

KANSAS FARMER

ESTABLISHED IN 1863.
VOL. XXXVI. NO. 11.

TOPEKA, KANSAS, THURSDAY, MARCH 17, 1898.

SIXTEEN TO TWENTY
PAGES—\$1.00 A YEAR.

BREEDERS' DIRECTORY.

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H. E. Bachelder, Fredonia, Wilson Co., Kas.

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125 head. The best individuals and most popular strains that money and judgment could buy and experience breed. Thirty choice spring pigs both sexes, by Black Stop Chief 16518 S., he by the great breeding boar Black Stop 10650 S., a son of the World's Fair winner Short Stop. Write or visit us.
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W. P. GOODE, Proprietor, Lenexa, Kas.

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WM. MAGUIRE, Haven, Kas.

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Both boars and sows, for sale reasonable. Sired by the noted Nox All Wilkes, Highland Chief by Chief Tecumseh 2d, and Look at Me by Look Me Over. Three fine young sows safe in pig for sale. Plymouth Rock eggs out of high-scoring birds, \$1.25 for fifteen.
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J. M. COLLINS, Welda, Anderson Co., Kas.

BLUE RIBBON HERD
PURE POLAND-CHINA SWINE
and Barred Plymouth Rock chickens. Tecumseh Short Stop 14750 at head of herd, assisted by Hadley Jr.'s Equal 15119 and King Tecumseh 16307. One hundred choice pigs for sale. Farm located three miles southwest of city. Calls or correspondence invited.
E. H. WHEELER, Lawrence, Kas.

Nation's Poland-Chinas.

Fifty boars and gilts for this season's trade. My herd boars consist of Darkness Quality 14361, Princeton Chief 14445, Col. Hidesretcher 37347 and Standard Wilkes. My sows are splendid individuals and of the right breeding. Personal inspection and correspondence invited.
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Herd boars, Victor Hugo 41799 (sire imp.), Barkis 30040 (weight 800 lbs.), Prince Jr. 17th, from World's Fair winner. Forty-eight spring and summer pigs for sale. Also bred choice B. P. Rock chickens. Write.
Allen Thomas, Blue Mound, Linn Co., Kas.

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KLEVER'S 1st MODEL
18245 S.

Sired by Klever's Model 14664 S., the \$5,100 king of boars; first dam Graceful Maid (43851); second dam Graceful F. 3d (29670), litter sister to Old Look Me Over 9011, the \$3,500 boar. This gives Klever's 1st Model all that could be asked in breeding and sale ring backing. He is black as ink, low down, deep and broad, extra head and ears. His get follows the pattern perfectly. He will be assisted by other good boars in service on thirty matured sows of modern type and breeding. I sell nothing but tops; keep my knife sharp for culls. Free livery at Roberts' stables.
F. W. BAKER,
Council Grove, Morris, Co., Kas.

COUNCIL GROVE HERD POLAND-CHINA SWINE.

Herd boars are H's World's Fair No. 2 11930, grandson of Seldom Found 7815, Klever's Model 3d 19789, King Hadley 15057 (C). This hog is not only a show hog, but a prize-winner, breeding Hadley Blood, One Price Imitation, Guy Wilkes 2d, Black U. S., L's Tecumseh and Chief Tecumseh 2d.
Did you ever see such a combination? Where can you get more of the blood of the great sires combined in so grand an individual?
Choice gilts and fall pigs for sale.
W. F. Shamleffer, Council Grove, Kas.

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For stock of all kinds. Write for prices. Manufactured by the
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SWINE.

SHADY BROOK POLAND-CHINAS
STOCK FARM.
H. W. CHENEY, Prop., NORTH TOPEKA, KAS.
Cheney's Chief I Know, assisted by Model Hadley, at head of herd. Topeka is the best shipping point and my stock the best kind to buy. When in Topeka call at 1132 N. Harrison St. and be shown stock.

PURE-BRED POLAND-CHINA SWINE.
Brood sows by Wren's Medium, Hadley M. Washington, Protection Boy, Moss Wilkes Tecumseh (by C. T. 2d), Tanner 19212, a grandson of the famous Hidesretcher, at head of herd, assisted by Prince Darkness, out of Darkness 1st. Corwin Sensation and Darkness 1st are very choice sows. Some October Tanner pigs for sale. Get one for a herd header. Also some One Price Medium 2d pigs for sale. Three young boars ready for service. Write for prices.
J. R. WILLSON, Marion, Kas.

MILES BROTHERS' HERD Registered Poland-Chinas.

Peabody, Marion Co., Kas.
We have for sale now some choice fall pigs by Miles' Look Me Over and out of a full litter sister to Corwin Sensation, that sold February 2, 1898, at Mr. Wren's sale for \$167.50. Also some nice ones by Hadley Corwin Faultless, and by a son of Chief Tecumseh 2d. We can suit you in quality and price. Write us.

PLEASANT VALLEY HERD REGISTERED POLAND-CHINA SWINE

King Perfection 4th 18744 S. at head of herd, assisted by Tecumseh Wilkes 12024 S. and Lambing Ideal 14060 S. The sire of last named is Gov. C. by Black U. S. We have for sale an extra fine male of June, 1896, sired by him. We have added several very finely bred sows to our herd. Write for particulars. Address either W. E. JOHNSON, E. A. BRICKER, Colony, Kas. Westphalia, Kas.

HIGHLAND FARM HERD PEDIGREED POLAND-CHINAS.

Herd headed by Corwin I Know, a son of the noted Chief I Know 11992 S. Corwin I Know won second as a yearling at Iowa State fair in 1897. Weighed 600 pounds at 13 months. Assisted by Hadley U. S., a son of Hadley Jr. 13314 S.; dam by Mosher's Black U. S. 25 Brood Sows—Kiever's Model, Look Me Over, Chief I Know and What's Wanted Jr. breeding. Inspection and correspondence solicited.
John Bollin, Kickapoo, Leavenworth Co., Kas.

Mains' Herd Poland-Chinas

Headed by the three grand breeding boars, Model Combination—his sire was J. D. Model, he by Kiever's Model 14664 out of McKelvie's Lass 42107; his dam Lady Chief 42919, she by Chief Tecumseh 2d 9115 and out of Ralph's Pet 42788; One Price Chief—his sire Chief Tecumseh 2d 9115, his dam Alpha Price 38785, she by One Price 4207; Kansas Chief 33615—she by Royal Chief's 2d and out of Bell O. 74504. The sows are all selected and equal in breeding and quality to any. A few sows bred will be offered. Young males and gilts ready. Satisfaction guaranteed.
James Mains, Oskaloosa, Jefferson Co., Kas.

150 PIGS FROM PREMIUM CHESTER WHITE
stock; choice breeding, good length, bone and ham. Young stock not akin from five grand boars and twenty-five sows. Special offering now of best breeding. Also B. P. Rocks and Buff Cochins eggs for sale from best strains. Prices right.
J. C. CANADAY, Bogard, Carroll Co., Mo.

PURE-BRED SHORT-HORNS.

I have for present sale thirteen pure-bred Short-horn bulls old enough for service, including my herd bull, Imperial Knight 119669, a pure-bred Cruickshank, which I can now spare. I have also twenty cows and heifers bred or will have calves at foot, all of my own breeding. For sale at reasonable prices. John McCoy, Sabetha, Kas.

Live Stock Artist.

F. D. TOMSON, 514 Monroe St., Topeka, Kas. Portraits for framing and cuts prepared for advertising purposes. Breeders' correspondence solicited.

LIVE STOCK ARTIST and ILLUSTRATOR.
L. E. A. FILLEAU, 807 Main St., Kansas City, Mo. Write for terms for sketches from life.

Agricultural Matters.

TREATMENT FOR A PECULIAR SOIL.

H. R. Hilton—Dear Sir: I send you by express to-day samples of the surface five inches and of the subsoil taken twelve to fourteen inches below surface from an upland prairie farm that has been in cultivation continuously for twenty-seven years and never plowed deeper than five inches, as far as I can learn. The surface soil varies in depth from six to ten inches, but probably averages eight inches. Soil washes in excessive rains but does not bake so much as Eastern claysoils. This sample from sloping land. Magnesian limestone outcrops below but not above the land in question.

When you examine this soil, would be glad to receive your suggestions as to the best method of treatment with such tools as we have here at our command, to make it more productive. Such information will be highly appreciated and we will try to make good use of it.

Yours truly, —

Blue Rapids, Kas.

MR. HILTON'S REPLY.

Topeka, Kas., January 19, 1898.
I duly received your sample of the surface and subsoil from your upland farm near Blue Rapids, in Marshall county, also your request that I advise you as to what, in my judgment, would be the best method to adopt to improve the soil and make it more productive.

I find on examination that the surface and subsoil represent extremes in their relation to water. The surface soil is very porous. It is, in texture, like oat or corn meal coarsely and unevenly ground. Water falls through it as rapidly as through building sand. It will take water to the depth cultivated five times faster than the fastest rainfall ever recorded in Kansas, or at the rate of thirty inches per hour. It does not swell much on being wet so as to check the flow of water downward into the soil. This is a favorable condition in one respect. If the subsoil takes care of all the rain as fast as it falls, then the surface inch or two will dry out rapidly and the loss by evaporation from the soil direct will be much less than in fine-textured soils. It is what may be termed a "self-mulching" soil; that is, it dries out on the surface without baking or becoming hard. Cultivation promptly after a shower will undoubtedly benefit it, but a failure to cultivate will not be so disastrous as in finely-powdered surface soils. Its capacity for water, or rather the quantity of water it will hold back from drainage, is below the average, probably three inches per foot of depth. On the other hand, the plant can probably reduce the water content to a smaller per cent. than in the case of finer-grained soils. Where it has only been plowed four to five inches deep its porous texture would be against it in a prolonged dry period, and for this reason and to increase its drought-resisting properties, it needs deepening and its texture improved so as to hold more water. Its highly granulated condition is probably due to loss of humus during the twenty-seven years of continuous cropping and soil-robbing to which this land has been subjected.

The subsoil is fine-textured and tenacious. In its natural position, when moist and fully swollen it undoubtedly takes water slowly, which in extremely heavy showers causes the top soil to become fully saturated and commence washing at the surface because the water cannot get away below. This condition would naturally suggest subsoiling to increase the water storage, but I find that once disturbed and broken up this subsoil does not settle closely together again. When dry it won't crush. Its particles do not separate. Pounding it is just like pounding leather. When wet it is very sticky but remains in a honey-combed condition, through which the water falls as rapidly as through the surface soil. Was compelled to resort to freezing and thawing to reduce it to a friable condition. Then water percolated through it at the rate of three inches per hour, instead of about thirty inches per hour before freezing it, and its water-holding power—that is, the amount it would retain after drainage ceased—was quite three and a half inches per foot in depth. A mixture of one part of the subsoil to four parts of the surface soil gave nearly ideal physical conditions for water, reducing rate of percolation to three to four inches per hour and increasing its water-holding power over one quart per cubic foot. As there is rarely more than four quarts of water available in any soil in each cubic foot, this would mean an increase of 25 per cent. of available water, an increase that, if main-

tained throughout the growing season, would easily double the crop.

This suggests one way in which this soil may be improved, viz.: Every time the land is fall-plowed go one to two inches deeper and leave this new earth on top all winter exposed to the action of rain, frost, sun and air. The next season's cultivation will mix it with the surface soil and thus improve the texture of the latter. The depth of the surface soil will be gradually increased in this way and should be until at least ten inches is made friable and mellow.

Subsoiling about four inches below the surface plowing would probably be beneficial if done in the fall and the ground is frozen during the winter following to the depth subsoiled, but if not frozen and thus mellowed, I would be afraid of four inches of honey-combed subsoil underneath only five inches of cultivated surface soil. When the surface soil is deepened to eight to ten inches then two inches of honey-combed subsoil might and probably would be a great benefit, especially if the surface two to two and a half inches is kept as nearly dry as possible to preserve the moisture from waste by evaporation.

If you can get a subsoiler in the neighborhood (a Perine preferred) use it on a strip a few rods wide, furrows about two feet apart, across the direction the corn is to be planted. Do this in the fall of 1898. Also run a dozen or more furrows with subsoiler, six to eight feet apart, across the slope on some of your sloping land, and note the effect of both methods. Would not go over ten inches from the surface. Use subsoiler on stubble without surface plowing. If trash gatherers put on a rolling cutter. This experiment will not cost much and may give you valuable information.

If these suggestions are followed I am confident the physical condition of the soil will be greatly improved, so that air, water and heat can co-operate to prepare the food for the plant, but this will not supply the food. A system of restoration must be inaugurated to make this land of value. The continuous drain of fertility for twenty-seven years cannot be restored in a few days. It is a labor of years.

To supplement the improvement in the physical or mechanical condition of this soil, I would suggest the following treatment: This spring (1898) sow oats, millet or some early-maturing crop. When the spring crop is removed, disc in Kaffir corn or Indian corn sown broadcast. Finish with harrow (teeth slanting backward). Plow under this crop in September or October, when the growth is rankest and fullest of sap and before any weeds mature. If the land has been plowed only five inches heretofore, let this plowing be at least seven inches deep. Always follow with the disc (axle at right-angle to line of draft) on the same day that the land is plowed. This is to prevent drying out and to press the soil around the green manure just turned under, so as to start it rotting at once while it is full of sap. This is very important and should be done promptly and thoroughly. If work is completed early enough, a seeding of rye would give a helpful cover during the winter, and its fall and winter growth would add an additional supply of humus-forming material to the surface soil.

