.

Milk should not be allowed to stand in

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unclosed vessels, except as immediately needed; especially should it not be allowed to remain thus in a sick room, in a room where there is vegetable matter, or where there are soiled napkins or bodily discharges of any kind.

Every baby should be offered an occasional drink of cold water. If the purity of the water is suspected, it should be boiled, a small quantity of salt added, so that it will not taste flat, and placed in a cool place or near ice. Iced water should not be given to babies on account of possible impurities in the ice and its tendency to chill the stomach.

In selecting clothing for infants attention should be given to warmth, softness, uniformity of protection, lightness in weight, etc. The underclothing should be of soft wool for both winter and summer, except in hot countries, since the wool is not heavy, keeps the temperature of the body even and prevents chilling. Garments should not be cumbersome, should not fit too snugly and should cover all parts of the body evenly. A cross baby, if not sick, is in discomfort from some burdensomeness of dress usually, frequently a too tight band, which is a superfluity after the first month or two of life.

Rubber or other impervious accessories to dress should never be used. They are not only a source of uneasiness to the child, but may induce chilling and thus cause sickness. Let the dress be such throughout that the utmost possible freedom of the limbs and of the organs of respiration and of circulation be maintained. A slight amount of restraint and pressure may not only hinder free circulation and free motion, but may result in permanent deformity.

A morning bath in warm to tepid water is one of the healthful measures of which the baby should not be deprived. Generally a careful sponge bath with rain water and a little castile or other pure soap is sufficient, although at times the child should be put into the bath and allowed to stretch its limbs and enjoy the freedom of release from its clothing. The enjoyment and exercise insure a healthy reaction, which is encouraged and promoted by thorough drying with a soft towel without rubbing, and, where necessary, by powdering. For this purpose vegetable powders should not be used on account of their liability to fermentative changes. Talc or zinc powders are probably the best. The bath should not be given too soon after feeding, for fear of indigestion, yet not with an empty stomach, lest the reaction be not good.

The baby should have exercise in the open air and in the sunshine. For this purpose it should be warmly clad in winter and amply protected from the direct heat in the summer. No "toughening" regimen is ever advisable, lest injury result. The house should always be thoroughly ventilated and should admit the sunshine freely.

It has been said that "a place that cannot be made wholesome by sunlight, air and cleanliness without disinfectants should not be occupied." The nursery should be the brightest and sunniest room in the house, and all the surroundings of the child from its infancy should be healthful and cheerful. The strong child is the prototype of the strong man, and elements of strength and resistance to disease are added and multiplied by rearing the child according to the tried and approved laws of health and implanting within its own bosom a knowledge and respect for the laws which govern the operations of its own body commensurate with the respect which is nurtured for the laws of the state.—*The Mother, in Nursery Guide.*

"For years," says Capt. C. Mueller, "I have relied more upon Ayer's Pills than anything else in the medicine chest to regulate my bowels and those of the ship's crew. These pills are not severe in their action, but do their work thoroughly."

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.

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,
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Get up a club for the KANSAS FARMER.

The Young Folks.

Wanted, Men.

Bring me men to match my mountains,
Bring me men to match my plains,
Men with empires in their purpose
And new eras in their brains;
Bring me men to match my prairies,
Men to match my inland seas,
Men whose thought shall pave a highway
Up to ampler destinies;
Pioneers to clear thought's marshlands
And to cleanse old error's fen;
Bring me men to match my mountains—
Bring me men!

Bring me men to match my forests,
Strong to fight the storm and blast,
Branching toward the skyey future,
Rooted in the fertile past;
Bring me men to match my valleys,
Tolerant of sun and snow,
Men within whose fruitful purpose
Time's consummate bloom shall grow;
Men to tame the tigerish instincts
Of the lair and cave and den,
Cleanse the dragon slime of nature—
Bring me men!

Bring me men to match my rivers,
Continent cleavers, flowing free
Drawn by the eternal madness,
To be mingled with the sea;
Men of oceanic impulse,
Men whose moral currents sweep
Toward the wide unfolding ocean
Of an undiscovered deep;
Men who feel the strong pulsation
Of the Central Sea, and then
Time their currents to its earth throbs—
Bring me men! —Sam Walter Foss.

The Play House.

Oh, where are my chickens?
They surely have fled,
For there in the corner
Is a queer dollies' bed.
And here is a table,
Set out with mud cakes,
For dollies, one, two, three,
Four, five, six plates,
There is carpet and cushions,
And boxes for chairs,
And up in one corner
A pole for a stair.
Old dresses and bonnets,
And bottles of water,
Show the hen-house was taken
By my two little daughters.

CREEDE.

LIFE IN A DREARY DESERT.

It was my evil fortune, writes Mrs. Robert Louis Stevenson in the *London Queen*, to dwell in a mining camp in the Reese river district, an arid stretch of alkali desert, where no green thing was to be seen on the face of the earth. Beef and bread (I cannot imagine on what the cattle fed), bread and beef was almost the sole diet at Reese River. There was little else, except when, on great occasions, and at a vast expense, some withered fruit or withered vegetables were imported from California or Salt Lake City.

Every man and woman (of the latter there were only some half-dozen) was his or her own servant. I thought it very strange at first to stand in my doorway, which overlooked the motley town, and see dapper young gentlemen hanging up their dishes, pans and kitchen towels at their back doors. And for some time the Shoshone and Plute Indians that infested the place were objects of interest, not unmixed with fear. I had supposed, on information derived from novels, that the proper word for an Indian woman was squaw, that Indian huts are called wigwams, and that the braves said "Ugh! Ugh!" and continually demanded "firewater;" also that all one's belongings were invariably stolen by them at the first opportunity; but these unsophisticated savages shudder at the taste of spirits, had no thought of thieving, and called their wives "mahalas," their huts "wickeaps" and themselves "hombres." My faith in the novelist is, however, not entirely destroyed, for the Indian did say "heay" and "sabe." "Hombre heap hungry," said Shoshone Jim, a fine, tall young man, with teeth filed to sharp points. I hastened to lay before him what broken victuals I could find. Having disposed of his food, he drew out a large sharp knife and carefully scraped the crumbs from the table where he had eaten. This was, I afterwards discovered, the proper etiquette for the occasion, and in time my table became worn to a lower level on the forward side from continual scrapings.

My Cousin Ben, a remarkably handsome youth, whose few days came to an untimely and sudden end in that forlorn country, did all he could to help me in my household tasks. The washing of dishes by a young man was looked upon with extreme disfavor by Shoshone Jim. "Why you wash dish?" he demanded of Ben. "Oh, the mahala makes me," was the reply. "You mahala?" inquired Jim. Ben carelessly replied in the affirmative, whereupon Jim rose, walked out of the house, and disappeared on a trail leading to the distant hills. Late in the evening he returned, carrying a young sapling carefully peeled and denuded of its leaves and branches. "Stick," said he, offering it to Ben. "You whip you mahala; no good hombre wash dish." His face clouded at Ben's refusal, then brightened with hope as he said in an insinuating voice: "You like I whip."

It was the custom in Reese River to

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

Royal Baking Powder

ABSOLUTELY PURE

breakfast, lunch and dine on fried beef-steak and "flapjacks," made by stirring water into self-rising flour. The formula for the butcher's order was invariably "two bits' worth of steak, and suet to fry it in." I revolted against the "flapjacks," and having fortunately brought with me some dried yeast cakes, kept my family in good light bread. The recipe for these yeast cakes, which keep a long time in a dry climate if tied closely in a bag, is most useful.

There were, doubtless, miners of the Bret Harte type to be found in our camp, but I have never had the good fortune to meet them, perhaps because I was one of only some half dozen women in a town of hundreds of men, and was shy of leaving the immediate neighborhood of my own house. I received presents occasionally. Once an apple was sent to me, but the offerings were to the sex only, and came anonymously. One name, however, I learned—Johnny Craycroft. I have often heard his footsteps, but Johnny's face I never saw, though I laid many traps to catch him. One was to send him a return present. I thought he would feel compelled to thank me, but his gratitude took the form of deeds and not words; the next morning I found two "sage hens" hanging to my door knob. The bait I hoped to catch Johnny with was a jar of imitation honey. I learned how to make this honey when a child from an old negro, who sold it under the name of "manna."

My first, last and only dinner party in camp was an occasion of much tribulation. Roast beef, of course, was the *piece de resistance*. Of calves' brains, sweetbreads and tongue I made a presentable *vol-au-vent*. Vegetables there were none. For my pudding I took two and one-half cups of common New Orleans molasses, one and one-half of chopped suet, two and one-half of bread crumbs, one teaspoonful of salt, cloves, cinnamon, nutmeg and ground ginger to taste. After warming the molasses I stirred into it one teaspoonful of carbonate of soda, and then with my hand worked all the ingredients together, adding flour to make a very thick batter. This I boiled in a small tin pan, with a flannel cloth tied over it, for six hours, and served it with blazing rum. It was not a bad imitation of plum pudding, minus the plums, and almost as indigestible. Except for sentimental considerations I am altogether opposed to the plum pudding. When for these reasons I think a plum pudding is called for, I use an ancient English recipe.

In the pride of my heart I refused all help in my preparations for the dinner party, only allowing Ben in the kitchen after everything was well under way. As I opened the door for him to enter, a hen that had long been my bane fluttered in between his feet. This hen belonged to a gang of Chinamen, who were fattening her for their coming New Year's celebration. I had several times found her in the house, doing more or less damage, but was afraid to complain to her owners. She began flopping about in the idiotic manner of hens, upsetting dishes, and utterly refusing to go out of the door we had set open for her exit. Never was a creature more exasperating than that hen. Finally she plumped into a pan of dough I had set to rise. Ben let fly a hatchet he had picked up from the hearth, it went straight to the mark and the hen was decapitated. It was a good throw, but the result filled us with consternation. We closed the door, shot the bolt, drew the curtain and sat down in council to consider the question of what we should do with the body of the hen. A fowl in Reese River was an article of untold value. Its price might ruin us. Ben suggested installments.

"And become bond slaves to China for the rest of our lives," returned I. Besides, we found that neither of us had the courage to confess the deed and say, like George Washington, "I did it with my little hatchet." Burning in the kitchen stove would not be safe, for the odor of burnt feathers might betray us. Time pressed, and we had come to no decision. "Steps must be taken," cried Ben; and, catching up the fowl, he buttoned it inside his coat,

snatched up his hat and disappeared. In a short time he returned, unbuttoned his coat and produced the fowl, plucked and ready for roasting. "Into the oven with it," said he. "I had meant to shy it down that old shaft behind the house, but hadn't the heart to waste the good meat. It will look well at your dinner party, and guests do not ask questions." "But the feathers and the rest?" I asked, doubtfully. "No danger," returned Ben. "I lay down behind a big boulder and plucked it into my handkerchief; then I put in a stone, tied up the handkerchief and flung it to the bottom of the shaft. There's not so much as a pin feather of evidence against us. After dinner I'll send the bones the same road."

I detected a look of surprise in the faces of my guests when the hen was served, but I was the most startled when a miserable child, who had been spying on us unobserved (who would have suspected treachery from an imp hardly weaned?) piped in with: "Oh, is that the chicken you and Ben stole?"

If the care of the hair were made a part of the lady's education we should not see so many gray heads, and the use of Hall's Hair Renewer would be unnecessary.

For a beautiful specimen of penmanship address Wichita Commercial college. Three professional penmen. Y. M. C. A. building.

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KANSAS FARMER.

ESTABLISHED IN 1863.

Published Every Wednesday by the
KANSAS FARMER COMPANY.

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No. 116 West Sixth Street.

SUBSCRIPTION PRICE: ONE DOLLAR A YEAR.

For an extra copy free fifty-two weeks for a club of six, at \$1.00 each.

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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.

Mr. McCarter, whose farm is in the Kaw bottom, a few miles east of Topeka, reports that he is harvesting this season's fourth crop of alfalfa hay. The total yield of the four crops is rather over seven tons per acre.

The land department of the Santa Fe railroad has procured from some of the irrigated orchards of western Kansas specimens of pears and other fruits rivaling in appearance and surpassing in flavor the world-famed fruits of California.

There seems to be no offerings from first hands, as yet, of broomcorn in the markets, hence no regular market rates have been established. However, the feeling is very firm, and broomcorn would bring 2½ cents for poor to 5 cents for choice, or possibly more.

A trip last week into the great wheat belt of Kansas convinced the writer that the amount of wheat being sown was never exceeded in one week's sowing. The land is in excellent condition on account of the late rains and the farmers will very soon have green fields to cheer the eye and give promise of bread in the not distant future.

The quarter-centennial meeting of the North American Bee-Keepers' Association will be held at St. Joseph, Mo., October 10, 11 and 12, 1894. It is the first convention of the North American Association beyond the west bank of the Mississippi, and large delegations from the great West will be present. The Secretary hopes the East, the North and the South will gather with them.

The State Agricultural Department has procured for its museum some very fine samples of Kansas alfalfa, grown without surface irrigation on the farms of Capt. J. H. Churchill, near Dodge City. One of the samples of this season's second crop from a thirty acre field of the same sort, Capt. Churchill writes to Secretary Coburn, will thresh from thirteen to fifteen bushels of seed per acre, the first crop having been likewise saved for seed and yielded an average of ten bushels per acre. A sample of the fourth crop of this season's growth, which was in blossom and ready to be cut for hay September 5, measures thirty-six inches. Another sample of a third crop has ripened seed and is estimated to yield eight bushels per acre. Capt. Churchill naively remarks that taking these yields of seed and hay into consideration he "feels that the season has not been altogether a failure." As he has one hundred acres already giving such yields, and has secured a good stand on forty acres seeded recently, he seems in little danger of the wolf or the Sheriff. He reports glorious rains of late; that "farmers are in good spirits, and are already seeding wheat, of which a good acreage will be put in."

SOME QUESTIONS WHICH CONFRONT THE PROSPECTIVE IRRIGATOR.

The correspondence received at this office from all parts of the State, and from other States as well, indicates that the experiences of this season's drought, added to thoughtful people's remembrance of disasters to growing crops on account of lack of seasonable rains during former years, has turned attention as never before to the subject of irrigation. The questions which arise in the mind of the farmer when he thinks of irrigation come so thick and fast that he expects that surely there must be ready answers somewhere. He is apt to be dismayed when he learns how scarce exact information, applicable to his own situation, is. Does he ask how much water will be required for an acre or for forty acres, the answer he is most likely to receive is that it takes lots of water to irrigate. Should he press the inquiry for a more definite answer he will find that in all the books on the subject, in all the speeches ever made, no one has given the information in such shape that he can tell how much water must be provided.

After considerable careful investigation the writer hereof concludes that for a single irrigation of a crop on the average soils of Kansas it will be necessary to have available quickly enough water to cover the land from two to six inches deep. Pretty wide margin, did you say? Yes, but about as close as it is at present safe to attempt to get. It is doubtful if any crop can be effectively irrigated with less than about three inches of water. This means about 40,000, and the amount used is quite as likely to be 50,000 to 75,000 gallons per acre for each irrigation.

Without concerning ourselves just now about the ultimate area of land for which an available water supply can be obtained in any section, the question of providing, at reasonable expense, for a single irrigation of ten, forty, eighty or 160 acres of land is sure to tax our ingenuity heavily. In the mountain States the plan is to catch a stream and by suitable dams and ditches divert it to the land sought to be irrigated. While this method may be found applicable in some parts of Kansas, and to a limited extent, the man who is now most actively planning to water his crops is directing his attention to raising water from the underground reservoirs. In some parts of Kansas the supplies at this source are abundant and are near the surface, and the question in these localities is reduced to one of ways and means of making these supplies available.

It will generally be assumed by those who have used water from the "underflow" of the western Kansas plains that the amount available is unlimited, and the fact is often cited that windmills have run continuously for years and have afforded unfailing supplies for large numbers of cattle. It must be remembered, however, that the irrigation of land is not to be compared with watering the cows, that to irrigate forty acres of land once will require no less water than 2,000 head of cattle will drink in a whole year, and that such an amount cannot be drawn through the common pump pipe in any reasonable time.

But in those portions of Kansas where there is the greatest activity in the preparations for irrigation reliance upon wells appears to be necessary. That they may be made with great capacity is not doubted by any who have given the subject attention; but to secure the required capacity without such cost as to be practically prohibitory is a problem with some uncertainty. To irrigate forty acres 2,000,000 to 3,000,000 gallons of water should be provided, and if the operation is to be repeated at the expiration of twenty days, another like amount will be necessary. This means that 100,000 to 150,000 gallons must be raised each day, 4,000 to 6,000 gallons every hour, or seventy to 105 gallons every minute. If eighty acres are to be irrigated as often as once in twenty days these quantities must be doubled, and for 160 acres the supply must be 280 to 420 or perhaps 500 gallons per minute. It is not likely that such a supply can be obtained from one well, neither is it certain that the necessity

will exist for irrigating as often as once in twenty days. But these figures give an idea as to the requirements.

The first thought of every prospective irrigator as to power to be used on the plains to drive the necessary pumps, is of the wind. He believes there is power enough wasted over every acre of his quarter section every year to pump water to irrigate the entire 160 acres, and he is not far wrong. The uncertainty of the wind as to the times and seasons when it blows, the irregularity of its force and the position of the necessary machinery are all elements on the other side of the account. Exact information as to the work which the wind may be depended upon to do during any period of time with any device for utilizing it is wanting.

With a view of getting accurate answers to some of the questions which confront every irrigator, the Barton County Irrigation Association has, as was last week mentioned in the KANSAS FARMER, arranged with manufacturers of pumping machinery to make an exhibit of their machinery and a test of some rather inexpensive wells on the farm of the editor of this paper on next Saturday, September 29. These wells are much after the pattern of "driven" wells, except that the "points" are six inches in diameter and are perforated for a length of eight feet. The suction pipes attached to these are six inches in diameter. The depth to the water is ten feet from the surface of the ground and the total depth of the wells is twenty-eight feet. The power of gasoline engines and pumps of large capacity will be brought to test the strength of the supply of water thus made available, and at the same time show the expense of this kind of power.

Since the first announcement was made of this proposed test and exhibition a number of persons prominent in financial circles and interested in irrigation have signified their intention to be present. Irrigation engineers and others prominent in the movement, scientists, and last, but most important of all, great numbers of farmers who contemplate irrigating their lands have arranged to see for themselves this important test.

WAR ON RAILROAD PASSES.

The war on the pass system has broken out afresh and ought to be continued until it shall become impossible for any public official to obtain or use a free pass. It is, however, not worth while to expect to prevent officials from taking and using passes by mere force of public sentiment or of morals. Human nature is not changed by placing the proprietor of any particular piece of it in office. Experience shows that while passes are available they will be not only accepted but sought after by the great majority of executive, legislative and judicial officers, not only for themselves but also for the members of their families, relatives and friends, to the exhaustion of their credit with the pass-issuing power.

It is idle to say that officials who thus solicit or even accept unsolicited these valuable "courtesies" are uninfluenced by them. So also are the hosts of attorneys at the county seat and the county officers.

Is there a remedy?

This is a difficult question. Many remedies have been proposed, but the trouble with all was that they had to be voted on by legislators whose pockets were full of passes and whose applications were in for many more.

The railroads themselves probably find the pass business less burdensome than many suppose. The writer has recently taken the trouble to ask several conductors for estimates of the percentage of traveling done on passes. The replies vary somewhat, but the proportion of passes is less than has been believed. A late estimate is that of the miles traveled during ordinary times less than one in two hundred is on passes. At times of conventions or political campaigns there is considerable increase of passes, but the estimates are that even this increase is not sufficient to bring the average, including newspaper passes, above one-half of 1 per cent.

It will readily be seen that so small a proportion cuts but an insignificant

figure in the business of a railroad and is not to be considered in comparison to the influence upon the pass-holders and those who hope to secure passes.

It has often been inquired whether the transportation issued to newspapers in exchange for advertising has any effect in modifying the attitude of the papers towards the railroads. Undoubtedly it does, even though the arrangement be purely a business one and a fair exchange of advertising for transportation. Every man who does business wants customers, and it is a part of every successful business man's policy to be on good terms with those with whom he deals.

It is scarcely probable, however, that these trade exchanges can be prevented, and it will be necessary in the future, as in the past, for the readers of newspaper discussions of questions involving transportation questions to make allowance for the fact that the railroad is a large and good paying customer for advertising space.

Could the entire pass system be eliminated it is doubtful if many years would pass before government ownership of railroads would be a reality.

THE STATE FAIR.

In view of the collapse, in 1893, of the Kansas State Fair Association, of Topeka, it was generally supposed that no State fair would be held this year, and such would have been the case had it not been that Wichita enterprise came to the front with a well-equipped and representative association, which had the courage and the enterprise to hang up \$20,000 in premiums as an inducement to bring out a State display. We are informed that this association has every prospect of having the best all-around agricultural fair held in the State for several years. And, what is more encouraging, from an exhibitor's standpoint, is the fact that they are now prepared to pay all premiums in cash instead of promises. The management is in excellent hands and the people of Kansas should do all in their power towards making the public-spirited effort of the Wichita Association a success from every point of view.

The Kansas State fair will be held at Wichita, Kas., October 2 to 6, 1894. Reduced rates (one fare for the round trip) on all railroads in Kansas. Any one wishing detailed information will be promptly attended to by addressing Secretary C. M. Irwin, of Wichita.

Weekly Weather-Crop Bulletin.

Issued by the United States Department of Agriculture, in co-operation with the Kansas State Board of Agriculture, for the week ending September 24, 1894, T. B. Jennings, observer:

The temperature for the week has been about normal except in the extreme east and southeast, where a slight excess prevails. Sunshine average. Heavy rains have fallen over the east half of the northern half of the State, and from Ellsworth south-eastward to Chautauqua and Montgomery. Fair rains have occurred from Dickinson east and southeast to Miami, Linn, Bourbon and Cherokee, except in Labette, where no rain is reported. Light scattered showers occurred in the western half of the State.