If, owing to dry weather, you should fail to get a stand of Kaffir or Indian corn, then plow and disc, as already suggested, as soon as the ground is in condition and seed to rye. Allow no stock on the rye during the fall or winter. Save it to feed the following crop.

In the spring of 1899, plant to corn, sorghum, Kaffir or any crop requiring summer culture. Use lister if it will work and not disturb the layer of green manure. Otherwise, plow shallow—about four inches—and use planter or drill. After crop is eight inches high do not cultivate deeper than two and a half inches. Cultivate as far as possible by showers and as promptly after every shower as possible. Use one-horse cultivator with five or more teeth, if it rains after you have "laid by" your crop. This is to restore the mulch of dry earth and save the moisture for the critical period in the plant's growth, viz., the time of flowering and of seed formation.

In the fall of 1899, sow wheat or rye in the corn rows. Break down and use stalk-cutter on stalks just as soon as the crop can be gathered. Do not pasture them, but start them decaying by bringing them in contact with the moist soil before winter sets in. If you have sown rye, you can plow it under in the spring, if you prefer to mature some other crop, but it must be an early-maturing one to admit of seeding a catch crop again in the summer of 1900. In plowing this under bring up at least one inch of new earth from the subsoil to be weathered and added to the top soil. For the catch

crop of 1900 would prefer cow pea or soy bean, because these are legumes and will add to the supply of nitrogen in the soil. Get a few bushels and begin cultivating them this spring (1898) for the seed. Sow the increase in 1899 and cultivate for seed. Sow the increase again in 1900, and you will have a supply of soy beans at least for the catch crop of 1901.

Crops other than legumes when plowed under do not add anything to the total fertility of the soil. They simply restore what they have removed. But they do improve the mechanical condition of the soil, increase its water-holding power, and become valuable agents in making available to the plant the fertility that is already in the soil. In other words, green crops not leguminous add to the available plant-food supply but do not increase the total supply. The legumes, on the other hand, add to both the available and the total supply.

When this rotation is repeated twice, that is, after two green crops have been turned under and incorporated in the soil and the surface soil deepened to eight or more inches, I think that you will find that you have a new soil that will begin from that time to give returns for the labor expended on it. By that time, also, it will be in condition to introduce a clover rotation, as without clover supplemented by all the stable manure made on the farm, it is difficult to maintain profitably the fertility of our soils.

I am sorry I cannot suggest any cheaper way to improve this soil, but the present method of continuous cropping cannot be practiced longer without a corresponding depreciation and annual loss.

An additional expense of at least two to three dollars per annum for several years is imperative in order to get remunerative returns, but I am quite confident an extra expense of \$10 to \$12 in the next five years will show a much larger net balance than by a continuation of the old way, and that the property itself will be worth much more instead of much less.

Don't undertake any larger acreage under this plan than you can do right, but test it, however small the acreage. There is still great capabilities in your soil in spite of bad treatment, but it will take work, work, work to bring it out.

After a few years of restorative treatment this farm should produce at least twenty-five bushels of corn per acre in the driest season and sixty or more bushels in the favorable ones. This soil is ready to bear me out in this statement if you will adapt it to the needs of plant growth and give it half a chance.

Artichokes.

Editor Kansas Farmer:—The Kansas Farmer has for many years been a regular visitor at my house and I gather useful information from its columns. I should like to hear more from my brother farmers about supplying a variety of foods for their stock. At this age of close competition it is necessary to keep animals in the best possible condition and at the least cost, or at the end of a year the farmer finds that he has been doing business at a loss. It will no longer do for the farmer to buy high-priced feed-stuffs; he must himself grow them. The most difficult seasons of the year to keep stock in good condition are between grass and dry feed in the fall and between dry feed and grass in the spring. To do this will require the careful attention of the feeder. We think our artichoke patch has solved this question, at least so far as the hog is concerned. An acre of artichokes will keep twenty-five head of hogs in first-class condition during these periods. We turn them in as soon in the fall as the crop is matured, and let them run till the first part of May. When they have all the artichokes they want they will not eat nearly the amount of corn, and will do much better than when fed entirely on corn. For brood sows we find them just the thing, not so fattening as corn, and it also gives them plenty of exercise, which is very essential at that period. Some enthusiastic writers have said that artichokes were a sure preventive of hog cholera. We would not like to make that assertion, but can say that we have had no cholera since we have fed them, and before we lost heavily for two years in succession. We think one acre of artichokes will produce as much food as four acres of corn. The labor required to grow one acre of corn would grow three acres of artichokes. All animals relish artichokes, and we think for fattening cattle nothing could be better to balance the ration and keep the cattle hearty. We have not given them a very thorough trial in this line, but were well pleased with the result of a short trial last year.

The mode of cultivation is very simple and they are a very reliable crop. Drought or wet weather does not affect them materially. Plant and cultivate about the same as potatoes. After that they can be cultivated once or twice with a corn cultivator and no more care is needed till harvest time, and the hogs will be very glad to attend to that part of the work. Enough tubers will remain in the ground to seed for the next year. If you wish to exterminate the patch, plow under when they are about a foot high. At that time the old tubers are decayed and no new ones will be formed. It is no trouble to get rid of them.

We are of opinion that within a few years all progressive stockmen will grow a large patch of artichokes and that they will be almost as common as corn. The yield is large, 500 bushels per acre being only a fair crop, and it is reported that on good ground and favorable conditions 1,000 or more have been grown. In conclusion, we would advise all enterprising farmers who depend on the hog to lift the mortgage and pay taxes, to plant a patch of artichokes. It will be the best investment ever made. We have no seed to sell. ADAM SNYDER & BROS. Fort Scott, Kas.

Breeds, Ages and Weights.

In the quarterly report entitled "The Beef Steer (and His Sister)," issued by the Kansas Department of Agriculture, are three or four pages of wonderfully interesting figures for stockmen, which the author, Secretary F. D. Coburn, has dug out, analyzed and tabulated from the official records of the American Fat Stock Show, giving the weights, ages in days, gain per day, etc., of the champions or first-prize steers of each of the different breeds and different ages by years, down to the present time.

The figures for three-year-olds, covering a period of fifteen years (the class for animals of this age having been discontinued after 1890), are as follows:

	lbs.	days.	gain per day—lbs.
Shorthorns	2115	1324	1.59
Herefords	1903	1271	1.50
Angus	2312	1375	1.68
Sussex	1960	1416	1.38
Grades or crosses	2140	1318	1.62

Average weight of all three-year-olds, of all breeds, 2086 lbs.; average age, 1341 days; gain per day, 1.56 lbs.

Two-year-olds, for fifteen years:

	lbs.	days.	gain per day—lbs.
Shorthorns	1765	978	1.81
Herefords	1642	996	1.65
Angus	1819	992	1.83
Sussex	1735	908	1.91
Grades or crosses	1793	966	1.86

Average weight of all two-year-olds of all breeds, 1751 pounds; average age, 968 days; average gain per day, 1.81 pounds.

Yearlings, for fifteen years:

	lbs.	days.	gain per day—lbs.
Shorthorns	1389	650	2.14
Herefords	1338	685	1.96
Angus	1413	613	2.28
Sussex	1264	632	2.00
Grades or crosses	1474	673	2.19

Average weight of all yearlings of all breeds, 1376 pounds; average age, 652 days; gain per day, 2.12 pounds.

The weights of the heaviest Short-horns and their gains per day were:

Three-year-olds2400 lbs.; gain, 1.75 lbs.
Two-year-olds2045 lbs.; gain, 2.02 lbs.
Yearlings1620 lbs.; gain, 2.51 lbs.

Heaviest Herefords shown and their gains per day:

Three-year-olds2350 lbs.; gain, 1.63 lbs.
Two-year-olds1940 lbs.; gain, 1.80 lbs.
Yearlings1545 lbs.; gain, 2.26 lbs.

Heaviest Angus shown and their gains per day:

Three-year-olds2410 lbs.; gain, 1.69 lbs.
Two-year-olds1895 lbs.; gain, 1.85 lbs.
Yearlings1495 lbs.; gain, 2.11 lbs.

Heaviest Sussex shown and their gains per day:

Three-year-olds1970 lbs.; gain, 1.41 lbs.
Two-year-olds1735 lbs.; gain, 1.91 lbs.
Yearlings1400 lbs.; gain, 2.06 lbs.

Heaviest grades and crosses shown and their gains per day:

Three-year-olds2370 lbs.; gain, 1.69 lbs.
Two-year-olds2048 lbs.; gain, 1.94 lbs.
Yearlings1640 lbs.; gain, 2.60 lbs.

The average percentages of dressed to gross weight of all steers of all breeds winning first prizes in the dressed carcass class to and including the year 1894 were:

Average for all three-year-olds, 68.03 per cent
Average for all two-year-olds, 67.53 per cent
Average for all yearlings, 66.02 per cent

Combined average for all dressed steers, all ages, all years, 67.37 per cent.

The Stock Interest.

THOROUGHbred STOCK SALES.

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

MARCH 17—W. T. Clay—H. C. Duncan, Short-horns, Kansas City, Mo.
APRIL 13—T. F. B. Sotham, Herefords, Chillicothe, Mo.
APRIL 15—Scott & Marsh, Herefords, Belton, Cass Co., Mo.

SELECTING, BREEDING AND FEEDING.

Paper by J. T. Lawton, of Burrton, Kas., read before the annual meeting of Kansas Swine Breeders' Association.

In discussing this question I shall confine my remarks to my own practical experience while breeding and feeding hogs.

I have found that, to be successful, the breeder has a great many points to study, that there is considerable more to do than to permit animals to mate or couple at will. The successful breeder must be possessed of the closest and keenest discrimination, that his judicious selections will perpetuate only the survival of the fittest. He must bear in mind that the same physical defects occurring in both parents will likely be intensified in the offspring, a defect which will at least be doubled. I will mention a mistake of my own that I made a few years ago. I purchased a boar of one of the most prominent breeders in the country. He was admired by every one who saw him. They told me I had a hog now that would be hard to beat in the show ring. I thought so, too. I crossed that hog with some of my best sows, expecting to get something fine, something that would

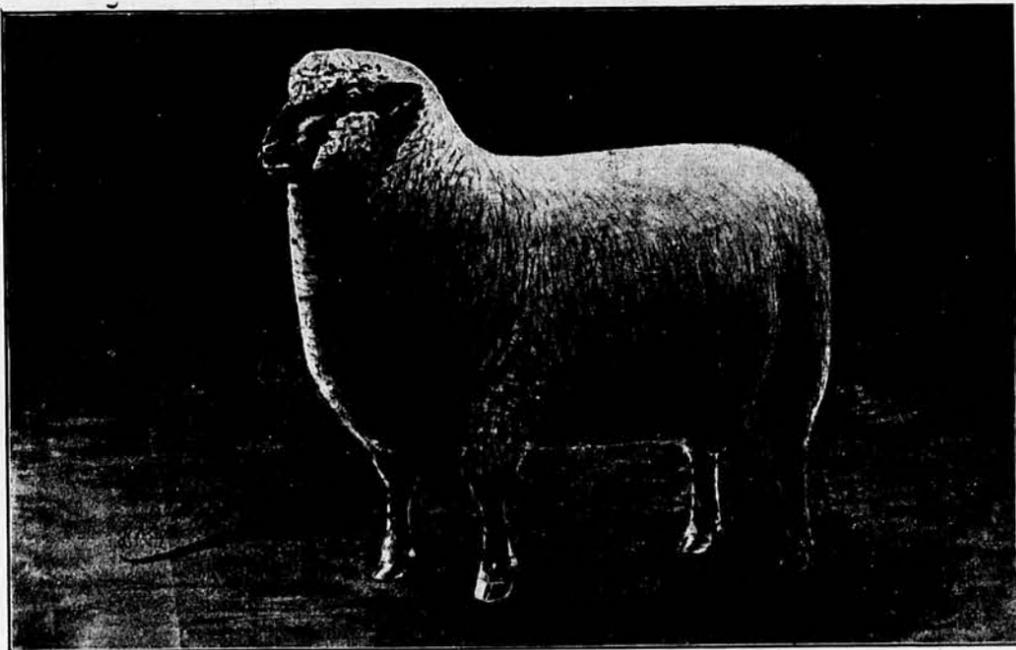
there is a vast amount of credulity in young breeders, it is absolutely cruel to start them out without warning. It is necessary that the young breeder exercise some skill in order to achieve his purpose. It is a mistake that some make in thinking that the breeder has nothing to do but sit down and watch the stock grow. The remark is often made that there is money in hogs. There is, if you know how to get it out. To the breeder who exerts himself there is sure reward.

Now, for brood sows, I prefer animals that are not coarse but growthy. You might perhaps call them a little coarse, but I want them for mothers, good nurses and sucklers. If they are a little too growthy I would correct that tendency with a vigorous, compact and blocky male. The dam should be looked to for vitality and constitution, the sire for appearance and general characteristics. I would carefully watch each sow and would discard those, no matter how fine individuals they might be, that were not good mothers. They must be gentle, kind nurses, and good sucklers. That sow that raises the best litter of pigs I would not discard as long as she proved a success as a breeder. It requires the whole litter to show the uniformity of breeding. I have now selected the sows, and it is necessary to exercise some care and judgment in order to get the best results from them. It is best to avoid too much heating food, to give them a good, cooling diet to get them in the best possible condition, so as to be ready for mating when the season comes around for breeding.

Now, for males to cross on these sows. I always like to visit the representative herds, so that I may select one whose sire

a start, so that he may hold his own and be classed with those whose ranks are filled with the survival of the fittest.

Good feeding and good breeding are said to be so closely allied that they are inseparable—useless one without the other. We can take the best herds of hogs in the country and by starvation and neglect run them down faster than any breeder can possibly breed them up. I would feed my hogs very little corn, and soaked at that. Oats and corn ground together make very good feed. If fed alone on oats, I prefer to feed them dry. I find they will feed longer on dry oats than any other diet I have tried. The great bulk of food should be slops, shorts, oats, pumpkins, beets and alfalfa, with plenty of good wood ashes, salt, lime and charcoal as an appetizer. I find that there is nothing better for hogs than a good alfalfa pasture, but if I could not get that, I would have one of clover, oats, rye, sorghum, anything—a weed patch is better than nothing at all. I think the person who would be successful in feeding hogs should feed regularly, not one day at early dawn, the next day in the middle of the morning, and the next day let the hog consider himself lucky if he gets anything at all. There are too many farmers who think a pig of no consequence, hence they let him "root hog or die," and if he does not do as well as their neighbors', they curse the breed and the breeder who sold them the pig. They never take into consideration that if they had given the hog a show, had fed him on such food as would have kept his system in good condition, attended to his wants instead of throwing corn out to him by the scoop full, had fed him regularly all he would



A SHROPSHIRE RAM. (Drawn and engraved by F. D. Tomson.)

bring me fancy prices. Imagine my surprise when most of my pigs from him showed a defect that I had not noticed in either of the parents, but which I could not help but notice in the offspring. We might find some defect in every hog, but the successful breeder must study close the defects of his own herd, and when he makes a selection be sure that the hog bought does not have the same defects as his own, or there will sooner or later be seen in his herd defects that it will not take an expert to show to him. One mistaken cross may require three or four years of the most careful breeding to regain the loss occasioned by it and to win back the herd to be as good as it was two or three years before.

A great many breeders do not pay as strict attention as they ought when they purchase new blood for their herds. They recognize at the time that there are defects plain to be seen, even by the inexperienced eye, and they make the purchase, knowing well that the same defects exist in their own herds. But then the individual traces to some hogs that have gained a reputation, hence the pig must be all right. I have always looked upon inbreeding as unsafe. The breeder may likely have good results for a while, but I must acknowledge that I do not consider myself competent to steer clear of all the physical defects that are hidden and which are likely to show when we mate related animals. There may be some who consider that they possess the ability to guard against any bad effects. I would be afraid that sooner or later I might be like the sea-tossed mariner without a compass, drifted onto some unknown rock where all hope of a prosperous voyage would be dashed to pieces, nothing remaining but the wreck. As

and dam show nothing back to disappoint me. I would ask the breeder to turn him out so that I might see for myself, and if the hog came out sprightly and vigorous, standing square on his feet, with noble bearing, I would then, all points taken into consideration, close the deal. If not, I would not want him at any price. I prefer to buy a boar in good flesh, one that I think will bring pigs that will mature at any age, and keep him growing on such foods as will bring the best results.

My sows, at the time of coupling, are in nice condition, not too fat and certainly not too lean. I think that by having them in prime condition you get better results when it comes to farrowing time. I have noticed some farmers who have been too generous about this time. They have supplied the new mother with slops and swill, the best and richest that could be procured. The result is, the sow is off her feed, the pigs are squealing for milk. The farmer has dried up the supply. His rich food has excited the milk glands and created an overflow, which has caused inflammation and the milk has dried up. I never feed a sow anything except a little bran and water for at least three days after farrowing. I then begin feeding the sow, and keep increasing the feed as I find the pigs are able to take care of the milk, which the sow must supply them until they are at least three weeks old. I prefer to have my sows under good shelter at all times and especially when farrowing. I count one pig lost worth the time of fixing shelter. The first hour of a pig's existence is undoubtedly the most important of his life. He is very tender, is easily chilled. I find at this time that it is very necessary for the breeder to be on hand to supply his every want and give him

eat up clean, be it slops, corn or whatever he fed, he would have returned the cost with usury. I have not the least doubt the hog would have developed beyond his highest dreams, and the farmer, instead of cursing the hog, breed and breeder, would have had the satisfaction of seeing the result of his labor crowned with success.

I would, first, commence to teach the pigs to eat early. At two weeks old let them have a little trough in a corner away from everything else, with a little sweet milk, then a little shorts and milk. Finally, you will have them, by the time they are a month old, eating like old hogs. I have seen, and not far from this city, the capital of Kansas, a sow (owned by one who claimed to be a representative breeder of Kansas) suckling four hundred pounds of pork, herself not weighing over a hundred and fifty pounds and scarcely able to stand alone. I would avoid all such strains as this. Teach the pigs to eat while young and give the sow a rest. When I wean my pigs, I shut the sow up and let the pigs run. I take from the sow all sloppy food that goes to make milk, and the milk gradually fails, while the pigs, having been used to their slop, do not seem to notice it but keep on growing until I get my money out of them. If a hog ever stops growing, no matter for how short a time, you have undoubtedly lost your labor and feed and all the crowding you can possibly give them will never regain that which is lost. I never yet have seen the hog that would grow any faster for having been stunted, no matter whether the time was short or long. Hence it is necessary for the breeder to watch closely and keep them growing; to study the wants of his hogs. If he does his part, I believe there

No More Scrofula

Not a Symptom of the Affliction Since Cured by Hood's.

"When our daughter was two years old she broke out all over her face and head with scrofula sores. Nothing that we did for her seemed to do any good. We became discouraged, but one day saw Hood's Sarsaparilla so highly recommended that we decided to try it. The first bottle helped her, and after taking six bottles her face was smooth and we have not seen any signs of scrofula returning." SILAS VERNOOY, West Park, New York. Get only Hood's because

Hood's Sarsaparilla

Is the best—in fact the One True Blood Purifier.

Hood's Pills cure nausea, indigestion, biliousness, constipation.

is no doubt but that he will meet with success.

In conclusion, gentlemen, I would remark that the ideas I have advanced are not theory, but are from my own practical experience. They may be different from yours. Still I do not hesitate to say that if you will treat your pigs as stated here, you will have the satisfaction of getting something for your labor.

Mrs. M. E. Busselle, 67 Park street, Newark, N. J., says: "After having used Dr. Bull's Cough Syrup in my family with most gratifying results, I pronounce it the friend of all mothers."

Does Its Work Every Time.

Wilmington, Del., April 5, 1896.—I found out the virtue of the Balsam and have used two bottles. I think it one of the finest remedies one can keep around a stable. It is always ready for use, and I believe if properly applied and rubbed in will do its work every time. I have used different kinds of liniments, but this does its work quicker than anything I have ever used, and after all leaves no scar, and the hair grows in same as ever. You can use my name whenever you see fit.—H. C. Parrish.

Changes in Constitution.

The changes made in the constitution of the N. C. B. A. were proposed at the Thursday session, by B. D. White, of Minnesota. Mr. White had thought that the resolutions containing the changes had been presented to the Committee on Resolutions, but when the committee reported, no references to the changes appeared in the report. It then developed that the committee had not received the resolutions, so Mr. White was called to the platform, and stated the matter, saying that he represented a large number of members of the association who had requested him to see the matter properly presented.

Briefly stated, the changes included a twenty-pound instead of a fifty-pound package for exhibition and competition, the twenty-pound package to be donated to the association and the latter to pay expressage and give the exhibitor his yearly membership charge. The second change was to make a charge of \$1 per year for every member instead of the \$1 membership and 50 cents dues, as has been the rule.

But the convention was not ready at Thursday's session to pass judgment upon the changes, so they went over until Friday morning, when they were both adopted.

State of Ohio, City of Toledo, Lucas County, ss.

Frank J. Cheney makes oath that he is the senior partner of the firm of F. J. Cheney & Co., doing business in the city of Toledo, county and State aforesaid, and that said firm will pay the sum of ONE HUNDRED DOLLARS for each and every case of catarrh that cannot be cured by the use of Hall's Catarrh Cure.

FRANK J. CHENEY.

Sworn to before me and subscribed in my presence, this 6th day of December, A. D. 1886. A. W. GLEASON,

[Seal.] Notary Public.

Hall's Catarrh Cure is taken internally and acts directly on the blood and mucous surfaces of the system. Send for testimonials, free.

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Sold by druggists, 75c. Toledo, O.

Don't Tobacco Spit and Smoke Your Life Away.

To quit tobacco easily and forever, be magnetic, full of life, nerve and vigor, take No-To-Bac, the wonder-worker, that makes weak men strong. All druggists, 50c or \$1. Cure guaranteed. Booklet and sample free. Address Sterling Remedy Co., Chicago or New York.

The Family Doctor.

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

Answers to Correspondents.

Dear Family Doctor:—Your very interesting articles in the Farmer a year or two ago on various topics in relation to health were both interesting and profitable. Can't we get you to take up the pen again and instruct us in regard to health? I would like to see something about the effects of limestone water on the urinary organs, and give us some hints in regard to how to live to avoid and also remedy such ailments in the early stages. Where can a person get a chemical examination of the urine, and what will be the cost? Also of drinking water? My wife gets very severe neuralgic headaches at times, which I believe is partly caused by uterine and kidney trouble.

Barnes, Kas. A. M.

As to your first question, I think I may safely say, without consulting the publishers of the Farmer, that if a sufficient number of their readers really wish the "Family Doctor" department kept up they will gladly do so. And the only feasible way to get at it that I know of is for you and all subscribers to the Farmer who wish such a department, to write to the publishers to that effect, and if enough subscribers show that they actually desire such a department kept up in the paper, the publishers will gladly give it to you. The department was started in 1893 to test its value and desirability. But the readers did not generally express themselves either for or against it, and other matters in a measure crowded it out. Of course, I am prejudiced in favor of such a department in any family paper. I believe that men, women and children are of far more account in the world than hogs and cattle, sheep and poultry. But the Farmer is an agricultural paper and not a general newspaper nor a medical or health journal, and its true field is agriculture, with all that pertains to it, so that if its subscribers want a special department that has nothing to do with agriculture and stock-raising, it is perfectly appropriate for them to so inform the publishers by postal card or otherwise, and they are liberal and enterprising enough to give their readers any reasonable thing a majority of the readers want. All publishers are anxious to supply their readers with any good thing they want. And the proprietors of the Farmer are as liberal and enterprising as anybody else.

As to the lime water in this part of the country, used for drinking and culinary purposes, a whole book might be written. It is well known to physicians that it produces a wide range of physiological disorders, of the kidneys, liver, stomach and bowels, and there is not room to catalogue them here. The chief troubles are probably gall stones and gravel, with various forms of indigestion, constipation or diarrhoea. Rough skin, pimples and some forms of bone disease I think may often be traced to too much lime in the water people drink. A certain quantity of lime is a great necessity in the human system, especially in the bones, but a superabundance of it is an unmitigated evil. In using very hard water, a large part of the lime can be extracted by boiling, for much of it will stick to the teakettle instead of going into the formation of stones in kidney, bladder and gall sac.

As to the analysis of urine, there are several chemists here and elsewhere who will make good analyses for from \$1 to \$10, according to the amount of labor and study the sample requires. A complete analysis is expensive, for it entails lots of work and time. But a partial analysis is often all that is needed to find out the overstock of some particular element in the sample. Samples sent to me with \$2 will usually receive a sufficient analysis for all practical purposes. In a few cases that would not meet the cost of the work. I am acquainted with a few skillful chemists who would do honest and faithful work. The same of drinking water.

As to your wife's headaches, you do not give sufficient symptoms to secure any fair judgment of the cause.

Family Doctor:—Patient is 33 years old, is the mother of three children, the youngest 17 months old. When she was a girl she had spells of pains just below and under the lower part of the ribs on the left side. The last spell

she had was when she was 12 or 14 years old. When her last child was born, or shortly after, she suffered a great deal with pains in about the same place. Some time last summer a formation or growth began to form about where the pain was and extend downward to the lower part of the abdomen and across the lower part of the abdomen to right side. The formation is not stationary or permanent either in shape or position. At times it is flat in shape and extends from one extremity to the other; at other times it is round in shape, extending from the upper extremity downward; at other times it forms in the shape of an elbow, with the elbow projecting outward; at times it is in a round shape, as large and the shape of her two half-closed hands put together. It appears to be loose all but the upper part where the pain was. She says that she can tell that it is not fast to the ribs. Her general health is good. It does not bother only after a day's washing or other hard work. Has a good appetite. X.

The above case from Cleveland, Okla., is probably a case of floating or migrant kidney. It is not a common trouble and is not often found in the practice of any physician. They are surgical cases, and nothing but a surgical operation will cure them. A fall or severe strain or a blow over the loin are the most common causes of the trouble. In such cases the kidney is detached from its anchorage against the spine and loin and then floats out forward and sidewise as far as the urinary tubes will allow. You have seen toy balloons on circus day, floating in the air, attached to a cord; and there is a slight likeness to that in case of floating kidney. Of course the kidney is not inflated with gas to give it floating lightness, like the little balloon, but it is anchored by a sort of cord in very much the same way, and when the patient changes position of the body, the kidney often glides from its home against the spine and goes on a visit to the neighborhood of the liver, or spleen, or stomach, or bowels, and sometimes, like a meddlesome visitor, it gets tangled up with the neighbors and makes trouble, and occasionally it gets tangled with the omentum, that covers the bowels, and causes great annoyance and pain, and occasionally it requires a skillful surgeon to untie the sort of Gordian knot it manages to worm into. But a goodly number of people carry them half a lifetime without much trouble or danger.

Family Doctor:—I am troubled with partial deafness, and lately have been syringing my ear with hot water night and morning. I find the remedy worse than the disease, for it has started a horribly smelling discharge, while not benefiting me any. Can you tell me the cause and remedy? Age 40. Slight catarrh. J. W. G.