Severe hailstorms occurred in Mitchell, Ottawa, Marion, Pottawatomie and Brown.

With but few local exceptions pastures are in fine condition over the State and the week has given good growing weather. Plowing and sowing wheat are in general progress. Wheat and rye are up in many counties and present a fine appearance. Apples are growing larger, tomatoes ripening, gardens responding and late cabbage improving. In the far southwest a better second crop of sorghum is expected to be harvested than the first. Alfalfa is all cut and stacked in the northwest. In Barber late peaches are selling from 35 to 75 cents per bushel and apples from 75 cents to \$1.

The hail did much damage to apples and window glass, while in Mitchell four horses were killed by it. In the eastern division potatoes have rotted in the ground in considerable numbers, and in some cases those not rotting have begun to grow. In the extreme northwest the ground is getting dry again.

KANSAS FLOUR AT THE TOP.

It has long been considered in the wholesale flour markets that nothing could equal the patents made from Minnesota, Dakota and Manitoba hard spring wheat. The fact that a hard fall wheat is produced in Kansas which possesses all the merits of the Northern hard wheat has recently become known to Minnesota millers and has led them to become large purchasers of this Kansas product. More than this, it has transpired that Minnesota millers have, within the last year, sought locations for new business where large amounts of Kansas hard wheat can be readily and constantly obtained.

The latest development in the case has arisen in the grading of flour in the great Cincinnati market. The inspector has been criticized for affixing to Kansas flour the same brand as used on Minnesota flour of the favorite kind. This has created some dissatisfaction, concerning which the Cincinnati *Price Current* has this to say:

"The Cincinnati Chamber of Commerce pursues methods corresponding with other large centers with reference to inspection matters, and this city has long held a prominent position in the distribution of flour. The inspection of flour is without reference to geographical areas where the wheat from which it was made was grown, or where the wheat was milled, and is solely with reference to its characteristics. Flour experts in this city have acquired a knowledge of the fact that flour having all the characteristics of 'spring patent' has been produced in Kansas, from the hard wheat grown in that State, and that the merit of the product has not depended on the fact that the seed for the grain was sown in the autumn or the spring months. It is the quality and condition of the wheat and the processes of manufacture which determine the features which make flour grade according to one or another of the several standards adopted and recognized by the trade.

"The article quoted says: 'Kansas flour should stand on its own merits. To sell it as Minnesota spring wheat flour is to commit a fraud on the public. To prevent such fraud is the duty of a flour inspector.' The inspector has nothing to do with branding flour otherwise than as to grade and quality. If dealers have put a Minnesota brand on Kansas flour it is not a matter for which the inspector has any responsibility. If dealers have put a Minnesota brand on flour made from Kansas wheat milled in Kansas they have not been seriously more guilty of a misdemeanor than Minneapolis millers in grinding Kansas wheat and putting their home brands on the flour and selling it as the regular product of their region.

"It is the Kansas miller who in fact has a grievance if a dealer puts a Minnesota brand on his product. For it is becoming more and more evident that the Kansas miller is turning out flour which in quality stands equal to any other, and Kansas is as much entitled to such credit as any other region for an especially meritorious product. That the hard winter wheat of Kansas can produce a flour of characteristics which the best of experts by inspection and in baking tests can not distinguish from the product of the hard wheat of Minnesota and the Dakotas is a condition of affairs not to be deplored. And while Minnesota mills may be obtaining wheat from the Dakotas, with more or less from Wisconsin, Iowa and Nebraska, and at times using a mixture of the hard winter wheat from Kansas under their brands of Minnesota 'patents,' they are not doing so very differently in trade practices from what an Ohio dealer may be doing in selling the product of Kansas hard winter wheat as 'spring patent' so long as the characteristics of the standard of spring patent are absolutely identical with the product of the Kansas hard wheat."

Horses appear to have no value in Illinois. The Carlinville (Macoupin county) *Democrat* of a few days ago contained an account of a mortgage sale at Barr's Store, that county, at which two horses were sold for 15 cents, one bringing 5 and the other 10 cents. One of

the KANSAS FARMER force visited that part of Illinois recently and reports one case in which a good horse was sold for 75 cents and others in which the price was so low as to indicate that fairly good farm horses in that section have almost no value.

THE TOPEKA KINDERGARTENS.

The kindergarten work started in Topeka two years ago is now entering upon a new year, under most favorable auspices. The Kindergarten Association has just issued its first regular report, a beautiful little pamphlet of twenty pages, which will be sent to any address on receipt of 4 cents in postage stamps. Besides explaining what is being done in Topeka, it in a general way explains the system and sets forth the claims of the work. The association has this week four kindergartens in operation and expects to add at least two more later.

The association has secured the services of Mrs. Mary Stone Gregory, of Boston, to superintend its schools and conduct a normal training class for teachers. This normal training school will open on the 8th of October. Fourteen pupils have already engaged the training course. It is the design to establish a permanent kindergarten training school in Topeka where the young women of Kansas can secure a kindergarten education of the highest order. The tuition is \$100 for a year's course. Mrs. Gregory is rated as one of the best kindergartners in the country, having large experience and rare qualifications. Topeka is fortunate in securing her leadership, and any who desire to take this training in Topeka can rely upon securing the best.

The value of this system is becoming recognized, not only for saving the children of the slums, but as one of great value to every home—a system of which every mother should have knowledge. Wm. T. Harris, United States Commissioner of Education, pronounces it the grandest system of education ever devised by man.

HOW SHALL TUBERCULOSIS BE DETECTED?

EDITOR KANSAS FARMER:—How can we know when a cow has tuberculosis? Certain breeds seem to be afflicted with it. Please give full information. J. J. M. Eskridge, Kas.

The experts admit that no certain diagnosis of tuberculosis can be made from outward symptoms. The disease is diverse in its manifestations, owing to the fact that its attack may be made upon almost any of the organs of the animal. The manifestations vary greatly and are liable to be confounded with those of other disorders. Indeed, an animal may have tuberculosis in some of its tissues and suffer scarcely any inconvenience from it, and therefore manifest no observable symptoms. It is on these accounts agreed by those best informed that outward indications are not to be relied upon. The recent discovery by Dr. Koch of a substance called tuberculin has, however, placed in the hands of the veterinarian a ready means of determining with comparative certainty whether an animal has or has not the disease. It is not necessary here to enter upon a description of the preparation of this tuberculin or the theory of its manifestations, although these are exceedingly interesting.

In using tuberculin for the determination of the presence or absence of tuberculosis in an animal, a small dose is injected into the circulation. If the animal be free from tuberculosis no effect is observable; but if affected a marked rise of temperature takes place. In some cases this is followed by a cure of the disease, while in others the malady is greatly aggravated and, not infrequently, death is hastened.

It will be seen that the risk is too great to admit of the use of tuberculin on the human subject. It is, however, so unsafe to use any product of a tuberculous animal that all those suspected should be tested, the assurance being that the healthy ones will not be harmed and the diseased ought to be killed as unfit for use.

The use of the tuberculin requires the services of a veterinarian. The confirmation of the tuberculin diagnosis by the use of the microscope on

affected parts after the condemned animals have been killed has been in most cases satisfactory.

SIR JOHN J. GRINLINTON.

Many of our readers will recall with pleasure the delightful reception given our State officers, World's Fair Commissioners and prominent Kansas citizens by that prince of entertainers, Mr. John J. Grinlinton, the Ceylonese Commissioner at the World's Fair, a year ago this month. And they will be equally pleased to know that the Queen of England has made Mr. Grinlinton a Knight of the Realm on account of his meritorious services as Commissioner of the little paradise half way around the earth from us.

Dr. Roby, through whose instrumentality these courteous relations of antipodeans were brought about, has received copies of the Colombo papers announcing the elevation of Mr. Grinlinton to Knighthood. The same papers announce that an American doctor, Mrs. Longshore-Potts, an aunt of Mrs. Dr. Longshore, of Topeka, was delivering a course of scientific lectures to the ladies of Colombo.

When we follow Pythagoras into transmigration, we want to be set down quietly in the beautiful tropical gardens of beautiful Peridonia, Ceylon, with Sir John J. Grinlinton for host and mentor.

Henry Avery & Sons, of Wakefield, report fine success in sowing alfalfa on newly-broken sod. The breaking was followed by thorough working over with disc harrow. The seeding was done with a press drill late in April. The stand is excellent.

Gossip About Stock.

Col. Jas. W. Sparks, the live stock salesman, Marshall, Mo., writes us to claim public sale dates of Poland-China swine for C. G. Sparks and G. L. Davis, to be held at Marshall, Mo., October 25, 1894.

Mr. L. N. Kennedy, proprietor of Wildwood farm, at Nevada, Vernon county, Mo., and breeder of high-class pedigreed Poland-Chinas, will offer on Thursday, October 18, on the farm, about eighty head of Polands, consisting mainly of Wilkes and Free Trade with some other leading strains. In next week's issue will appear a detailed announcement of the offerings.

Every Kansas breeder of Short-horns will be very much interested in the great Bates Short-horn sale of stock belonging to the estate of the late Col. H. M. Valle. The sale will be held at Independence, Mo., Wednesday, October 10, 1894. There is no better bred herd of Short-horns in this country. Write for catalogue and particulars to Jno. A. Sea, administrator, Independence, Mo.

Col. S. A. Sawyer, the Kansas live stock salesman, writes concerning the W. H. Wren sale of Poland-China swine at Marion, Kas., on October 3, as follows: "I desire to state that the hogs at the last February sale have given excellent satisfaction, and this sale will be a great day for buyers and the offerings will equal anything in the West. If you are wanting fine hogs, don't fail to attend. Catalogues now ready."

Next week, on Tuesday, Mr. C. C. Keyt's sale of Short-horns and a clearance draft of seventy-five head of Poland-Chinas will take place at Falls City, Neb. If you are looking for either good cattle or swine, go to Keyt's sale and you will find high-class animals in both herds. Falls City is on the main line of the B. & M. and the Missouri Pacific railways. Consult the advertisement in this issue and govern yourselves accordingly.

J. L. Heath, the old-time stock feeder of Peabody, says that his experiment in feeding wheat to cattle has been very successful, as he had "put on ninety pounds of flesh to the steer in the past thirty days—weighed in and weighed out." Mr. Heath feeds crushed wheat dry mixed with bran, but no corn. It is evident that Mr. Heath has not gone back on corn altogether, however, for he has just purchased 10,000 bushels of that grain at 50 cents a bushel. He has between 400 and 500 cattle on feed now.

Our readers should keep in mind on Wednesday of next week, Mr. Wren's fourth annual swine sale will take place, on his farm, near Marion, in Marion county. In a recent letter, among other things he states: "The herd is coming first-rate and everything now points to a successful sale. Several litters by Royal Short Stop are very promising and the litters by Kansas King seem to out-feed anything in the herd. The four boars out of Lady Orient and by El Capitan are sure prize-winners. The litter by the Black U. S. boar, Transcript, and out of dam by El Capitan, are a very fine lot of youngsters. In short, the whole

lot that will be in the sale are the tops, as none have nor will be sold until the day of sale."