Crow, Kas. Your trouble is produced by catarrh and the syringing with hot water is an excellent aid to medical treatment if done properly.

The remedy you need is hepar sulphur 3x, a dose three times a day. The establishment of the discharge is nature's method of throwing off the dead and superfluous cells that always accumulate about a chronic inflammation. It is nature's cleaning-up process in restoring a healthy condition of the tissues and will not last long if you take the right remedy internally. After each syringing put a few drops of Pond's Extract of witch hazel in the ear, with a plug of cotton over it to keep it from being chilled and to exclude the dust.

J. C. S.—Your case is in all probability a case of necrosis of the jaw bone. When the tooth was so badly inflamed it affected the jaw bone and resulted in destroying the life in a patch of bone, and that was followed by the abscess that broke through the face over the dead patch of bone, and the dead bone keeps up the discharge and the face will not heal until you have the dead fragment taken out. Had the tooth been taken out earlier it might have saved you from the present calamity and the necessity of a surgical operation. But now the mischief is done and an operation is all that can free you from the dead fragment of jaw bone and heal up the face.

1898 Bicycles Down to \$5.00.

New 1898 Model Ladies' and Gent's Bicycles are now being sold on easy conditions as low as \$5; others outright at \$13.95, and high-grade at \$19.95 and \$22.50, to be paid for after received. If you will cut this notice out and send to SEARS, ROEBUCK & CO., Chicago, they will send you their 1898 Bicycle Catalogue and full particulars.

To Cure Constipation Forever. Take Cascarets Candy Cathartic. 10c or 25c. If C. C. fail to cure, druggists refund money.

A Horseman's Views.

F. J. Berry, Union stock yards, Chicago, Ill., has just returned from his tour of lectures through the Pacific Northwest—Oregon, Washington and California—and says that a great wave of prosperity has swept over the land of sun and flowers. Business is brisk, everything is prosperous, money is plenty, and every one is rejoicing in prosperity and good times. More money reported in the banks than ever before, cattle are selling well, sheep are high, wool and wheat bring good prices, people that were mortgaged heavily have paid off their mortgages and have money in the banks, and every one is talking only of good times and prosperity.

All the people of the Pacific Northwest are greatly elated over their prospects of export trade to China and Japan. There are regular lines of steamers running from their coast to these countries, and the trade is increasing every day, and the best financiers are expecting great developments in commerce with the above named markets.

Gold is being discovered and taken out in all the above mentioned States, and it is the opinion of those most interested in the mining interests, that they are on the eve of a great production of gold. The possibilities of that country, it is believed by the best men, are to be great in all branches of stock, agriculture and mining. The output of gold in California alone is estimated for the coming year as high as twenty millions.

"The horse interest has been very much depressed," says Mr. Berry, "but I left the people wherever I delivered lectures much enthused over the horse, and I think there will be a great reviving in breeding of much better and higher class of horses. The depression in the prices of horses will be a benefit in the end. It will result in a much larger, finer and handsomer animal that shall be more beneficial and a much higher class of horses and more adapted to the American as well as the foreign markets. Every week brings a stronger export demand and higher prices, and I believe that horses have a great future, as they have already begun to get scarce, and they are increasing in price every month. The time is near at hand when the demand will far exceed the supply. And I believe that there is no kind of stock that has so great a future and promises so large returns for the same expense, as that most noble animal, the horse.

"In visiting the different breeding establishments, on the Pacific slope, I find the stock in the different establishments very much reduced, although most of them have a lot of fine youngsters on hand. But a large number of the best breeders have gone out of the business. Palo Alto, which is the largest breeding establishment I visited, seemed very prosperous. They had a very fine lot of horses and youngsters on hand. They shipped thirty-six head March 8 for Fawcett's sale in New York."



"She comes from the past and re-visits my room; She looks as she did then, all beauty and bloom So smiling and tender, so fresh and so fair, And yonder she sits in my cane-bottomed chair."

Many a man sits silent and alone in a home of mourning and conjures up before his eyes the face and form of the woman who was once a loving wife and a faithful helpmate. In thousands of such cases the wife might still be alive and well and happy, had the man been not only a good husband, but a wise adviser. Women shrink from the ordeal of consulting a physician. They shudder at the thought of submitting to the obnoxious examinations insisted upon by most physicians.

In the majority of cases they have none of this hesitancy about consulting their husbands. A wise man will understand at once that troubles of this description will soon break down a woman's general health. He will understand that a specialist of eminence and world-wide reputation should be frankly consulted at once. Dr. R. V. Pierce, for thirty years chief consulting physician to the Invalids' Hotel and Surgical Institute, at Buffalo, N. Y., is one of the most eminent and widely-known specialists in the world. With the assistance of a staff of able physicians, he has prescribed for many thousands of ailing women. He has discovered a wonderful medicine for women, that may be used in the privacy of their homes. It is known as Dr. Pierce's Favorite Prescription. It cures surely, speedily and permanently, all weakness and disease of the distinctly feminine organism. It allays inflammation, heals ulceration, soothes pain, gives rest to the tortured nerves, and checks debilitating drains.

WHOLE AMBER preserves the harness. BIG PROFITS TO AGENTS. Also Europe's Best Sheep Dip. Write to ALFRED P. ANDRESEN & CO., Minneapolis, Minn.

AGENTS WANTED MURAT HALSTEAD'S GREAT CUBA BOOK. All about Cuba; Spain; Maine Disaster; and War; great excitement; everyone buys it; one agent sold \$7 in one day; another made \$13.00 in one hour. 600 pages; magnificent illustrations; photographs, etc.; low price; we guarantee the most liberal terms; freight paid; 20 days credit; outfit free; send 10 two-cent stamps to pay postage. THE BIBLE HOUSE, 524 Dearborn St., CHICAGO.

1898 High Grade BICYCLES for Men, Women, Girls & Boys. Complete line. All brand new models. \$75 "Oakwood" for \$32.50 \$60 "Arlington" " \$24.50 No Money in Advance. Others at \$15, \$17 and \$20 WRITE TODAY for SPECIAL OFFER. Juveniles \$7.00 to \$12.50 Shipped anywhere C.O.D. with privilege to examine. Buy direct from manufacturers, save agents & dealers profits Large Illus. Catalogue Free. CASH BUYERS' UNION, 162 W. Van Buren Street, B. 64, Chicago, Ills.

You will Blunder if you have a Dairy or Creamery and do not use The Best Separator on the Market, The Improved United States Separator.

Send for catalogues filled with testimonials.

It excels all others in Ease of running and cleaning.

No. STONINGTON, Ct., Dec. 28, 1897. The No. 5 Improved U. S. runs easy. My 14-year-old brother run it all summer without any trouble. I would not be without one. E. F. WHITE.

BETHANY, N. Y., May 20, 1897. The ease of running and cleaning of the Improved U. S. is far superior to the DeLaval and others that I have tried. F. I. JUDD.

FREDERICKSBURG, PA., June 1, 1897. My daughter, 6 years old, can set The No. 6 Improved U. S. in perfect running order and run it. It runs much easier than the DeLaval. DAVID UMBERGER.

NEW HOLLAND, PA., June 1, 1897. The Improved U. S. runs very easily, is very simple to wash, and does everything it is recommended to do. MARTIN HOOVER.

GOULD, R. I., Dec. 20, 1897. My Improved U. S. runs very easily and is quickly cleaned. A visitor who has tried all kinds says it is the easiest and steadiest of any machine on the market. G. K. CONGDON.

Catalogues free on application.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.

The Poultry Yard

KANSAS STATE POULTRY ASSOCIATION.
President, A. M. Story, Manhattan.
Secretary, J. W. F. Hughes, Topeka.

Setting a Hen.

Editor Kansas Farmer:—Before putting eggs under a hen, it is best to be reasonably certain that she desires to sit and can be depended upon. It is often the case that a hen, and especially a young pullet, will sit a day or two and then quit her nest. For this reason, unless the hen is an old one that has proved herself a good mother, it will be best to allow her to remain on the nest two or three days before risking a setting of eggs under her. Just at night is a good time to put eggs under a hen. The number given her must be determined somewhat by her size and the season. But a large hen set almost any time from now on may be given fifteen eggs, and a less number to a small hen. See that her nest is free from lice; supply material in the nest box by putting in a few stems of tobacco. Hollow out the material so that when the eggs are placed in it they will all lie closely together, and so that the hen can cover them well. Arrange her so that she will be disturbed as little as possible by the other hens. Dust insect powder well in among her feathers, so as to down lice. Never grease a hen while sitting, as the grease getting on the eggs will close the pores and smother the germ.

A hen may sometimes be forced to sit by putting her in a covered box and keeping her confined a day or two. When it can be done it is often a good plan to set two or three hens at the same time, and then if any of the eggs fail to hatch well all the chickens can be given to one hen. N. J. S. Eldon, Mo.

Actual Experience Helpful.

Editor Kansas Farmer:—It is not because I have had so much experience in writing for papers (for this is my first attempt), or that I know so much about poultry-raising, but because my interest in the poultry business is so great that I am tempted to give my views concerning the poultry page of the Kansas Farmer.

The article of G. B. Ruth, in February 24 Farmer, was just what we have needed for a long time. We could gain more real practical knowledge by relating our failures and triumphs to one another through the good "Old Reliable" Kansas Farmer than reading all the theories of the Eastern fanciers. What we want is actual experience at or near home, for what applies in the East won't do for we Western people. I am just a beginner in the thoroughbred poultry yard, and am not here to give advice, but to obtain all I can; but I will have to say that my experience so far does not go hand in hand with that of J. H. Davis, in February 24 Farmer. I find that I can not only feed too much corn (at any time of the year excepting in the coldest weather), but the waste corn around cribs and where cattle are fed is more than they should have. I find a pullet, as a rule, will lay when very fat but an old hen when very fat will lay but few eggs and they quite often deformed or ill-shaped. I also find that where there is an absence of grit the hens do not thrive, and I believe that it causes indigestion. Much of Mr. Davis' article I agree with, but those few points I certainly do not. Let us hear from others on the corn subject, also grit, good and cheap poultry houses, ventilators and handy contrivances around the poultry yard. It at least won't hurt to air our opinions, and it might do some one some good. Let's just crowd the advertisements (with the editor's consent) not concerning poultry out of "The Poultry Yard" page and make it one of the most interesting of the paper. MRS. F. G. RICHMOND, Hall's Summit, Coffey Co., Kas.

FREE TO ALL WOMEN.

I have learned of a very simple home treatment which will readily cure all female disorders. It is nature's own remedy and I will gladly send it free to every suffering woman. Address MABEL E. RUSH, Joliet, Ill.

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Red River Early Potatoes.....	per bushel, \$.90
Red River Beauty of Hebrons.....	.. .85
Red River Early Rose.....	.. .85
Native Early Ohios.....	.. .80
Native Early Ohios, small.....	.. .35

SEED SWEET POTATOES.

Vineless.....	per bushel, \$1.50
Red Bermudas.....	.. 1.00
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Yellow Nansemonds.....	.. .70
Jersey Chunk.....	.. .70

All seed guaranteed true to name. No charge for packages or drayage. Established 1883.

COPE & CO., Topeka, Kas.

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You May Have a Sample Bottle of the Great Discovery, Dr. Kilmer's Swamp-Root Sent Free by Mail.

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Dr. Kilmer's Swamp-Root is the discovery of the eminent physician and scientist and is not recommended for everything, but will be found just what is needed in cases of kidney and blad-

der disorders or troubles due to uric acid and weak kidneys, such as catarrh of the bladder, gravel, rheumatism and Bright's disease, which is the worst form of kidney trouble. It corrects inability to hold urine and smarting in passing it, and promptly overcomes that unpleasant necessity of being compelled to get up many times during the night.

The mild and extraordinary effect of this great remedy is soon realized. It stands the highest for its wonderful cures. Sold by druggists, price fifty cents and one dollar. So universally successful is Swamp-Root in quickly curing even the most distressing cases, that to Prove its wonderful merit you may have a sample bottle and a book of valuable information, both sent absolutely free by mail, upon receipt of three two-cent stamps to cover cost of postage on the bottle. Mention Kansas Farmer and send your address to Dr. Kilmer & Co., Binghamton, N. Y. This generous offer appearing in this paper is a guarantee of genuineness.

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5,000 Dwarf Juneberry or Huckleberry ..	1.50	10.00	100.00
1,000 Kansas Raspberry tips.....	1.50	10.00	100.00
1,000 Lucretia Dewberry tips.....	1.50	10.00	100.00
1,000 Crandall Currants, sprouts.....	2.00	15.00	150.00
4,000 Houghton Gooseberry, 2 years.....	1.50	12.50	125.00

HARDY FLOWERING SHRUBS.

1,000 Blooming Sizes, large clumps.....	5.00	50.00	500.00
1,000 Purple Persian Liliac, divided.....	1.50	15.00	150.00
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2,000 Common Purple Liliac, divided.....	1.50	15.00	150.00
1,000 Common Privet, divided.....	1.50	15.00	150.00
1,000 Scarlet Japan Quince, divided.....	1.50	15.00	150.00

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2,000 Trumpet Vines, small.....	1.00	7.50	75.00
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1,000 Chinese Wistaria, small size.....	1.00	7.50	75.00
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Cash with order. Boxing and packing at cost. I refer to Citizens' State bank, Arlington, and First National bank, Hutchinson, Reno Co., Kas.
B. P. HANAN, Arlington, Reno Co., Kas.
On the C., R. I. & P. R. R.

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The Three Great Earliest, Pure, Smooth and Vigorous.

Sacked and delivered at depot, Topeka.

EARLY OHIO.....85c per bushel
EARLY ACME.....85c per bushel
EARLY SIX WEEKS.....85c per bushel
Ten bushels of any variety above, 80c per bushel.

FINE SWEET POTATOES.

Yellow Nansemond, Red Nansemond, Red Bermuda, Southern Queen, ALL \$3.00 PER BARREL.
B. H. PUGH, Box A, Topeka, Kas.

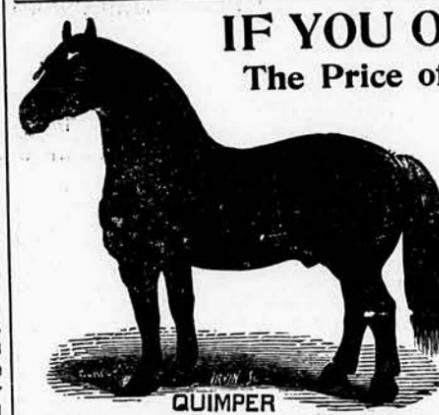
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at wholesale or retail. Officially declared free from scale or injurious insects. Best stock grown. Strawberry Plants—63 varieties; all from new beds. Apple, Pear, Plum, and other stock. Send for new Catalogue to-day.
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PREVENTED BY
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Twenty millions of cattle successfully treated. Write for particulars, prices and testimonials from thousands of American stockmen who have used this Vaccine during the last two and a half years.
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The Price of a Good Horse in

You would buy some good breeding stock now. While our herd is not so large as formerly, we still have the finest collection of

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In the West. Prospects never so bright. Prices never so low.

All Ages. Either Sex. Choice Colors.

HENRY AVERY, WAKEFIELD, KANSAS.

Kansas City Stock Yards

are the most complete and commodious in the West and second largest in the world. The entire railroad systems of the West and Southwest centering at Kansas City have direct rail connection with these yards, with ample facilities for receiving and reshipping stock.

	Cattle and Calves.	Hogs.	Sheep.	Cars.
Official Receipts for 1897.....	1,921,962	3,350,796	1,134,236	123,047
Slaughtered in Kansas City.....	965,287	3,084,823	805,288	
Sold to feeders.....	665,615	341	151,389	
Sold to shippers.....	216,771	263,592	91,576	
Total Sold in Kansas City 1897.....	1,847,673	3,348,556	1,048,233	

CHARGES: YARDAGE—Cattle, 25 cents per head; Hogs, 8 cents per head; Sheep, 5 cents per head; HAY, 80c per 100 pounds. CORN, 60c per bushel. OATS, 60c per bushel.
NO YARDAGE CHARGED UNLESS THE STOCK IS SOLD OR WEIGHED.
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200 EGG INCUBATOR, ONLY \$10

F. M. CURVEA, Hanna, Ind.
THE CROWN Bone Cutter for cutting green bones. For the poultryman. Best in the world. Lowest in price. Send for circular and testimonials. Wilson Bros., EASTON, PA.

THE IMPROVED VICTOR Incubator
Hatches Chickens by Steam. Absolutely self-regulating. The simplest, most reliable, and cheapest first-class Hatcher in the market. Circulars FREE.
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HATCH Chickens BY STEAM with the MODEL EXCELSIOR Incubator
Simple, Perfect, Self-Regulating. Thousands in successful operation. Circulars FREE.
GEO. H. STANLEY, 114 to 122 S. 4th St., QUINCY, ILL.

THE STANDARD INCUBATOR

A low-priced machine with a record unequalled by any. An incubator that any one can operate. For free illustrated circulars and testimonials address the
Sure Hatch Incubator Co., Clay Center, Nebraska.

A small Poultry Farm is Better than a Gold Mine
If you know how to run the business. There's \$ Millions \$ in it, but nine out of ten fail in it because they do not know the secret of Success with Poultry or **The Money in Hens.**
Do you know how to get it? Our New Poultry Book will tell you how. It tells you all about Poultry and explains why some (a few) succeed and others (the many) fail. This invaluable Book given Free as premium with our Farm and Poultry paper **WAYSIDE GLEANINGS**, 8 months for 10 cents. Address F. B. **WAYSIDE PUBLISHING CO.,** Clintonville Conn.

CATALOGUE FREE. HOME GROWN SEEDS at Low Prices.
SEND for OUR large, fine CATALOGUE TO-DAY, mailed FREE. It tells all about Market Gardeners ask for Wholesale Price List.
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STANDARD VALUE
Counts for more in the selection of fruit trees than almost any other place. Why? Because fruit trees are bought on faith. We have the standard kind of all the leading varieties. Fruit Trees, Berry Plants, Evergreens, etc., etc. Strong, healthy trees free from Black Knot, Yellow, Blight, Scale, etc., etc. Do not place your spring order until you get our catalogue and prices. Sent free; write to-day.
J. W. MILLER CO., Box 268, Freeport, Ill.

1000 GIVEN AWAY

At the Slaughter Price of \$3.00 each. These magnificent watches are the finest Gold Alloy hunting case, fitted with high grade fully jeweled genuine Standard Make, American movement, absolutely guaranteed for 5 years. A watch which will last a life-time and not to be confused with the ordinary cheap Swiss watch advertised so extensively. **AGENTS AND WATCH DEALERS CAN MAKE FROM \$6 TO \$60 DOLLARS DAILY** handling these watches as they can be sold easy from \$5 to \$50 dollars each. If you want a real bargain, cut this out and send us your name and address, stating if you want Ladies' or Gent's size, and we will send you watch by express to examine, and if you find everything satisfactory, pay to Express Agent our **SPECIAL SALE PRICE \$8.65** and if it is yours, otherwise order returned at our expense. If money is sent with order, a beautiful 8 year rolled gold chain will be sent Free with watch. Address
T. PRETER CO., 296 E. 22d Street, CHICAGO.

LEONARD'S LIVE SEEDS

remove every element of doubt and make Garden Success a certainty. The reasons why will be found in our splendid new catalogue; It contains all that is good and reliable for the vegetable and flower Garden and the farm. Your name on a Postal Card gets it.
S. F. Leonard, Seedsman, P. O. Station D, Chicago, Ill.

SAVE YOUR CROPS Get rid of Gophers, Ground Squirrels, Prairie Dogs, Moles, Rats and all burrowing animals BY USING **PEERLESS GOPHER KILLER.** Costs less than 1c. to treat each burrow and **IT GETS THEM ALL**—old and young, within 5 minutes. They never dig out. No poison. It increases in profits if used during plowing and planting season. Circulars, prices, and terms to Agents. Free. P. O. Station D, Omaha, Neb.

Pressure between burrs in grinding is carried on chilled roller bearings. Large inside burr revolves twice to sweep's one. Ordinary length sweep.
DAIN DOUBLE MILL
Sold under an absolute guarantee to do double the amount of work of any other mill of same size or to be refunded. Write for circulars and prices.
DAIN MFG. CO., Carrollton, Mo.

The Home Circle.

OLD APPLE TREES.

IN AUTUMN.

The twisted trees, like grey old nuns at prayer,
Stoop stiffly forward, their dishevelled hair
Embeaded with the mist. Beneath the hill,
Careering earthward with a mighty thrill,
Expands the conflict of the approaching
wind,
Who seeks that sisterhood in peevish mind,
Meaning to rate them lustily for sin,
The day being gray and full of discipline,
Their orisons too creaking, poor and thin.
And what a priest! Intoning at his will,
Cowed madly in an air-tossed capuchin,
Blustering out Paternosters, Aves, Creed,
His flapping robes flung back for greater
speed.

IN SPRING.

But in the spring—the sisters in the spring
Break into prayer, that is a blossoming.
The rigid trees in budding-time agree
In whiteness fair. Like silver filigree
Against the tender turquoise of the sky,
Stirless and stiff and pure the blossoms lie,
As chiseled by a carving delicate
As that which shaped some reredos of
state,
'Neath some great dome of blue immac-
ulate.
Robed like white brides of heaven, trans-
lated, free,
Ecstasically devout in their estate
Of reverent beauty, to a radiant sky
The ancient sisters lift a harmony.
—Hannah Parker Kimball.

Written for Kansas Farmer.

A REVOLUTION IN THE GRAY FAMILY.

JONAS COOK, PHILIPSBURG, MONT.

On the 14th of June, 1863, a boat pulled up to the wharf at Atchison, Kansas, and therefrom alighted Miss Martha Adams, a "Yankee school ma'm" from the classic State of Massachusetts. She had come West with the two-fold idea of school teaching and matrimony.

She was an intellectual woman, who was nearing the equator of life and who had cultivated her intellect far more than her heart. If she had ever loved, the object of that love had been herself. She had, in all things, profound respect and admiration for her own acts and opinions. Her heart was a kind of galvanic battery that shocked nearly every one who came in contact with her. She could quote poetry by the hour, but it was uttered with as little feeling and sentiment as if it had come from a phonograph. She was well versed in history, ancient and modern, sacred and profane, and could converse intelligently on almost any subject,—but like many whom the world call educated, she never gave birth to a new idea or thought—her knowledge and opinions being wholly the children of adoption. Like people of her kind, she had very pronounced opinions regarding right and wrong, and no argument, however logical, was ever known to change her mind.

To the student of human nature who observes closely, her character was clearly discernible. When she walked she "toed in," which is an infallible sign that to be convinced is impossible. The bones over her eyes were prominent and her lips thin and drawn, which indicated that she had free use of her tongue and that the more used, the sharper it became. Her chin projected and was carried above the level, which placed her in the class of "rule or ruin." She was an absolute monarch without a monarchy, and she came to Kansas to establish her kingdom.

She secured a school near White Cloud, Doniphan county, and boarded at the home of Thomas Gray and mother, Pennsylvanians of German descent, who had come to Kansas in the border ruffian days.

Thomas Gray was a well-to-do farmer and ranchman who, by hard work, had wrested from nature a beautiful farm and by the strictest economy had become, to use a Western phrase, "well off." He was not versed in science, literature and art, but his life on the frontier had made him a man of broad ideas, charitable, kind and loving. His house was patterned after the Pennsylvania style, large and roomy, and his mother, who was a model housekeeper, made the home a little less than a heaven on earth.

Into this home Martha Adams found herself as a boarder one week before her school began. From the day she entered the Gray household, she began to plan to ensnare Thomas into matrimony.

Her school opened with a large attendance and she soon became reputed as the best and most intelligent teacher in the county; for she was not a person to permit an opportunity to pass without impressing her superior knowledge upon those she met. Secretly vain and seemingly unpretentious, yet she loved to have the reputation of being the most intelligent person in the neighborhood.

She always felt that the man who secured her for a wife would be most fortunate indeed. She had lived long in anticipation that she would some day meet a man a little lower than an angel

who would take her unto himself as a wife. Her anticipation thus far had not been realized, and she had made up her mind that if she could not marry the kind she wanted, she would marry the kind she could get. She looked upon courtship with the same cold reasoning faculties that she used in the solution of a difficult problem or the demonstration of a geometrical theorem. She never had felt the delightful emotion that true love experiences in courtship. But with a deep-seated design she "filed a pre-emption" upon Thomas Gray with the full determination "to prove up her claim" in due time. She read to him such poems as "Enoch Arden," "Evangeline" and "Hiawatha," and talked learnedly of their beauties, thus making herself agreeable in every possible way.

Age, with its attendant infirmities, was stealing upon Mother Gray, so Miss Adams did not sit down and fold her hands when she returned from her days' work in the school-room, but assisted Mother Gray with her household duties, and thus soon endeared herself in the heart of the kind old lady, while her help was greatly appreciated by the dutiful son.

In the spring of 1864, it became evident that the mother could not live long. When she realized her condition she called her son and Miss Adams to her bed-side and expressed her desire that they would become man and wife, and wanted them to do so before she passed away. They both assented, and the wedding took place the next week. School having closed the week before, Miss Adams was quite willing to become Mrs. Gray at this time. The marriage was not one consummated by any particular love, but one brought about by circumstances and seeming necessity to keep the household together.

Within a few short days the spirit of the dear old mother took its flight and her body was consigned to the earth, whence it came.

From that day Mrs. Martha Adams Gray found herself the chief woman of a home and set about to establish rules and regulations to govern it. She never thought of considering how difficult it is for a man of forty years to change the habits of his life. She had theorized so long on her notions of a home, and now was determined to put her theories into practice without consulting any one but herself.

While she was a boarder in the Gray family she had often observed that Thomas drank his coffee from his saucer and conveyed his food to his mouth with his knife; but now she proposed to break him of that rude, uncultivated habit, and she set about to do it. She called his attention to "table manners" daily and informed him that in Massachusetts such rudeness would not be tolerated in good society. She also twitted him upon his lack of culture in literature and art. His language, though always kind and simple, quite often violated the rules of grammar, and she never let an opportunity pass to correct his expressions of false syntax. Daily he was checked in his conversation to be criticised for some error of speech, until, at times, he felt like abandoning the use of spoken language entirely. In all things she considered herself his superior and never hesitated to impress the fact upon him. She talked learnedly to him upon the subject of hygiene, concerning his diet—though a confirmed dyspeptic herself, while he was a type of the physically perfect.

As a housekeeper she was scrupulously clean and her enmity for dirt made her always meet Thomas at the door to see that his feet were clean before entering, and finally to protect her house from this enmity she forced him to remove his boots on the back porch, and don a pair of slippers before entering. She nagged him in every conceivable way and continually reminded him that she had never been accustomed to such rude manners as he possessed, when she lived in her New England home. Every deed or act of Thomas was weighed in her New England balance and found wanting.