The first annual clearance sale made by W. H. Babcock, on his farm, near Hiawatha, Kas., was fairly well attended, last Wednesday. The prices, while not quite up to the average of the older and well-established breeders, were in the main satisfactory to Mr. Babcock and encouraging enough to stimulate him for better things in the future. Thirty-six head of youngsters averaged \$16.05, making an average for each brooder having sons and daughters in the sale's offerings of over \$60 each. Good enough, friend Babcock. Your prolific sows do make money, sure.

Next week, on Thursday, October 4, Mr. J. A. Worley, of Sabetha, Kas., will hold his annual clearance sale of seventy-five head registered Poland-China swine, on his farm, near Sabetha, and on the following day, Friday, October 5, Col. Eli Zimmerman, of Hiawatha, will offer about the same number from his Poland herd, also some good horses and Holstein cattle. On reference to their advertisements in this issue, the reader will find that the breeding of the two swine herds is the best. By attending the Worley sale and then Zimmerman's the day following, will give an opportunity of selecting from the blood of both herds.

J. A. Worley, Sabetha, Kas., writes: "The Poland-Chinas at Pleasant View stock farm are coming on in fine shape. Lail's Victor 2d stands at head of herd, and he is proving himself as grand a breeder as his royal ancestors would indicate him to be. He was sired by Lail's Victor 4298, by Victor 2904, and out of Marshall Maid (4742), she tracing three times to Tom Corwin 3d 35; his dam, Black Nery (6690), sired by M's Perfection 2d 2215, he being a grandson of Tecumseh 678, and also grandson of Give or Take 24, her dam Lady Bismarck (6691) sired by Give or Take 24. This is a concentration of the best blood that courses in the veins of Poland-Chinas to-day, and as an individual he is a fine type of the Poland-China breed, being of that broad-backed type, heavy quarters, short legs, strong, heavy bone, good head and ear, with splendid feeding qualities. He is assisted by America's Equal 12279, tracing two times to Sunset (430) on his dam's side; he has a very strong back, stands on the best of feet and is extra fine in head and ear, and breeds very uniform in type. His pigs are strong and growthy fellows, with plenty of length to make heavy-weights. He will weigh 500 pounds in fair breeding condition."

As to Doctor Books.

EDITOR KANSAS FARMER:—Will you please inform me where I can get a good, reliable family doctor book, also one for stock? Can I get them combined? Answer through the "old reliable" FARMER. T. B. RUSSELL, Springfield, Kas.

We would say to our correspondent that there are a good many doctor books which are cheap and fairly reliable to those who know how to use them properly, but the human system ought not to be experimented with too much by those who have not studied medicine. Generally it will prove cheaper and safer to consult a reliable physician in cases where the ordinary home remedies fail, than to try to "doctor" a sick person according to directions in a doctor book.

In cases of animals the risk is not so great. We can recommend a book you need called "The Horse, Sheep, Cattle and Swine Doctor." See advertisement of it in another place in this issue.

THE PRIESTS OF PALLAS.

Grand Parade, Tuesday, October 2.

The Priests of Pallas at Kansas City will parade this year Tuesday evening, October 2, and the people who witness it are assured of seeing the grandest procession of the most beautiful floats ever produced. This popular organization can always be depended upon to furnish an entertainment that will fully repay all the people who may visit Kansas City on this occasion.

The subject chosen this year is one of unusual interest, affording an excellent opportunity for brilliant, artistic effects, and the Priests and their large corps of artists have taken advantage of the occasion to charm the seeker for the beautiful and to gratify the student of the intellectual. Colored fires and calcium lights will render night brilliant and many of the leading bands of Kansas and Missouri will participate. A one-fare rate for the round trip has been made for this occasion by the Union Pacific system, good October 1 to 8, from points in Kansas within 250 miles of Kansas City, and Nebraska points within 200 miles, and many special trains will be run. Carnival Krewe parade on Thursday, October 4, afternoon and evening. See your nearest Union Pacific Agent. E. L. LOMAX, J. B. FRAWLEY, G. P. & T. A., Omaha. Gen'l Ag't, Kansas City, Mo.

Horticulture.

SECOND-CROP POTATOES.

EDITOR KANSAS FARMER:—I have been growing second-crop potatoes for the winter market and for planting purposes ever since I first heard of them, which was in 1876. Up to that time I had been buying my seed potatoes in the North and they always gave me trouble. It was often hard to get them to pay; they came up with a number of shoots; they produced as many unmarketable tubers as large ones; and frequently in spite of thorough cultivation, the yield fell below a profitable rate per acre. I knew that the difficulty lay in the fact that having been dug when fully mature the Northern seed, even if they had not sprouted in the cellar, had been on the decline and were feeble. So when I heard that a gardener near Louisville was planting potatoes in July or August and digging them late in October, when not fully grown, to be saved and used as seed, I felt sure that he had made a needed discovery.

That same year I planted potatoes in July for a second crop and I got a good yield. In the spring I planted the second-crop seed for my main crop and was astonished and delighted at the result. Some of the seed was planted whole, some cut to three eyes, some to two and some to one. All came up promptly and every piece sent up one shoot and one only, and it was as strong as it could possibly be. From five to eight tubers, no more, formed on each stalk, and when I dug my crop I had all big, marketable potatoes. I had 50 per cent. the best stand in the history of my place, and 50 per cent. the best crop. As soon as the ground could be prepared I planted again in the same field, using second-crop seed that I had saved. This was late in July, and late in October I took from the ground fully as many potatoes as I had secured in the first harvest, but, of course, being immature, nearly half of them were too small for the market. These I saved as seed and the rest I sold.

The next year more of my ground was devoted to potatoes, and the business has grown every year since then until now, although I am only half a mile from the limits of a large city, affording a fine market for cabbage, peas, beets, lettuce, and all the small garden truck that is usually most profitable, I find potatoes pay me best.

And so it is with all the other gardeners near Louisville. Since the second-crop discovery they all, without exception, make potatoes their main crop. It never fails either in the spring or in the autumn. During the one month of July, 1893, we (that is I and my fellow gardeners within three miles of Louisville) not only supplied all the potatoes eaten by 250,000 people in Louisville, New Albany and Jeffersonville and their suburbs, but shipped nearly 100,000 barrels of three bushels each to the North. And in October we again fed the local multitude and put away enough potatoes to plant all our fields twice this year, and, I hope, to supply many thousands of growers elsewhere.

I venture to say that the little strip of garden lands around Louisville has produced any year during the past ten, twice as many potatoes to the acre as any other equal extent of land elsewhere in the country. It is all due to the second-crop method of seed-growing. And the same improvement can be made anywhere in potato-growing latitudes. Near St. Louis, Cincinnati, Pittsburg, Philadelphia, Baltimore, Washington and even around New York, the climate is practically the same as near Louisville, and two crops can undoubtedly be grown on the same ground as is done here. In the latitude of Chicago, Detroit, Cleveland, Buffalo and Boston, perhaps the first crop could not be gotten out in time for a second crop on the same ground, but there is no reason why special fields should not be planted in July and dug after the first hard frost. The tubers would then be half or two-thirds grown, and this is the very best size for seed potatoes.

When the second-crop seed are in-

duced all over the country, as they inevitably will be before long, the potato yield will be doubled.

The principal merits of second-crop potato seed are:

1. They keep in a cool cellar without sprouting or shriveling, or losing any of their vigor. It seems that having been checked before maturity, they lie dormant ready to send up a shoot when again in warm ground as vigorously as they were growing when stopped by the frost.

2. They never send up but one sprout. This is true whether they are planted whole or cut to any number of eyes down to one. The consequence is that all the growth goes into the tubers that come on one stalk (generally from five to eight) and these all grow to full marketable size. If the ground be very rich, and the season fine, they will all be extremely large.

3. They can be cut six weeks, or, in fact, any length of time before planting. The only precaution necessary is that they shall be kept, after being cut, in barrels open at the top only. If there are openings at the side or bottom the pieces thus exposed will deteriorate. The gardener or farmer using second-crop seed can do his cutting on rainy days, or at other convenient times, and he will always be ready to take full advantage of a spell of good weather for planting.

4. Growers of second crops, by planting early in July in this latitude, can get a fine crop of full-grown potatoes, which sell better in market than those from the North; or by waiting until the latter part of the month, they get seed potatoes of the very best quality.

The philosophy of the value of the second-crop potato seed was explained more than a hundred years ago and was forgotten, so that what is known as the Louisville discovery is really a re-discovery. In 1763, a disease called "the curl" made its appearance in Lancashire, England, and spread rapidly to foreign countries, being worst in places where potatoes had been long cultivated. It was feared that the vegetable was doomed to extinction, and great premiums were offered in vain by the English government for a remedy for the disease. The "curl" caused the top leaves to shrink, and all growth in the plant ceased as soon as this symptom appeared.

Finally, a discovery which showed not how the trouble might be cured, but how it might be avoided, was made near Edinburgh in Scotland. Some of the growers there were in the habit of procuring seed potatoes from the cold moorland districts, and such fields as were planted with these were free from curl. Upon investigation it was found that in these humid situations the potato crop was so late that the frost killed the leaves and vines while they were still green and the tubers only half grown and unripe. It was this greenness that prevented the curl, and it is the same greenness in the second-crop seed that makes them so much more vigorous and productive than old potatoes used as seed.

The matter was scientifically explained in May, 1827, by a writer in *Gardener's Magazine*. He wrote: "The potato tuber is a perfect organized system in which the circulation regularly proceeds, and if suffered to ripen will then tend to decay; but if separated before ripe from the stem or stalk which furnishes it with blood or fruit sap descending from the leaves, the circulation of the blood sap is suddenly arrested. The ripe potato having performed all its operations, becomes more inert, but the circulation of the sap in the unripe tuber, having been stopped, it starts more readily and with greater vigor when planted; the one appears to die, worn out with age, the other seems accidentally to have fallen asleep, and when awakened, possesses an unspent vigor and energy."

Here at Louisville we no longer go to the North, or to the moorland countries for seed, but raise our own by planting so late that the frost catches them while still growing. And what we do all other growers can do.

JOHN C. PEARCE

Louisville, Ky.

Get up a Club for KANSAS FARMER.

Tomato Rot.

Tomato rot usually makes its appearance at the eye of the fruit, where probably the spore was arrested when blown upon the ovary at the time of setting in the blossom. It forms a brown or black spot, dry and leathery in appearance and sunken a little below the surface. So rapidly does it extend that in a few days it covers one-fourth of the fruit. Under the microscope it is seen to consist of a velvety pile of mycelial threads, some of which bear conical groups of spores, at first brown and finally black. These form a very fine, light dust which a breath will disperse in every direction. They do not seem to fix readily to the polished surface of unripe fruit, but, like dust, collect in the eye of the tomato, that is, the depression marking the place where the style of the flower joined the young ovary. Once there, it awaits the access of moisture, whether rain or dew. Then it germinates, sends its mycelium down through any existing crack into the ripening cells of the fruit, and preys on their juices. So rapid is its growth and so large the demand it makes upon the succulent pulp that the part affected speedily falls in and flattens.