In the church of White Cloud she was the leader. Rhetorically, her prayers were gems filled with metaphor, and her word-pictures of the "home over there" for those who have "fought the good fight" and "kept the faith" were portrayed with a vividness not soon to be forgotten. Love, patience, forbearance and all the nobler traits of human character were themes upon which she dwelt in public, until it was generally believed that Thomas Gray's home was a heaven here below. Her husband sat quietly in the congregation and listened to the beautiful words of his wife, and silently breathed a prayer that she might only practice what she so eloquently preached.

He was a man who made no noisy pro-

Ask Your Neighbor



whose house is conspicuously clean, whose work worries her least, whose leisure time is greatest, how she manages. The chances are ten to one she will answer:

"I do all my cleaning with

GOLD DUST Washing Powder

Sold by all grocers. Largest package—greatest economy.

THE N. K. FAIRBANK COMPANY,

Chicago. St. Louis. New York. Boston. Philadelphia.

fession of religion, but the Sermon on the Mount was made manifest to the letter in his every-day life. The poor and needy never sought him in vain, while many a downcast heart did he cheer and glid its sky with the radiant bow of hope.

The Gray home in the earlier days had been a cheerful place, and the neighbors loved to call and enjoy its hospitalities. But since the advent of Martha these visits had almost entirely ceased, and, though in a thickly-settled community, they lived a life of isolation. Thomas Gray often looked back through the telescope of years and with a sorrowful heart noted the changes that had been wrought. He was both homesick and sick of home. The old house, though roomy and comfortable, no longer suited the aesthetic taste of Mrs. Gray, so a large commodious one, with bow windows and hipped roof, whose outward appearance was beautiful to behold, was erected and furnished with costly carpets, furniture and fixtures. It was a house made for show alone, hence the best rooms were not used by the family. The blinds of the parlor were always closed and the curtains drawn so that a ray of God's sunlight scarcely ever penetrated it.

With the new house, Mrs. Gray's enmity for dirt increased, and thenceforth the little kitchen must serve them as both sitting and dining-rooms, as the main part of the house (in her opinion) had not been built for that purpose.

As the years passed by, three children were born to them—Charles, Ruth and Paul—each of whom was a strange blending of the dispositions of their parents. They inherited the kind, quiet and loving disposition of the father, with the strong will of the mother. From the time they had been old enough to understand, they had had their attention called to their faults and little shortcomings. Anything childish or playful was sufficient occasion for their mother to check them or make some remark concerning their rudeness. She could trace all that she called breaches of etiquette to their father, and if there was anything refined in them it was either inherited from her or a direct result of her teaching.

In a social atmosphere like this it was but natural that the children should love and cherish their father. Her cold, fault-finding nature repelled these little hearts, and only were they happy when they could be with their papa. When he returned from his work and his children ran out to meet him and twine their little arms around his neck, they were reproved by their mother, saying that they would soil and wrinkle their clothing. As time passed, the gulf between her and her children widened, and yet she seemed to know not why. She grew jealous of the love they manifested for their father, and daily reminded them that she was working her life away for them and their father and receiving no thanks. On one or two occasions, when she was complaining bitterly to her husband of the condition of affairs, he had ventured to give her his opinion wherein he thought she failed to understand child-nature. But an attempt of this kind on his part only gave her an opportunity to recount her patience and endurance as a mother, and to inform him how little a man knew concerning the duties of a mother to her children. She gave him to understand that the kindergarten education she had received in the East rendered her pre-eminently better fitted to manage and direct children in the right way than any man like him, whose early education had been so sadly neglected.

The Gray children could not have any

associates call and spend the day, as was customary among the young people in their community. No parties were ever given for them; it was too much trouble, made unnecessary work, and, besides, they might soil the carpets. And thus they grew on and up; they despised their home and would have gone anywhere to get away from it, if it had not been for the cords of love that bound them to their father.

Charles was now blossoming into manhood and was a phototype of his father. Ruth was budding into womanhood, while Paul would only remain a boy a few years longer. Charles had arrived at the age when he sought his companions away from home and began to spend his evenings at White Cloud, which caused his father a great deal of anxiety and gave his mother an opportunity to lecture him for the want of his appreciation of a good home. Ruth occasionally went somewhere and would remain over night and have what she called a "good time," where people did not consider it rudeness to be happy.

The father fully realized what the end would be unless there was a revolution in the form of government in the family. He had talked with Charles, and his son had informed him that he would not remain at home unless he was treated differently by his mother, and he also acknowledged to his father that several times in fits of despondency and desperation he had drowned his sorrow in strong drink in the company of evil companions. He loved his sister Ruth fervently, and he told his father that she, too, had planned to get away, and he feared she would not be able to battle with the world and would be lost.

Mr. Gray told his son that it would break his heart if his children left home, and yet he could not blame them for wanting to do so, but he would see that hereafter they were given the privileges due them and that their rights would be respected. Charles was astonished to hear his father speak in this way, but he knew that there would be some change, yet he feared the attempt would destroy the home entirely.

Thomas Gray did not go to supper that evening, and when bed-time came he still was absent, nor did he come that night. He had gone to the old house—the one he had built when he first came to Kansas; the house in which he and his mother had spent so many years, and where friends and neighbors were accustomed to gather and enjoy themselves. He loved its very walls, and he sat there that night gazing into the bright light of the fire-place, thinking of the changes that had been made in his home, until his feeling sought relief in tears. He spent the whole night there thinking and planning on the best way to revolutionize the government of his home, without destroying it. On one thing he was decided, and that was that tyranny should no longer rule. He wanted to be kind and just in the matter, but he also knew that there are times when one "must be cruel only to be kind."

When daylight came he had perfected his plans and went from the old home into the new to put them into execution. First, he opened the shutters of the parlor and sitting-room, put up the shades, pulled aside the curtains and let the rays of the morning's sunshine in with all their splendor. He threw back the portieres between the rooms, built a fire in the parlor grate, then, seating himself in one of the large upholstered chairs, lighted his pipe and waited for the coming of his wife. It was the first time he had sat in one of those chairs since they were purchased, five years before, and he had never smoked in the new

house, nor thought of entering the parlor to sit down.

His wife soon came down from her chamber, and, on seeing her husband, was so astonished that she could not speak. They sat in silence for a few moments, looking at each other—a silence so still that the ticking of the great clock of eternity could almost be heard. The husband broke the awful silence, in a firm but kind tone, with the following: "Ever since the day of our marriage you have been an absolute monarch in our household. Your word has been law and your opinions the supreme court of the home. You have never considered it your duty to give to others the same rights you demand for yourself. You have preached the Golden Rule but you have never practiced it. Your prayers have been a hollow mockery and an abomination unto the Lord, and you have never seemed to realize that his kingdom might come and his will be done on earth as it is in heaven. These many long years our home has been only an abiding place, and though you may never have considered it, yet you have done all in your power to make it as unpleasant as any place could be. You have observed of late that our children do not enjoy themselves here and are seeking pleasures elsewhere, and our son Charles told me yesterday that both he and Ruth have planned to leave home unless they can have privileges in their home, as other young men and young women do. They are falling into bad company, and unless there is a revolution in the government of our home it will be destroyed. You have not seemed to realize that our children have any rights that you are bound to respect. They are not machines to be operated, but must be loved, guided and protected. The soil of our State was baptized in the blood of Freedom, but her glorious banner has never waved in our home. This house which we have built has not been used for our comfort, but from this day henceforth it shall be. Our children shall be permitted to invite company here and I shall no longer submit to your dictations concerning what you have for years been pleased to call 'breaches of etiquette,' and our home must be so ruled that that motto, 'Peace be within thy walls,' which hangs over your head, will be carried out in reality. This change in the management of our home can be established, peacefully if you will, forcibly if I must."

During this time Mrs. Gray had been thinking as well as listening. It was the first time in her life that she had ever had her mistakes and faults thrown upon the screen to be viewed by herself. She made no reply to her husband, but the more she thought of what he had said and the kind, though positive manner in which he had said it, the more she became convinced that what he said was true, and she concluded to submit cheerfully to the change. The new order of things was explained to the children by their father. They were admonished to be kind and loving to their mother, and, above all things, not to abuse these privileges given them.

The wish of Thomas Gray was a law unto his children, for they loved him dearly and they did everything in their power to make their mother happy in the "new home," as they called it. In less than a year Mrs. Gray was the happiest woman in Doniphan county, and an ardent advocate of her husband's government of a home. As she grew in age and grace, she would often refer with great pleasure to the "Revolution in the Gray family."

The Farmer's Wife.

Who is it makes and tends the garden on the farm? Who is it must work early and late, first in the house to be up, fires to make, last one to bed at night? Who is it must work in the garden with bended and aching back, sowing and planting seeds and setting out the onion sets?

The "gude mon" generally plows the ground, after all the other spring work is done, and his better half must rake and smooth the beds herself, to plant the garden; and as is, of course, the consequence of the lateness, their garden is not so early as the more fortunate in town. And when our "gude mon" goes to town, and sees the nice, crisp radishes and lettuce, and the fragrant green onions at the store, his mouth waters for a taste; he comes home growling, "Why don't you put out some garden early? You could scratch in a few seeds, and some onion sets. They don't need much attention. I'm tired of side-meat, beans and old potatoes."

Now is the time to buy those garden seeds and have the "gude mon" plow the ground.

If the farmer's wife has the garden to

make and care for, who should know better than she what seeds to plant, what varieties are best suited to that particular locality? Send for catalogue to a farmer's wife.

MRS. THEO. SAXON.
St. Marys, Kas.

The Young Folks.

THE BOYLESS TOWN.

A cross old woman of long ago
Declared that she hated noise.
"The town would be so pleasant, you know,
If only there were no boys!"
She scolded and fretted about it till
Her eyes grew heavy as lead,
And then of a sudden the town grew still,
For all the boys had fled.

And all through the long and dusty street
There wasn't a boy in view.
The baseball lot, where they used to meet,
Was a sight to make one blue.
The grass was growing on every base,
And the paths that the runners made,
For there wasn't a soul in all the place
Who knew how the game was played.

The cherries rotted and went to waste—
There was no one to climb the trees—
And nobody had a single taste,
Save only the birds and bees.
There wasn't a messenger boy, not one,
To speed as such messengers can.
If people wanted their errands done,
They sent for a messenger man.

There was little, I ween, of frolic and noise;
There was less of cheer and mirth.
The sad old town since it lacked its boys
Was the dreariest place on earth.
The poor old woman began to weep,
Then woke with a sudden scream.
"Dear me," she cried, "I have been asleep,
And, oh, what a horrid dream."

THE GRIEF OF A JAGUAR.

"It was in the wooded region of Ecuador, in the San Jacinto district, on the easterly slope of the Maritime Andes, that I killed a jaguar one day just as our party was going into camp for the night," said A. L. Vernon, a civil engineer, who for several years was engaged in exploring railway routes and building track in various parts of Central and South America. "The jaguar was a female, a big, hungry brute that had followed us for hours, and she hung so close about the camp after we halted as to throw the horses and some of the men almost into a panic. I shot her in broad daylight, not fifty yards from our campfire, as she was stealing upon a mule standing with his pack under an algarroba tree. I took off her skin—it was a superb one, sleek as satin, and splendid in its black and yellow markings—and hung it against the trunk of the tree high enough to keep it from the mountain rats and other gnawing vermin. It was in the pairing season of jaguars, and some of the old forest men with me said that there would be another tiger to deal with before morning, that the male jaguar would come round in search of his mate. There was a noticeable willingness throughout the camp to lend a hand in gathering firewood, and for their common safety I put two men instead of one to the duty of guarding the horses and mules when the stock was turned out to graze through the night.

"We were camping in ground partly open, with thickly wooded slopes on the right and the left, rising to the foothills of the Andes. Shortly after nightfall we heard the wailing cry of a jaguar off in the forest on the right, and the sound shifted to different points, coming nearer before we rolled ourselves up in our blankets for the night. It was the dry season and we slept in the open air, twelve of us, in a double row, and there were four fires left burning brightly, one on each side of the camp, as we dropped asleep. I should not have troubled to have the fires built on my own account, having great faith in my repeating rifle and revolvers to meet the case of jaguars or whatever other beasts might come, but my men, who knew the forest, thought differently, and I gave them their way.

"Some time in the night I was awakened by a cry, a frightful scream that brought me to my feet, with my rifle clutched in my hand, before I fairly knew that I was awake. All about me the men were starting up and gazing fearfully around.

"What is it, Pedro?" I asked my native guide and interpreter, who slept always by my side. He had drawn his machete from beneath his poncho, and now, resting on one knee, was looking in the direction of the algarroba tree. "El tigre, señor," he answered. "He is mourning his esposa (wife)."

"He pointed with his machete toward the tree as he spoke. The full moon had just risen above the mountains, and by its light I could see the jaguar standing beneath the tree looking up at the skin of his mate stretched against the trunk. Twice he moaned. The sound was some-

thing between a whine and a low roaring, but its cadence unmistakably was of distress. Then throwing his head higher he uttered again a cry such as that which had awakened the camp. Such a sound I have never heard before or since. Loud, deep, vibrant, it filled the air with its expression of wonder, dismay and grief—a jaguar's grief, with a note of gathering anger in its tone. As it ended the creature turned toward our camp, as I could tell by the flaming forth of his eyes like fireballs. Then lowering his head and half crouching the jaguar uttered roar after roar.