This fungus has not been thoroughly worked out as to its life history, and hence preventive measures are not satisfactorily devised to meet its ravages. But it would appear that the spores are not able to penetrate the polished skin of the fruit, but find an entrance at the minute cracks so frequently in the apex when it has been grown with a surplus supply of irrigation water. This is perhaps the reason that the sorts known as Acme and Mikado are particularly subject to the scourge, being apt to grow somewhat irregularly, very rapidly, and with a hollow center, all testifying to quick development. It is otherwise with Trophy, Paragon, Perfection and some others.

It would be seen, therefore, that everything tending to a forced growth and a monstrous, irregular and ribbed, hollow fruit is to be avoided. The readiness of all solanaceae to respond by rapid growth to extravagant nitrogenous manuring has tempted growers to pamper them out of all reason. Tomato foliage has been so swollen and thickened in aspect by inordinate use of nitrates, that it was not easily recognizable at first sight. Raw stable manure must be avoided, the plants pricked out thinly and allowed a full quantum of air and light. Whoever is industrious enough to tie plants up properly to dwarf trellises will have less chance of the disease than the lazy grower who lets them tumble on to each other and get twisted into a snarl.

Then preventive measures amount to: 1. Selection of smooth, regular varieties of medium size; 2, under-manuring rather than heavy manuring; 3, trellising and ample space allowed. There is no guaranty for curative results from applications to the diseased fruits. They are done for. But it would be a very sensible foresight with a succeeding crop to spray with the universal fungicide, Bordeaux mixture. Spray when the blossom has quite set, and two more applications during growth and ripening. The copper salt which has been so successful with other fungi may reasonably be expected to modify the ravages of this one.—*Farm and Home*.

Publications of United States Department of Agriculture for August.

Forage Plants for the South. By S. M. Tracy, M. S. Pp. 30, figs. 17. (Farmers' Bulletin No. 18.)—Summary of the practical results of investigations carried on for the past five years at the experiment stations of Mississippi, North Carolina, Georgia, Florida and Louisiana.

The Effect of Spraying with Fungicides on the Growth of Nursery Stock. By B. T. Galloway. Pp. 41, figs. 17. (Bulletin No. 7, Division of Vegetable Pathology.)—Shows the results of three years' work in the treatment of nursery stock for the prevention of fungous diseases; also approximately the cost of the work and the profits of the same.

Report of the Statistician. New Series, No. 118. Pp. 8.—A synopsis of the crop report taken from the Report of the Statistician for August, 1894, and embracing returns showing acreage and condition of



A Bright Lad,

Ten years of age, but who declines to give his name to the public, makes this authorized, confidential statement to us:

"When I was one year old, my mamma died of consumption. The doctor said that I, too, would soon die, and all our neighbors thought that even if I did not die, I would never be able to walk, because I was so weak and puny. A gathering formed and broke under my arm. I hurt my finger and it gathered and threw out pieces of bone. If I hurt myself so as to break the skin, it was sure to become a running sore. I had to take lots of medicine, but nothing has done me so much good as Ayer's Sarsaparilla. It has made me well and strong."—T. D. M., Norcatur, Kans.

AYER'S Sarsaparilla

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

Cures others, will cure you

buckwheat and hay, and the condition solely of corn, spring wheat, spring rye, oats, barley, potatoes, tobacco, cotton, rice, sorghum, cane, apples, peaches and grapes.

Suggestions Regarding the Cooking of Food. By Edward Atkinson. Pp. 81, figs. 8.—Contains introductory statements regarding the nutritive value of common food materials. By Mrs. Ellen H. Richards.

Report of the Statistician—August, 1894. Pp. 445-536. (Report No. 118, Division of Statistics.)—Contains crop report for August; notes on foreign agriculture; the production and consumption of rice in the United States; commerce between the United States and Mexico for the years 1873, 1878, 1883, 1888 and 1893; and transportation rates.

Proceedings of the Seventh Annual Convention of the Association of Agricultural Colleges and Experiment Stations, held at Chicago, Ill., October 17-19, 1893. Edited by A. C. True and H. E. Alvord. Pp. 100. (Bulletin No. 20, Office of Experiment Stations.)

Reports of Observations and Experiments in the Practical Work of the Division, made under the direction of the Entomologist. Pp. 56. (Bulletin No. 32, Division of Entomology.) Contains the formal reports of the field agents for 1893.

Wheat as a Food for Growing and Fattening Animals. By D. E. Salmon, D. V. M. Pp. 4. (Circular of Information No. 2, Bureau of Animal Industry.)—The purpose of the circular is to give a direct and definite answer to the questions which have been most frequently asked concerning the use of wheat as a food for stock.

Protection of Fruit, Vegetables and other Food Products from Injury by Heat or Cold During Transportation. By Mark W. Harrington, Chief of the Weather Bureau. Pp. 7.

Monthly Weather Review—June, 1894. Pp. 235-272, charts 4.

Charts of the Weather Bureau. (Size, 19x24 inches.)—Weather-Crop Bulletin (series of 1894), reporting temperature and rainfall with special reference to their effect on crops. (Nos. 21, 22, 23, and 24, for the weeks ending August 7, 14, 21 and 28, respectively. Semi-daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

[Look over this list, select what you want and write to the Secretary of Agriculture for it.—EDITOR KANSAS FARMER.]

Climate and Crops Just Right.

Oklahoma has thousands of acres of the finest farming land in the world, waiting for you or anybody else with a little cash and lots of gumption. Climate crops are just right. Farms will cost more next year than this. To find out if this is the country you want, ask G. T. Nicholson, G. P. A., Santa Fe route, Topeka, Kas., for free copy of Oklahoma folder.

Six Thousand Square Miles of Wealth.

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.

In the Dairy.

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

Oleomargarine Law.

EDITOR KANSAS FARMER:—There are at the present time but nine States which have no laws regulating the manufacture and sale of oleomargarine, and after the next session of the Legislatures of those States there will not be more than two or three States with no law on the subject. Kansas does not want to be one of those two or three which does not consider her dairy interest of enough importance to be looked after and fostered.

The statistics of Kansas, while incomplete on that product, show now that the butter business is greater than the coal business, but we have laws for the control of mines and a mine inspector. Greater yet, the dairy business exceeds that of wheat in America, and still there has not been enough enthusiasm in the citizens of this great State to enact a law which will stamp out or prohibit that great fraud and counterfeit, oleomargarine, from being freely sold within her borders, not for what it is, but sold as butter.

Let the State Dairy Association have a bill all ready when the Legislature meets and have it presented as one of the first bills, so that it will not be kept so far down on the calendar that it will be lost.

There is a growing interest among the farmers and dairymen which is gratifying to see, but still there is not near the enthusiasm which we need.

Let us profit by the experience of Nebraska two years ago, where the bill was "frozen out" by being presented so late in the session that it never got beyond the committee.

Dairymen, do not sit idly around and depend upon someone else to do all the work. Let each man, and woman, too (for they are also interested), appoint themselves a committee of one to work in conjunction with the local committee and the State Dairy Association and agitate this movement. It is wholly non-partisan and a question wherein the whole State is alike interested and opposed only by a few counterfeiters and their paid attorneys and lobbyists.

When the bill comes up for final passage, watch and see how your Representative or Senator votes. You will then know if he truly represents his constituents or has "been seen" by the manufacturers of that most unwholesome of food frauds, oleomargarine.

FRED GLICK.

From National Dairy Union.

EDITOR KANSAS FARMER:—At the present time, when the political warfare is becoming warmer and warmer, and partisan lines are being drawn closer and closer, I have taken the liberty of writing to you a short communication upon a matter which interests so many of your Kansas farmers and dairymen.

The organization of the National Dairy Union last fall was undertaken for the purpose of securing laws, and enforcing those already passed, to prevent the fraudulent sale of imitation dairy products. The development of the dairy industry in your State has been rapid, and of great value to your citizens, whether they be farmers or dairymen or otherwise. A creamery planted in a neighborhood means better farmers, better farms and general improvement in the condition of affairs all the way through. In view of this fact, I would urge upon the readers of the KANSAS FARMER, that they forget for a while that they are members of any political party, and that they are dairymen and farmers first, last and always, and see to it that the parties who are seeking for election to the Legislature are tried and well-known friends of the dairy industry. Men who, when the proper time comes, will see to it that just and equitable laws are placed on the statute books to prevent the fraudulent sale of oleo for butter. Men who will not be influenced by the wily oleo millionaire, but will

do their duty as representatives of the farmers and dairymen of your State; and going further than this, that the members of Congress who shall receive the suffrage of the farmers and dairymen of your State during the coming campaign, are always on the right side of this question, that they are friends of the dairy, and will agree that should they be called upon by the dairymen of Kansas when in the national Legislature, that they will sustain and vote for such measures as will give them protection, not from honest competition, but from base counterfeit and fraud. Through your paper, the National Dairy Union, representing the whole country and dairy industry of the United States, tells the farmers and dairymen of Kansas to take hold and work and vote for such candidates as will pledge that they will vote for laws that will protect them from this base and unholy competition of oleo.

D. W. WILLSON,

Secretary National Dairy Union, Elgin, Ill.

How to Prevent Milk Fever.

Mr. Jas. E. Spargo, in *Breeder's Gazette*, says: "Having had much experience and unbroken success in the management of dairy cows previous to parturition I have felt induced to submit an outline of the practice, the results of which have firmly convinced me of its absolute safety and worthiness of universal adoption. As in my career I have never had a cow to fall a victim to milk fever I shall have nothing to add on that point, but will confine my remarks to the treatment of the dairy cow from her first preparation for the dairy.

"My training and experience in the management of dairy stock was acquired in a pre-eminently dairying district in the west of England, where, with a climate that allowed the cows to remain out of doors by night from April 1 to December 31, and with pastures with such luxuriance and richness as would excite the admiration and envy of many an American dairyman, the danger of milk fever was ever of such a magnitude as to demand the strictest attention and was unfortunately manifested by the number of very valuable animals which fell victims to it every season.

"For fifty years my father has been dairying and for several years I have had charge of a dairy herd managed entirely on the lines laid down by him, and in all that time not a single animal has been lost nor has a penny been spent in medicines of any kind, though the herds have always contained many excellent milk and butter-producing cows, such as alone are liable to attack.

"Our heifers, the produce of the best cows, were bred to produce their first calves in the summer, and previous to the birth of the fourth calf, or until the fifth year was reached, everything was done to develop the milk vessels and stimulate the milk flow as well as to keep them in a healthy and thriving condition. From this time every precaution was taken. If the cow were a rich milker but inclined to go dry for a few weeks before calving she was allowed a rest, but on approaching parturition should her udder become at all distended she was without any hesitation milked out. If a persistent milker—one of the perennial kind—it was always regarded as the only safe course not to stop milking her, nor to allow an accumulation of milk, though the old milk became useless or new milk had come, as occasionally happened. If due to calve during such time as necessitated housing at night she remained at pasture during the day and at night was fed sparingly, no rich food being allowed her; if due to calve during the warmer season she remained at pasture, which provided her entire food. For the first week after calving the cow was lightly fed on such diet as would preclude constipation and any considerable or immediate increase of milk, after which period no danger was feared and she was fed full rations, to which a generous response was invariably made. I have drawn four gallons of milk from a Jersey cow which produced full two pounds of butter on the day before calving. This cow had been milked

THE best investment in real-estate is to keep buildings well painted. Paint protects the house and saves repairs. You sometimes want to sell—many a good house has remained unsold for want of paint. The rule should be though, "the best paint or none." That means

Strictly Pure White Lead

You cannot afford to use *cheap paints*. To be sure of getting Strictly Pure White Lead, look at the brand; any of these are safe:

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

FOR COLORS.—National Lead Co.'s Pure White Lead Tinting Colors.

These colors are sold in one-pound cans, each can being sufficient to tint 25 pounds of Strictly Pure White Lead the desired shade; they are in no sense ready-mixed paints, but a combination of perfectly pure colors in the handiest form to tint Strictly Pure White Lead.

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.

St. Louis Branch,
Clark Avenue and 7th Street, St. Louis.

NATIONAL LEAD CO.

continuously for years, and yet her own condition and that of her calves were all that could be desired. Only two other cows by the sire of this one were produced in our neighborhood and both died from milk fever. They were rich milkers and their misguided owners by giving them a rest from milking and by feeding to produce a fine show before calving killed the geese that had been laying the golden eggs.

"Nor was any weakness or lack of development indicated in the offspring in any case, and I do not believe that in a single instance was there less yield or profit in a year than would have been under any form of treatment. The cows so treated invariably laid on flesh as the time of calving approached, so proving their ability to produce a thoroughly healthy calf while contributing to the dairy; and wherever such a condition exists there would not appear to be the slightest cause for apprehension as to the condition of either the cow or the calf. As old and favorite families were bred for many generations, a steady deterioration would have been evident were such a course prejudicial to the health or stamina of the calves, but such was never apparent or existent, and all heifers offered for sale were quickly purchased at good prices, many buyers returning for further purchases. As to spoiling an udder by such treatment I cannot think such a thing in the least degree likely, though I am aware that many fine udders and valuable cows have been ruined by the opposite treatment."

The Poultry Yard

Local Clubs.

EDITOR KANSAS FARMER:—Through the columns of your paper, for the good of the cause, I would like to recommend to the poultry fraternity the necessity of local clubs every place, no matter how small. If they can get no more than six or eight breeders together, they should organize a club. It is a great help to each member in several ways. First, they encourage and assist one another. Second, they encourage new breeders. Third, when they get fully advertised and started it is generally understood that when people send to any member of the club for eggs or stock they will be fairly dealt with, as the members are bound to watch one another so as to protect themselves, and by so doing they gain the confidence of their customers.

To prove what I am saying, I will give my knowledge or experience: I came from New York State, and that is a great poultry country. Naturally, I had the chicken fever, so I began to look around to see what I could find in the way of fancy poultry. I found three or four breeders of poultry, and, as it looked as though this was a good poultry country, I wanted to see the opportunity improved. So I went to work to organize a club. I found a few poultry breeders, some pigeon fanciers and rabbit breeders, got them all together, and after five or six trials we organized. That was about five years ago. We have held our meetings regularly, once a month, and very interesting ones.

After the regular business we would have a paper read on some special breed or have a pigeon or chicken scored, to see who could do the work the best, which made it very interesting. Also, every member was watched, to see that he dealt fairly and squarely with his customers. We never had but one occasion to expel a member, and it is not necessary to say that he quit the poultry business. And when the Kansas State Poultry Association could not get a quorum, the Topeka Fanciers' Association (which is our name) took the show under its auspices and made a success of it.

Now we have a good large organization and lots of breeders around that do not belong, and we can boast of about seventy good responsible breeders in and about Topeka. Showing as a club we make a better display and also get better shipping rates than would be possible otherwise. Our motto is: "All pull together and assist one another." We have tried to breed all different breeds so as not to have to send a customer away. Now, if I have not said enough to convince any reasonable person, just try it and convince yourself. I nearly forgot an important point, and that is, the saving in advertising, which every prosperous breeder or club must do.

J. P. LUCAS.

How to Kill Mites.

EDITOR KANSAS FARMER:—As a subscriber I take the liberty of asking you for a bit of information regarding the best method of exterminating mites in a barn. My chickens have been roosting in it this summer and now I wish to put my horses up, but am afraid it will be an impossibility to keep my horses in good flesh while the mites are so numerous. Would kerosene or gasoline brushed all over destroy them?

America City, Kas. B. F. EATON.

There are several efficient methods available. The kerosene or gasoline treatment will be effective if made sufficiently thorough to reach all of the mites. It is difficult, however, to make sure that none escape. A more certain method is to close up the barn as tightly as possible and then fumigate with some easily vaporized insecticide. For this purpose it will be found that bisulphide of carbon is easiest of application. To use this it is necessary only to uncork a bottle of the ill-smelling stuff in the barn and shut it in. Be careful that no fire, not even a lighted pipe or cigar, is brought near the bisulphide, for it is very inflammable and explosive. Another method is to burn some roll sulphur in an iron vessel or other receptacle inside the barn. Still another plan is to spray every part of the barn and all the litter and everything in which mites could harbor with kerosene emulsion. A knapsack sprayer is very convenient for this purpose.

Agents wanted for Gearhart's Family Knitter. For particulars address J. E. Gearhart, Clearfield, Pa.

Homes for the Homeless.

The opening of two Indian reservations in northeastern Utah to settlers opens up over three and one-half million acres of fine agricultural and stock-raising land for homeseekers.

The Uintah and Uncompahgre reservations are reached by the only direct route, the Union Pacific system, via Echo and Park City. E. L. LOMAX, G. P. & T. A., U. P. system, Omaha, Neb.

Irrigation.

IRRIGATION.

EDITOR KANSAS FARMER:—Some years ago the people of the United States were torn from center to circumference over what was considered a very perplexing financial problem. Shortly preceding the time referred to our national government had decided to resume specie payments, and when necessary legislation had been enacted, all of the wise men, including the doctors of finance, were seriously perplexed as to how so stupendous an undertaking could possibly become an actual reality. Many of the readers of this article will remember how a plain, matter of fact, every-day man put the world at large on their heads by simply remarking in that paper which he owned (the New York Tribune), "the way to resume is to resume," and it occurs to the writer that the way to irrigate is to irrigate.

There is no gainsaying the fact that it will be an exceedingly nice thing for every owner of farms in the State of Kansas and elsewhere to irrigate every acre of land he possesses. This is an impossibility, however, from various causes. To irrigate a large tract of land necessarily requires a large volume of water. In many instances the necessary water is not to be had under any circumstances or conditions. In other cases the water is plenty, but the farmer lacks the necessary means which will enable him to put in such a pumping plant as is necessary to handle such an increased quantity of water. It nevertheless remains an indisputable fact that where there is a will there is a way, and every farmer in Kansas, practically speaking, can do some irrigating, and it is so nearly the truth that one does not endanger his reputation for veracity by saying that every farmer in Kansas can irrigate sufficient ground to more than raise all the vegetables necessary for the sustenance of himself and family.

Within the past few weeks the writer has had a conversation with a gentleman living at Wallace, Kas., a country with which the writer is thoroughly familiar through his connection with the old Kansas Pacific railway in 1873, 1874 and 1875, and in which years the country round about Wallace never gave any indication of being capable of growing even white beans. The gentleman to whom reference has just been made, however, put up a small windmill, constructed a reservoir, and turned the combination loose. The result is that he has had more than sufficient products from a small acreage to sustain himself and his family, and has somewhere in the neighborhood of \$1,000 worth of onions for the market.

Any one can build a reservoir. If he has not a team of horses and a scraper, he can take a shovel and by patience and perseverance can have a reservoir of greater or less capacity complete. The expense of putting up a small windmill and tower with suitable pump is practically within the reach of every one, because the amount of money required for this is small, comparatively speaking, and most people have something, if not the actual cash, which will enable them to secure this mill.

Those who have the means and a ready supply of water can easily provide for irrigating upon a larger scale, and will, of course, receive the greater measure of benefit. In a great many localities an ample supply of water can readily be secured by constructing dams across draws through which annually sufficient water runs to waste to properly irrigate the entire surrounding country.

It can be set down as a fixed fact that neither the national nor the State governments are going to provide irrigating plants for the individual, and as the writer has clearly said in previous articles: "Irrigation is a subject worthy every agriculturist's thought and application. But comparatively few localities exist where it is utterly impossible to irrigate at least a few acres. Do not depend too much on wells, but create artificial lakes by damming draws and so retain for use as demanded the so-called run-off water. A little money and labor expended in

this direction will bring immediate returns, whereas the person who waits for the government to act will perhaps not live to learn that irrigation is a possibility. *Nothing succeeds like individual effort.*"

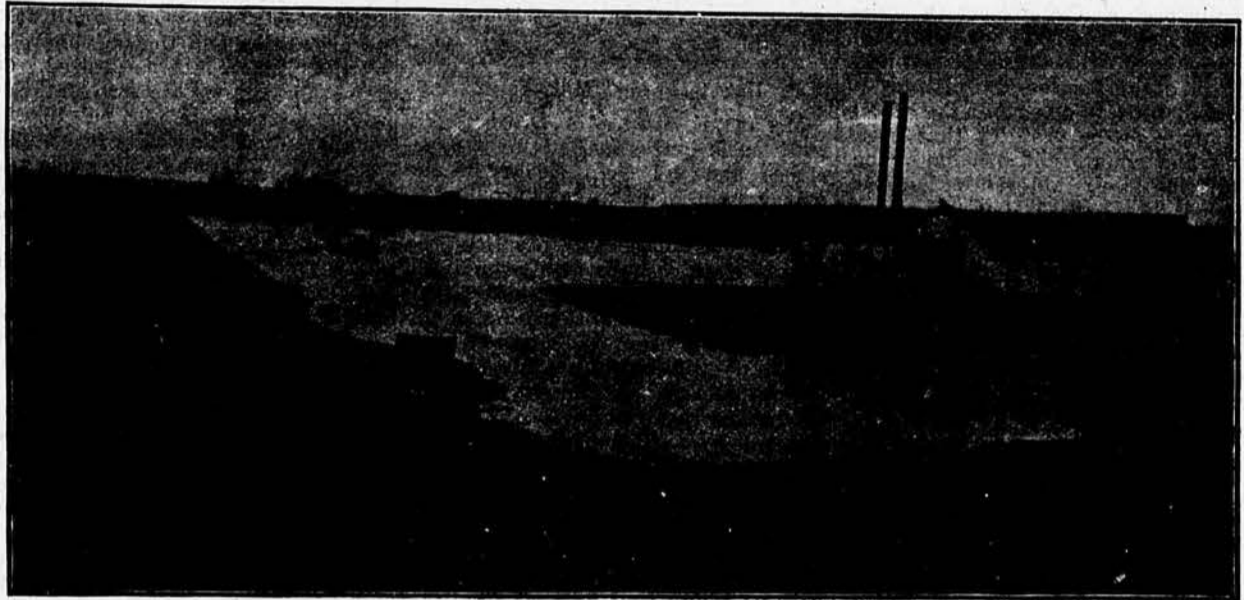
Most people have done more or less driving across the country, and from a distance have viewed hills which to the eye seemed unsurmountable, it just looked as though the dirt in the road stood right straight up and down, but have you not noticed as you patiently proceeded in following the road that the hill gradually but surely melted away? It is almost exactly so in the travel through life. We get to a certain elevation, and as we look forward it just seems as though the barriers appearing before us were beyond our power to overcome, yet as we have pressed forward with our unlimited faith in God we have surmounted the difficulties, have grown stronger by the