"We were all on our feet now, and every man who had a weapon of any kind had seized it. Some of the men were at the fires that had been built around us, stirring them into a blaze and piling fuel upon them, taking care as they worked not to get beyond the protection of the flame. Every instant we expected the jaguar to come bounding upon us. The sight of our numbers and the blazing up of the fires held him back from attacking us, but for several minutes the animal faced us, roaring angrily. Sometimes he would crawl a few inches toward us, or, rising, would tear the turf and tree roots as if testing the strength of his claws. It was a splendid challenge that none of us was inclined to accept.

"At fifty yards away, in the bright moonlight, the jaguar made a fine mark for my rifle, but somehow I did not feel like shooting him. His grief and resentment, both so intense and fitting, appealed to my sympathy, and I should have been glad to see him turn away unmolested. I stood with my finger at the rifle trigger without aiming until Pedro's whisper came:

"Fire, señor, while you have a chance. In the name of Joseph and Mary do not wound without killing him. If you do, he will have revenge."

"Then I fired three shots in succession, aiming between the fiery eyes. The moonlight may have been deceptive, perhaps tiger fever, more nerve-shaking than buck fever, got into my aim. I knew that none of my bullets struck the jaguar. But what was better than merely to wound him, their whistling and the flash and reports of the firing caused the jaguar to retreat. At the third shot the roaring ceased, and he crept into the shadow of the tree. Somewhere beyond the trunk I caught another glimpse of his eyes and fired two more shots. That was the last we saw of him, as he stole away in the darkness.

"Five minutes later there came an outcry from the direction in which our stock had been driven—sounds of a stampede of hoofs, the cries of the herders, and a gunshot. I took half the men, and, carrying torches, we started for the sounds. We met the herders coming toward the camp, very much frightened. 'El tigre! El tigre!' was all that I could get them to say until one of them managed to tell me that the jaguar had leaped among the horses, pulled two of them down and stamped the rest of the herd. I cursed the herders for their cowardice and threatened them with worse if they did not take me to the jaguar. As we came near the place we could hear the growling of the jaguar, but at our approach he left the horse he was tearing and we did not get within sight of him. We found, as the herders said, that the jaguar had killed two horses. He had leaped on one horse and broken its neck with a single bite. Then had overtaken the second one, my riding horse, and killed that.

"The killing of the horses seems to have been done by the jaguar purely as an act of revenge. It apparently served

to work off his fury, for he troubled the camp no more. The loss of two good horses, besides the disturbing of the camp, which did not get quieted down for hours, was the price the jaguar made us pay for the killing of his mate. Indeed, I feared at first that more of our animals had been killed, but we found all the others at the camp when we returned. The instinct that causes domestic animals to seek the protection of man in presence of danger from wild beasts had brought them there, after their first mad rush in any direction to get away from the jaguar's attacks. But they were the worst scared lot of animals that you ever saw. Some of them were so badly scared that they did not get over it for a day or two after."—New York Sun.

You are too young, no matter what your age, to lose your hair. Save it by the use of Ayer's Hair Vigor. It removes dandruff, prevents baldness, restores gray and faded hair to its original color, and makes it soft, glossy and abundant. No toilet is complete without it.

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Electros must have metal base.
Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All advertising intended for the current week should reach this office not later than Monday.

Every advertiser will receive a copy of the paper free during the publication of the advertisement.

Address all orders—
KANSAS FARMER CO., Topeka, Kas.

The Ohio crop report for March 1, places the condition of winter wheat at 67. The statement that the prospect is 33 per cent. below the average is discouraging for the Buckeye wheat-growers.

The writer made a trip of some 200 miles, penetrating the heart of the wheat belt in Kansas, last Saturday. The appearance of the growing plant and the judgment of the farmers talked with place the present prospect above that of this season of the year in the wheat-growing record of Kansas.

A deal was made at Kansas City, last Monday, by which Mat Murphy, of the Murphy Cattle Company, of St. Paul, purchased from Ryan Brothers, of Leavenworth, their entire herd of cattle now on the ranges of eastern Montana. The herd numbers between 12,000 and 15,000 head and the price paid is said to be \$30 per head.

A meeting of Kansas cattle breeders, feeders and shippers has been called to meet at Abilene, March 22 and 23, 1898. Among the prominent speakers announced are Major Calvin Hood, of Emporia, J. W. Robison, of El Dorado, and Secretary F. D. Coburn, of Topeka. This will be one of the important gatherings of the year and will consider matters of vital interest to all who are engaged in the cattle industry.

French buyers are said to have taken quite as freely of the recent arrivals of wheat over the Atlantic as the most sanguine had expected. English millers are hard pressed to secure grain for grinding but American flour is said to be obtainable in England at prices out of proportion to the quotations for wheat. Possibly the mixer of maize flour with his wheat product can explain the difference.

The Farmer is pleased to note a revival of the horse industry, especially in the West. In a recent letter, Henry Avery, of Wakefield, Kas., who has staid by the business determinedly, notwithstanding the long depression, writes thus encouragingly: "There can be no question about 'return to life' of the horse business. Inquiries stating the need of good stallions where none are, and others stating that old stallions have died, come in from every part of Kansas as well as from Oklahoma. In fact, the numerous inquiries from all directions show conclusively that the 'tide has changed.'"

In the Industrialist for February, Prof. J. T. Willard, of Kansas State Agricultural College, makes an announcement of his plans for sugar beet experimentation for 1898. He is very anxious to make this test as perfect as possible. This implies early seeding. He now has on hand over three hundred pounds of Kleinwanzlebner seed, and an equal amount of Vilmorin's Improved. It is desired especially that localities where there is much interest in the subject shall test the matter thoroughly, even to the extent of growing half an acre or more, by two or three of the farmers, as well as many smaller plots by others. The people of Mulvane have taken up the matter with great energy, and other localities are considering it, and will doubtless do the same.

GRAIN IN FARMERS' HANDS.

The consolidated returns of the different crop reporting agencies of the Department of Agriculture at Washington, D. C., made up to March 1, show the wheat reserve in farmers' hands March 1, to have been the equivalent of 22.9 per cent. of last year's crop, or about 121,000,000 bushels. This is 33,000,000 bushels in excess of the farm reserve reported one year ago, but the result of the special wheat investigation made by the department last fall would indicate that the crop of 1896 was larger than the department had reason to believe at the time. The proportion of crop of 1897 shipped beyond county lines is 50.7 per cent. The corn in farmers' hands, as estimated, aggregates 783,000,000 bushels, or 41.1 per cent. of last year's crop, as against 1,164,000,000 bushels, or 51.0 per cent., on hand March 1, 1897, and 1,072,000,000 bushels, or 49.8 per cent., on March 1, 1896. The proportion of the total crop shipped out of the county where grown is estimated at 21.6 per cent., or about 412,000,000 bushels. The proportion of the total crop merchantable is estimated at 86.8 per cent. Of oats there are reported to be about 272,000,000 bushels, or 38.9 per cent., still in farmers' hands, as compared with 313,000,000 bushels, or 44.2 per cent., on March 1, 1897. The proportion of this crop shipped beyond county lines is estimated at 29.2 per cent.

TEXAS FEVER CASES WON BY THE FARMERS.

In May, 1894, Hosier Bros., big cattlemen in Crockett county, Texas, shipped 2,000 head of cattle into Chase and Lyon counties, Kansas, in violation of the Kansas quarantine law. The cattle were shipped in over the Missouri, Kansas & Texas road, and unloaded at Bazaar, and were driven twenty-eight miles across the country to the place where they were to be pastured. Two weeks later the domestic cattle became infected with Texas fever. Every herd that was driven across the trail of the Texas cattle died. One hundred and fifty-six farmers in that locality lost almost their entire herds. They then banded themselves together and commenced a joint suit in the Lyon county District court against the Missouri, Kansas & Texas Railway Company to recover \$60,000 in the aggregate. The case was tried in the fall of 1894 before District Judge Randolph. Judgment entered for the farmers. An appeal was taken to the State Supreme court by the road, and in 1896 a decision written by Justice Allen affirmed the decision of the lower court. The road then appealed to the United States Supreme court, claiming that the Kansas quarantine law was in violation of interstate commerce, and that it conflicted with the Federal quarantine regulations.

The decision of this, the highest court in the land, has just been handed down. The opinion of the court, written by Justice Harlan, fully sustains the decisions of the Kansas courts. This makes the railroad responsible as provided in the Kansas statute. It will not only secure the reimbursement of the farmers for their losses, but will doubtless at once and forever put an end to the importation of Texas fever by way of the railroads.

GET THEIR GOOD WHEAT FROM KANSAS.

In his address welcoming the National Buttermakers' convention to Topeka, Secretary Coburn said, among other things, "if you Minnesota men want more of our Kansas wheat with which to go on making more of your world-famous Minneapolis high-patent flour, we will continue to furnish it." This was regarded by many as simply "having fun with the boys," but the following from an article in the Chicago Tribune, discussing the wheat, flour and milling situation, especially from the Chicago and Minneapolis standpoints, suggests that the statement, instead of being a joke, was strictly a business proposition made in good faith. The Tribune says:

"The complaints regarding the spring wheat flour are significant. The opinion of the inspector, backed by the experts on the Board of Trade committee, is that there is something radically and constitutionally wrong with a large part of the 1897 spring wheat crop. The Northwestern millers have recognized this and have been forced to call on the Southwest for wheat for mixing purposes. One of the most remarkable features of the movement of the 1897 crop has been the shipment of large quantities of Kansas wheat to Minneapolis for milling. The Northwestern millers have been fighting for the use of the

words 'Minneapolis' and 'Minnesota' as describing the locality in which wheat used in milling spring wheat flour is raised.

"In face of this the Minneapolis millers during the last three months have been using a great quantity of Kansas wheat and have been prominent buyers at Kansas City. A prominent Northwestern railroad man in a recent interview admitted that the Northwestern wheat was so inferior of the 1897 crop that the quality of the flour produced was being greatly improved by the use of Kansas wheat, which was of unusually good quality. In the tests the (Northern) flour appears all right in the 'dust,' and even when first made into dough. When it stands for a little time it loses its strength, flattens out and becomes moist and pasty."

A DARK SIDE TO BEETS.

All is not smooth sailing with the Grand Island (Neb.) beet sugar factory and the farmers who have grown the beets. A recent dispatch says: "The Beet Growers' Association had another meeting to-day. A telegram was received from Mr. Oxnard, stating that no modification could be made in the contract, but that the probabilities were that the Hawaiian clause would be withdrawn about March 15, as the measure for annexation would have been voted on by that time in Congress and defeated. This message failed to help matters and members of the association renewed the resolution unanimously not to raise beets on any other contract than at \$4 straight without test. This practically settles the fact that there will be no beet industry in this country this year. But the growers went further and appointed two delegates, Messrs. Murr and Voss, to go to Norfolk and organize the farmers in that vicinity in order that there may be unity of action here and at Norfolk."

A correspondent of the Country Gentleman, writing from Norfolk factory, says: "The end of the campaign for 1897 at the Norfolk (Neb.) beet sugar plant gives an average yield in sugar of nearly 190 pounds per ton of beets. If an average price of \$4 per ton is paid the farmer, there can be but little profit left for the sugar company." The same correspondent continues: "It is doubtful if more than fifteen tons per acre can be grown with safety, unless the quickly available chemical manures are used very liberally, and, what is of fully equal importance, used very intelligently."

This statement may not be intended to mislead, but it conveys the impression that the farmer may at least expect to obtain fifteen tons of beets per acre. The writer, a few years ago, talked with a considerable number of farmers, as they were hauling their beets to the Grand Island factory, and was surprised to learn that the average yield for that year was considerably under six tons per acre. It would be interesting to know from the Beet Growers' Association what is the average crop, one year with another. It is time for deception to cease.

The World's Third Sunday School convention meets in London, July 11-15. Delegates from this country are to have exclusive use of Cunard steamer Catalonia, leaving Boston June 29. Cost of round trip, \$90. J. F. Drake, Topeka, of the International Executive committee, will give further information as desired.

Writing of Leiter's operations in wheat at Chicago, the great English market statistician, Beerbohm, says that Leiter "must take into account the fact that by raising wheat to a difficult price in America he is thereby inducing consumers to turn to cheaper substitutes, such as maize flour, the use of which is undoubtedly spreading in America—thus enabling the country to spare for export a larger amount of wheat than had been expected." Well, the American farmer is not kicking Mr. Leiter on account of either the rise he is credited with having helped in the price of wheat or the demand he is charged with having indirectly created for corn.

The book of the year is "Feeds and Feeding, a Hand-Book for the Student and Stockman," by W. A. Henry, Director of the Agricultural Experiment Station, University of Wisconsin. It is published by the author, at Madison. This is no tract or bulletin, but is a big book, containing 657 pages. Prof. Henry is the first authority in this country on the subject treated in his book. His work is standard all over the world. The book is admirably arranged and indexed, so that any branch of the subject can be traced without waste of

time. It is up-to-date, embracing the results of the latest reliable investigation. For the feeder, for the dairyman, for the breeder, for every stock-owner who would make the most of the labor, feed and expense devoted to his animals, the book, which sells at \$2, is worth many times the cost. Orders for the book will secure it postage free at publisher's price.

"First Principles of Agriculture" is the title of a new book by Edward B. Voorhees, A. M., Director of the New Jersey Experiment Station and Professor of Agriculture in Rutgers College, New Brunswick, N. J. The book is finely-arranged and is a valuable acquisition to agricultural literature. It is evidently intended to meet the special needs of those who have not had opportunity to acquire a thorough agricultural education and those who think they have not the time to go thoroughly into the details of agricultural science. The work is up-to-date as far as it goes, but the space devoted to commercial fertilizer marks its preparation as having been made to meet the wants of the farmer on the poor and worn-out lands of the Atlantic States rather than of the tiller of the rich acres of the newer West. There artificial fertilization is necessary. Here the needs of the present and of coming generations are well conserved by saving and using the manures naturally made on the farm and by the growth of leguminous plants.