of the land from the public domain is ordained by the Secretary of the Interior, the State shall file a map of the said land proposed to be irrigated, which shall exhibit a plan showing the mode of the contemplated irrigation, and which plan shall be sufficient to thoroughly irrigate and reclaim said land and prepare it to raise ordinary agricultural crops and shall show the source of the water to be used for irrigation reclamation; and the Secretary of the Interior may make necessary regulations for the reservation of the lands applied for by the States to date from the date of the filing of the map and plan of irrigation, but such reservation shall be of no force whatever if such map and plan of irrigation shall not be approved. That any State contracting under this section is hereby authorized to make all necessary contracts to cause the said lands to be reclaimed, and to in-

reclaimed and settled; provided, that such States shall not sell or dispose of more than 160 acres of said land to any one person, and any surplus of money derived by any State from the sale of said lands in excess of the cost of their reclamation shall be held as a trust for and be applied to the reclamation of other desert land in such State. That to enable the Secretary of the Interior to examine any of the lands that may be selected under the provisions of this section, there is hereby appropriated out of any money in the Treasury, not otherwise appropriated, \$1,000.

Water Inches.

Irrigation water is measured generally by the cubic foot, by the gallon, or by miner's inches. The miner's inch is a variable quantity, depending upon the head above the one-inch orifice of



City Lake, Garnett, Kansas, showing waterworks and electric light power house. Lake covers fifteen acres; average depth, eleven and one-half feet. Southern Kansas Railway on the left.

effort and have accomplished the desired end.

The object of this letter is to try to encourage those who seem cast down through the continued losses that have come to them year after year, and to whom the future to-day seems very dark. Nevertheless, if these people will take the bull by the horns, once more, and follow out the spirit of the suggestions which have herein been given, the future will surely bring them the victor's reward, and which is their just desert.

If any who read this find in it any suggestions and about which further information may be desired, communications addressed to the writer at Kansas City, Mo., will reach his hands, and letters will be promptly and fully answered, and no charge will be made for any services or suggestions that may be given.

IRA C. HUBBELL.

The Arid Lands Act.

The land clause of the recently-passed sundry civil appropriation bill is as follows:

"That to aid the public land States in the reclamation of the desert lands therein, and the settlement, cultivation and sale thereof in small tracts to actual settlers, the Secretary of the Interior, with the approval of the President, be, and hereby is, authorized and empowered, upon proper application of the State, to contract and agree, from time to time, with each of the States in which there may be situated desert lands as defined by the act entitled 'An act to provide for the sale of desert land in certain States and Territories, approved March 3, 1877,' and the act amendatory thereof, approved March 3, 1891, binding the United States to donate, grant and patent to the State free of cost for survey or price such desert lands, not exceeding 1,000,000 acres in each State as the State may cause to be irrigated, reclaimed, occupied and not less than twenty acres of each 160-acre tract cultivated by actual settlers, within ten years next after the passage of this act, as thoroughly as is required of citizens who may enter under the said desert land law.

"Before the application of any State is allowed or any contract or agreement is executed or any segregation of any

duce their settlement and cultivation in accordance with and subject to the provisions of this section; but the State shall not be authorized to lease any of said lands or to use or dispose of the same in any way whatever except to secure their reclamation, cultivation and settlement.

"As fast as any State may furnish

discharge. It varies from a four-inch head to a six-inch head, and is not a commendable unit of measure. Thus, there are fifty miner's inches to a cubic foot per second. California measurement, and about forty miner's inches, Colorado measurement. One cubic foot contains seven and one-half United States gallons of 231 inches.

CUBIC FEET.

1 cubic foot per second equals:
2 acre feet in twenty-four hours.
60 acre feet in thirty days.
180 acre feet in three months.
720 acre feet in one year.
7.5 gallons per second.
50 California inches.
38.04 Colorado inches.

CALIFORNIA INCHES.

100 California inches equal:
4 acre feet in twenty-four hours.
1 acre foot in six hours.
120 acre feet in one month.
360 acre feet in three months.
1440 acre feet in one year.
15 gallons per second.
900 gallons per minute.
77 Colorado inches.
2 cubic feet per second.

COLORADO INCHES.

100 Colorado inches equal:
5.14 acre feet in twenty-four hours.
1 acre foot in 4.2 hours.
155 acre feet in one month.
465 acre feet in three months.
1860 acre feet in one year.
19.50 gallons per second.
1170 gallons per minute.
2.6 cubic feet per second.
180 California inches.

—Rural Californian.

Practical Points in Irrigation.

EDITOR KANSAS FARMER:—After reading the proceedings of the political humbug held in Denver, under the name of the irrigating congress, I feel like asking the question, "how many such political meetings would it take to furnish the water to irrigate five acres of potatoes?" Now, as this all-important question is agitating the minds of the majority of farmers in the country, and as the country is full of men selling all kinds of new-fangled pumps, all of which are the best, and take the least power, etc., I would say to the people, make haste slowly, but make haste.

Take the money that it costs to attend these irrigating congresses and put down a well, and the balance spend on your reservoir. Don't think of emigrating, but irrigating, and let me say right here, there is not one quarter



Anderson county corn, product of 1894.

satisfactory proof, according to such rules and regulations as may be prescribed by the Secretary of the Interior, that any of said lands are irrigated, reclaimed and occupied by actual settlers, patents shall be issued to the State or its assigns for such lands so

section of good agricultural land in the State but has at least ten acres of it which is susceptible of irrigation.

Now, a few words in regard to pumps. For ease of construction, low first cost and the cost to keep up repairs for deep well pumping, say fifty feet and over, there is nothing better than the lift pump.

Water Measurement.

By H. V. Hinckley, Topeka, Consulting Engineer Kansas Irrigation Association.

So numerous are the irrigation plants that are being put in and so difficult is it for the average man to get a definite idea of the quantity of water he is using, that the following table may be of service where the delivery is such that it can be measured over a rectangular weir cut smooth in a smooth board:

Table with 4 columns: Depth, Miners' inches, Depth, Miners' inches. It provides conversion data for various weir depths and miner's inch measurements.

To use the table, measure the depth of water in inches over the weir, but in doing so measure from the bottom of the weir opening (through which the water flows) vertically to the level of the still water (back of the weir) rather than to the actual top of water over the weir.

Multiply miner's inches by .02 and you have the cubic feet per second; or by .04 and you have the acre feet per day; or by 0.5 and you have the acre inches per day; or by 4 and you have the acre feet in 100 days; or by 4.8 and you have the acre feet in four months; or by 14.5 and you have the acre feet in a year; or by 9. and you have the gallons per minute.

The water immediately back of the weir should not be turbulent. Measuring weirs are usually placed in a side box off from the main current.

For large canal measurement the following formula will be found handy: Cubic feet per second = 10 W (D^3)^(1/4), W

being width of weir opening in feet and D being depth of water in feet measured as above stated. A sliding weir can often be arranged so that D may

be kept at one foot and formula reduces to 10 W.

Multiply cubic feet per second by 2 and you have the acre feet per day; or by 25 and you have the acre inches per day; or by 198 and you have the acre feet in 100 days; or by 238 and you have the acre feet in four months; or by 724 and you have the acre feet in one year; or by 449 and you have the gallons per minute.

For determining the amount of water delivered from the end of a horizontal pipe by a gasoline or steam engine, measure the horizontal distance (H in feet) and the vertical fall (F in feet) from the center of the end of the pipe to the center of some point in the falling stream. The delivery in cubic feet per second (when power is sufficient to keep pipe full or practically so) is H D^2, in which D is the inside diam-

eter of pipe in inches. If convenient, take F as four feet, so that formula becomes H D^2. The cubic feet per second may be reduced to acre feet per day, etc., by multiplying as above directed.

To determine the amount of water a windmill is throwing, use the following formula: Gallons per hour 0.2 N S D^2, in which N = number of strokes per minute, S = stroke in inches and D = inside diameter of cylinder in inches.

(A simpler method, however, is to measure the actual delivery with a gallon measure for one minute and multiply by sixty. Beside being simpler, it corrects any error due to loss in cylinders.

Divide gallons per hour by 38 and you have acre inches per month; or by 13 and you have acre inches in three months.

The above results are not mathematically accurate, but will be found close enough for ordinary computations. They make no allowance for seepage and evaporation.

WORLD'S CARNIVAL CITY.

St. Louis Offers a Continuous List of Attractions—Her Unrivaled Fall Festivities Commence September 5, and Hold Full Sway Until October 20, 1894.

The successful series of carnival seasons inaugurated by the citizens of St. Louis some fifteen years ago, continue as ever for the season of 1894, and from the morning of September 5 to the evening of October 20 the city will be one scene of gayety and splendor.

THE ST. LOUIS EXPOSITION, the only one of its kind in the United States that has lived year after year with flattering results, will throw open its doors to the public September 5, and remain in a state of activity until the evening of October 20.

The exhibitors, both foreign and home, will present new ideas in displaying their goods, and, in addition to other features, a full complement of specialty artists will perform on the stage of the Music hall.

THE GREAT ST. LOUIS FAIR, which will open Monday, October 1, and continue during the week, promises to afford many pleasant surprises. The "Midway Plaisance" feature at the World's Fair will be reproduced in full, and the people of the West and Southwest given an opportunity to see in real life the inhabitants of every civilized and uncivilized country on the face of the globe.

The "Streets of Cairo," "Old Vienna," "Moorish Palace," "Hagenbachs," "Ferris Wheel," etc., will be faithfully portrayed.

His Royal Highness, the MIGHTY VEILED PROPHET and retinue, will enter the gates of the city on the evening of October 2, and parade through the principal thoroughfares as of old. Visitors to the city will arrive at the handsome new Union station, the largest railway edifice in the world, and the most perfect in every appointment.

For a complete program, giving each week's attractions in detail, address any agent of the company, or H. C. Townsend, General Passenger Agent, St. Louis, Mo.

A Prize Postal Card.

Several weeks ago the Topeka Mail offered a premium of one year's subscription to that paper and one year's subscription to the KANSAS FARMER to the Shawnee county farmer who could put the best idea on a postal card.



A. E. JONES.

dairyman and farmer east of Oakland, and dairy editor of the KANSAS FARMER, who crowded on to one little postal card more practical information and sound sense than the general run of writers can put into two or three newspaper columns.

My experience is that farming, to be profitable, must be conducted on the most exacting plan of economy in every department, and recommend the following: Study to have the work done in the best manner with the least labor. Good fences make peaceable stock. Keep the farm tools in repair and under cover. Don't let manure go to waste.

Silberman Bros., wool merchants, of Chicago, write the FARMER regarding the prospect of wool sales as follows: "The passage of this bill has put wool on the free list—that is, free of import duties, which is no doubt a direct discrimination against the wool producers, who are now compelled to accept prices regulated by foreign markets."

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holders. Stocks here are only sufficient to supply the demand of Western mills. We anticipate no material decline, and look for a steady business, with slightly better prices on medium wools, as the season advances and stocks become reduced.

Free exercise and a varied diet will give to the hogs the streak of fat and the streak of lean now so much desired. They will be especially happy over a diet of vegetables, waste fruits, skim-milk and bran.

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Room 507 Brown Block, Omaha, Neb.

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It is printed in clear, good type on fine paper, and is handsomely bound in cloth, with ink side stamp and gold back, and is a book which every person ought to possess, who has anything to do with the care of animals.

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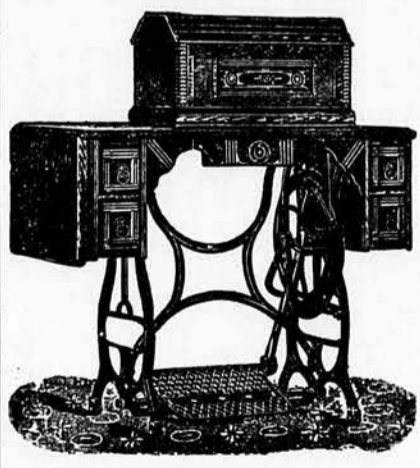
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PROPOSED AMENDMENT TO THE CONSTITUTION.

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 their 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 thereon 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.

PERCY 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,
[SEAL.] Secretary of State.

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Official Receipts, 1893.....	1,746,828	1,948,373	569,517	35,097	99,755
Slaughtered in Kansas City.....	956,792	1,427,703	372,385		
Sold to feeders.....	249,017	10,125	71,284		
Sold to shippers.....	300,237	510,469	15,200		
Total sold in Kansas City.....	1,566,046	1,948,357	458,869	22,522	

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Answer.—The lump should be cut away carefully so that the sore can be healed, but the extent to which it should be cut will depend upon the exact location and condition of the cut, and the character of the lump, whether morbid growth or not; and all this can only be determined by a competent veterinarian.

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THE STRAY LIST.

FOR WEEK ENDING SEPT. 12, 1894.

Harper county—Wm. Duffy, clerk. MARE—Taken up by Frank Seifert, in Anthony tp., April 21, 1894, one small dun mare, 7 years old, no marks or brands.

FOR WEEK ENDING SEPT. 19, 1894.

Johnson county—Jno. B. Lyons, clerk. COW—Taken up by J. E. Johns, P. O. Merriam, September 11, 1894, one red muley cow, tip of tail white.

FOR WEEK ENDING SEPT. 26, 1894.

Coffey county—T. N. Bell, clerk. HORSE—Taken up by E. A. Rutledge, in Pleasant tp., September 9, 1894, one heavy set black horse, 6 years old, weight 900 pounds, spot in forehead; no marks or brands.

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the Board of Public Works of the State of Kansas, at Topeka, Kansas, until 2 o'clock p. m. on Monday, October 15, 1894, and opened immediately thereafter, for all labor and material required in the construction of a detached cottage for the State Industrial School for Girls at Beloit, Kansas.

Each bid must be accompanied by a certified check for a sum not less than 3 per cent. of the amount of the proposal, made payable to S. M. Scott, President of the Board of Public Works, State of Kansas, and to be forfeited to the State of Kansas as liquidated and assessed damages by the successful bidder if they fail to enter into contract and give the required bond on or before October 20, 1894.

The attention of all bidders is called to chapter 114 of the session laws of 1891, which they are expected to comply with in all State contracts. All bidders are invited to be present at the opening of bids, either in person or by attorney.

WM. WYKES, Secretary.

MARKET REPORTS.

Kansas City Live Stock. KANSAS CITY, Sept. 24.—Cattle—Receipts, since Saturday, 7,015; calves, 617; shipped Saturday, 2,303; calves, 251. The market for native cattle throughout was steady; western steers 10 to 20 lower; Texas steers steady; cows 5c lower. The following are representative sales:

Table with columns for DRESSED BEEF AND EXPORT STEERS, WESTERN STEERS, COWS AND HEIFERS, and TEXAS AND INDIAN STEERS. Includes prices for various grades of cattle.

TEXAS AND INDIAN COWS. 27..... 835 \$2.20 89..... 678 \$2.17 32..... 744 2.10 70..... 761 2.05

STOCKERS AND FEEDERS. 20..... 1.180 \$3.75 110 Phd..... 1,022 \$3.50 20..... 1,027 3.40 5..... 640 2.80

Hogs—Receipts since Saturday, 1,782; shipped Saturday, 821. The market was steady, with choice hogs unsold. The sales were scattering from \$5.15 to \$5.55. The following are representative sales:

Table with columns for Chicago Live Stock, CHICAGO, Sept. 24.—Hogs—Receipts, 19,000; official Saturday, 7,306; shipments Saturday, 3,414; left over, about 5,500; quality poor, market fairly active; prices 5c higher.

Chicago Live Stock. CHICAGO, Sept. 24.—Hogs—Receipts, 19,000; official Saturday, 7,306; shipments Saturday, 3,414; left over, about 5,500; quality poor, market fairly active; prices 5c higher.

St. Louis Live Stock. ST. LOUIS, Sept. 24.—Cattle—Receipts, 3,900; market slow and lower than last week's close; good native steers, \$4.10 to \$5.00; good Texas steers, \$3.00 to \$3.30. Hogs—Receipts, 2,000; mar-

ket active, 10c higher; choice heavy, \$5.70 to \$5.95; mixed, \$5.20 to \$5.70; light, \$5.50 to \$5.75. Sheep—Receipts, 1,500. Market barely steady.

Kansas City Grain. KANSAS CITY, Sept. 24.—The receipts of wheat to-day were very small for Monday and the market was consequently very dull. There were but few buyers. Prices were about the same as Saturday's.

Receipts of wheat to-day were 67 cars; a year ago, 291 cars. Quotations for car lots by sample on track at Kansas City at the close were nominally as follows: No. 2 hard, 40 to 47c; No. 3 hard, 45 to 46c; No. 4 hard, 44 to 45c; rejected 48c; No. 2 red, 44 to 45c; No. 3 red, 44c; No. 4 red, 43c; rejected, 42 to 43c.

The receipts of corn were small and there was a fair demand for the offerings at unchanged prices. Receipts of corn to-day, 12 cars; a year ago, 189 cars.

No. 2 mixed, 2 cars 40 to 4c, 6 cars 40c, 1 car new 45 to 4c, 1 car new 45c Kansas City; No. 3 mixed, 45c; No. 4, 44c; No. 2 white, 3 cars 51 to 4c, 3 cars 51c; No. 3 white, 50c.

Oats were in fair demand at unchanged prices. Receipts of oats to-day, 12 cars; a year ago, 17 cars.

No. 2 mixed oats, 9 cars 28 to 4c, 4 cars 28 to 4c, 4 cars 28c; No. 3 mixed, nominally, 27 to 4c; No. 4 oats, nominally, 27c; No. 2 white oats, 1 car 32 to 4c; No. 3 white, nominally, 31 to 4c.

Hay—Receipts, 57 cars; market lower. Timothy, choice, \$3.50 to \$4.00; No. 1, \$3.00 to \$3.50; low grade, \$7.00; fancy prairie, \$8.00; choice, \$7.00 to 7.50; prime, \$5.50 to \$6.00; packing hay, \$4.00 to \$5.00.

Chicago Grain and Provisions. Table with columns for Sept. 24, Opened, High'st, Low'st, Closing. Includes prices for Wheat, Corn, Oats, Pork, Lard, and Ribs.

St. Louis Grain. ST. LOUIS, Sept. 24.—Receipts, wheat, 44,000 bu.; corn, 33,000 bu.; oats, 60,500 bu.; flour, 3,840 bbls; shipments, corn, 8,400 bu.; oats, 10,500 bu.; flour, 7,225 bbls. Closing prices—Wheat—Cash, 48 to 4c; September, 48 to 4c; December, 51c; May, 56 to 4c. Corn—Cash, 52 to 4c; September, 53c; December, 47 to 4c; May, 49 to 4c. Oats—Cash, 29 to 4c; September, 29 to 4c; May, 34 to 4c.

Kansas City Produce. KANSAS CITY, Sept. 24.—Eggs—Supply light, market quiet and steady; strictly fresh, 12 to 4c. Butter—Receipts increasing, market weak on common grades; extra fancy separator, 22c; fancy, 19 to 21c; fair, 18c; dairy, fancy, firm, 17 to 18c; fair, 16c; choice country, steady, 15 to 18c; choice packing, weak, 11c. Poultry—Receipts light; the market is quiet; hens firm, 6c; spring, large, rough, 6 to 6 to 4c; choice small, 7c; roosters, 15c; turkeys, receipts light, not wanted; young, unsalable; gobblers, weak, 5c per lb.; hens, 5c per lb. Ducks, dull, 5c per lb.; spring, 6 to 4c per lb. Geese, not wanted, dull, 4c; poor, unsalable; goslings, 6 to 4c. Pigeons, quiet, 75c per doz. Green Fruits—Lemons, quiet, steady, \$3.00 to 4.50. Oranges, dull; Mexican, \$4.25 per box; Rodi, \$5.00 to 5.50. Grapes, active, firm, 2c per lb. Plums, 40 to 50c per 1/2 bu. basket; Damson, \$2.50 to 3.00 per bu. Peaches, \$1.75 to 2.00 per 6 basket crate. Cranberries, firm; Cape Cod, \$9.00 per bbl. Watermelons, dull, 35c to \$1.00 per doz. Cantaloupes, plentiful, 4 to 75c per doz. Vegetables—Cabbage, scarce, \$1.00 to 1.25 per 100. Michigan, \$1.25 to 1.40. Cauliflower, small, 40 to 50c per doz.; large, 75c per doz. Potatoes, plentiful, weak, 40 to 45c per bu.; Utah, 62 to 67c; sweet, red, 40c; yellow, 50c per bu.

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C. M. IRWIN, Secretary, Wichita, Kas.

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