Publishers' Paragraphs.

Remember that if you get \$2 for two new subscribers your own subscription will be continued another year free.

The Chicago Times-Herald has gained its large circulation by adhering consistently to the highest ideals of modern journalism. It is thorough and clean in its presentation of the news, fearless in its editorial expression and free from jingoism and claptrap. These are only a few of the characteristics that have secured the regard of discriminating people. Tell your newsdealer you want the Times-Herald.

Write to Currie Windmill Co., Manhattan, Kas., for their catalogue of windmills and feed-grinders. They have been in the business of manufacturing mills and grinders for many years, and their machines are surpassed by none. They are reliable and worthy of Kansas patronage, and their mills will work equally well in Colorado, Nebraska, Missouri and Oklahoma. Unlike the "mills of the gods," which "grind slowly," these grind wonderfully fast and "exceedingly fine."

An interesting and descriptive booklet has been published by J. P. Vissering, Box 155, Alton, Ill. The primary object of it is to describe the Farmer's Fence Tools, which weave a variety of low-cost, yet the best farm fences on earth, but it also contains a vast amount of fence information. It is a very able attempt in this line and no farmer can fail to derive profit from its perusal. The paper may be had free by addressing a postal card as above. See his advertisement elsewhere.

We have so many requests for information about the sewing machine which we advertise to send anywhere free of charges for \$20, that we have thought it best to publish, from time to time, the letters of some who have received the machine, to show how well it pleased them. Mrs. J. Q. Deal, of Winfield, under date March 14, 1898, writes us as follows: "Gentlemen:—The sewing machine I ordered of you came all right, March 9, and it is a perfect beauty—in fact, it is so much better sewing machine than I expected to see, that my neighbors who have seen the machine can't help but smile when they see how nicely it works."

The provision of life insurance is an act of broad-minded selfishness which prompts the head of the household to anticipate the day when his efforts for his family shall cease. The uncertainties of the retention of property through the vicissitudes of business or during the reverses of industry and the liability of the reasonably prudent to use, when available, the rewards of industry as fast as they come into possession, emphasize the importance of making some investment in life insurance. The value of this investment to the beneficiaries depends, first of all, upon the soundness of the insurance company. There is also another view to be taken of insurance. The company invests the money received from its policyholders so as to have it earn an increase. If this money is paid to an Eastern company it is taken out of circulation in Kansas, unless it is borrowed back, in which case the interest is drained from Kansas productive industry into the

East. A better policy is to seek a sound home company, in which case the money paid is kept at home and all the earnings from it accrue on our own soil. These conditions, i. e., absolute security, ready availability when due, and keeping the money at home to help transact the home business and make times easy here, are met when a policy is taken in the Kansas Mutual Life Insurance Company, of Topeka, Kas.

From cover to cover the new catalogue of E. W. Reid's Nurseries, at Bridgeport, Ohio, bears the stamp of plain, straightforward truthfulness. It tells a business story in a businesslike way, and the story is one that should be read with profit by every tiller of the soil and grower of fruits, small fruits, shade trees or flowers. An impression of solidity and good taste is conveyed at first glance by its cover of sober gray. These show rich effects of lettering in relief, and the caption, "Everything for the Fruit Grower," on the title page, is amply supported by the evidence in the body of the book. The Reid Nurseries have been known for years to be trustworthy and economical, and their trees have been grown with success in all parts of the country. The managers have been privileged to see profitable orchards planted with trees supplied by them years ago, each one of which has proved healthy and true to name. Throughout their business career the owners of the Reid Nurseries have been guided by the sound belief that the confidence of their customers is of greater value to them than any immediate profit. In consequence, they have incurred heavy losses, frequently, in discarding varieties which, after thorough trial, failed to come up to the highest standard. The wisdom of these business methods is shown in the present catalogue, containing the results of many years work in the Nurseries, every offer in which is backed by the reputation gained by years of conscientious dealing. This handsome catalogue has in it hints for growers both great and small, and any one can get it by writing to E. W. Reid's Nurseries, Bridgeport, Ohio.

Gossip About Stock.

Morris Pyles has removed his herd of pure-bred Short-horn cattle from Arcola, Mo., to Emporia, Kas., where he may be heard from hereafter.

Allen Thomas, breeder of Berkshires, Blue Mound, Kas., reports splendid sales of last year's surplus stock and is now ready to take orders for pigs. He has also added Shropshire sheep to his breeding stock.

J. C. Canaday, breeder of Improved Chester White hogs, Bogard, Mo., also breeder of Barred Plymouth Rocks and Buff Cochins, writes that he is now ready to fill orders for eggs from the best birds he ever had, and that the pig crop is especially desirable. Also has a number of choice males suitable to head herds that will be sold reasonable if taken soon.

Everybody wishes to be up-to-date on Herefords, even if they cannot afford to buy one, but those who contemplate the purchase this spring of Herefords should not fail to note the quarter-page advertisement of the annual Weaver-grace offering by Mr. T. F. B. Sotham, Chillicothe, Mo., to be sold on April 13, at Chillicothe, Mo., and should ask for his "Hand-book of Hereford Information," which illustrates every animal to be offered in the sale, besides giving up-to-date points on Herefords generally. There will be no better offering made in America this year, it is safe to say, and the fact that no animal is ever sold at private sale from this herd makes one more than doubly sure of having first choice. If you are interested in Herefords, get his catalogue and we guarantee that you will be present at the sale and prepared to do business.

"There can be no question about the return to life of the horse business," says Henry Avery, of Wakefield, Kas. It is doubtful whether he would have been so well aware of the fact had he not so widely advertised the fact that he had draft stallions and Coachers for sale. What is better, he reports the following sales: Imported stallion Scrutator, to M. E. Ellinwood, Bayard, Kas.; also the pure-bred mares, Angeline 12591 and Almada 10189, also the home-bred stallion, Agate 12600, to L. E. Mayer, Junction City, Kas.; and the young home-bred stallion, Brilliant Jr., to I. S. Buden, Wakefield, Kas. He reports a remarkably fine collection of young stallions still on hand. Among them are four young Brilliants coming four this spring. These will suit the most fastidious buyers. In the line of Coach horses Mr. Avery wants to go on rec-

ord as having the finest specimens of the breed in the West. Among them is the famous sire, Ravenstine 424, who has style, action, symmetry and speed to justify all claims made for him.

Our Mr. Brush sends the following pointers on Scott & March's Hereford sale, at Belton, Mo., April 15, 1898: "Among the Hereford breeders in this country that went through the beef cattle depression and held to the faith in the return of better times were Messrs. Scott & March, founders and owners of the herd of over 500 head, known as the Mt. Pleasant herd, situated on their breeding farm, adjoining Belton, Cass county, Missouri. The eight head of foundation animals, one bull and seven heifers, averaging nine months of age, were purchased of Messrs. Gudgell & Simpson in 1881 for \$2,250. Five of the seven heifers were imported from England, as was the bull, Taurus 2d 9670, bred by E. Lister. Two years later the imported bull, Royal Oak 19506, he by Bingham 15639 and he by Lord Wilton 4057; his dam, Perfection Lass 19505, was a daughter of Sir Isaac 6629. This bull, Royal Oak, was a great sire and gave to the immediate descendants that which is easily detected throughout the herd at the present time. Shortly after the advent of Royal Oak were three cows for which \$450 was paid each for two and \$225 for the third one. Ten years ago a draft of twelve cows and heifers were added from Gudgell & Simpson's herd. It has been an invariable rule to sell off the young bulls and retain the heifers, and the result is that the visitor at the farm now finds 225 breeding cows, which very strongly illustrates what may be done by starting with a few select cows and always buying breeding bulls of best breeding and individuality. All persons that attended their public sale last April can rest assured that the one hundred head, fifty bulls and fifty heifers, that will be offered next month are a much stronger lot than were those sold at the former sale. These offerings have been especially cared for since weaning time, consequently are larger, more growthy and superbly finished in the best of Hereford beef character. A majority of the offerings are by the great bull, Monitor 58275, a grandson of the World's Fair winner, Don Carlos 33734, and his dam, Empress 11th 44013, a granddaughter of Anxiety 4th 9904. The sons and daughters of Henry 4th 62086 by Fortune 2080; Rob Rorer 52626 by Duke of Boon 47665 and dam by Dictator 1989; Julian 48668, by Royal Oak 19506; Bombastes 37170, by Don Carlos 33734; J. K. 56567, a grandson of Anxiety 4th; Sam 57265; by Dictator 2d 15068, and Bengal 48658, by Royal Oak 19506, are equally strong and attractive. The tabulated pedigrees found in the sale catalogue reveal that there are none better, either in this country or in England. Secure a free copy by writing for it."

Judge Henry H. Goldsborough, Baltimore, Md., says: "It gives me pleasure to recommend Salvation Oil to any one suffering from rheumatic or other pains."

Pleasant, Profitable Work at Home.

If you want work you can have plenty of it to do at home, and will be paid promptly every week. If you desire to start at once, write to Fairfield Floral Co., Fairfield, Maine.

Kills the Germs.

Bannerman's Phenyle Disinfectant and Germicide has been tested by many leading stock breeders as a preventive to hog cholera and other diseases among hogs and poultry. It has the endorsement of all users from results obtained through its use. Send for circulars. Address Bannerman & Co., Chicago, Ill.

Pleasant Home Employment.

Any person who wants work to do at home can get steady employment by making artificial flowers. The work can be learned in two or three days, can be done by anybody and workers receive from eight to sixteen dollars weekly for services in their own home. It is a pleasant and profitable employment. Instructions will be given you free and materials will be supplied you regularly, if you promise to send completed work back to us, and not sell to storekeepers in your town. For full information write, inclosing stamps, to Fairfield Floral Co., Fairfield, Maine.

Beauty Is Blood Deep.

Clean blood means a clear skin. No beauty without it. Cascarets, Candy Cathartic clean your blood and keep it clean, by stirring up the lazy liver and driving all impurities from the body. Begin to-day to banish pimples, boils, blotches, blackheads, and that sickly bilious complexion by taking Cascarets,—beauty for ten cents. All druggists, satisfaction guaranteed, 10c; 25c; 50c.

- ARMSTRONG & McKELVY Pittsburgh.
- BEYMER-BAUMAN Pittsburgh.
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- FAHNESTOCK Pittsburgh.
- ANCHOR Cincinnati.
- EKSTEIN Cincinnati.
- ATLANTIC New York.
- BRADLEY New York.
- BROOKLYN New York.
- JEWETT New York.
- ULSTER New York.
- UNION New York.
- SOUTHERN Chicago.
- SHIPMAN Chicago.
- COLLIER Chicago.
- MISSOURI St. Louis.
- RED SEAL St. Louis.
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- JOHN T. LEWIS & BROS CO Philadelphia.
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EVERYBODY who knows anything about painting knows that Pure White Lead and Pure Linseed Oil make the best paint; but there is a difference in White Lead. The kind you want is made by the "old Dutch process." It is the best. Let the other fellow who wants to experiment use the quick process, "sold-for-less-money," sorts.

See list of brands which are genuine.

FREE By using National Lead Co.'s Pure White Lead Tinting Colors, any desired shade is readily obtained. Pamphlet giving valuable information and card showing samples of colors free; also folder showing pictures of house painted in different designs or various styles or combinations of shades forwarded upon application to those intending to paint.

National Lead Co., 100 William St., New York.

The Fence Question.

When it comes to the selection of a fence, there are many things to be considered besides the mere question of cost. It is not unfair to say that in a majority of cases where the object is only to buy the cheapest fence, the man gets just what he seeks and he never has a satisfactory fence. Quality should be the first requisite in the purchase of a fence, as well as other things. If it is possible to secure a high quality fence at a reasonable cost, the purchaser is just so much more fortunate. Combinations of high quality and low cost have been sought by both manufacturer



and purchaser everywhere. We believe that these two qualities are possessed in a high degree by the Cyclone fence, a cut of which we show herewith, and which is manufactured by the company of that name at Holly, Mich. They tell us that they have constructed about 400 miles of railroad fence during the last year. This fence, it will be observed, differs from others principally in the fact that each of the long horizontal strands is a cable of two strong wires twisted together. This not only makes a very strong fence when interwoven with the No. 9 wire steel crimped picket, but the twisting of the wires also provides the cables with the spring necessary to take up their own expansion and contraction. Better write to Cyclone Fence Company before you buy. Kindly tell them that you saw their "ad." in our paper.

"The National Horse Breeders' and Dealers' Convention."

Editor Kansas Farmer:—In view of the present situation in horse breeding and the limited supply of good horses for the world's markets now open to America, a number of prominent horse dealers and breeders have united in calling a national convention, to meet in Chicago, Wednesday, March 30, at the Palmer House, at 10 a. m., to encourage prompt, vigorous breeding of the best classes of horses to suit the increasing domestic and foreign demand, to discuss together the market requirements, as to the best class of horses to breed for the city and export trade, with due consideration for the wants and interests of the farm, and to organize a "National Horse Breeders' and Dealers' Association," to permanently advance these interests and to encourage the improvement of American horse breeding up to the standard of the world's best markets.

An attractive program of able speakers will entertain the convention, which, with the free discussion by horsemen and delegates, will make the meeting one of the most important ever held in this country in the interest of horse breeding.

Horse breeders and importers of all the recognized breeds and classes are

invited to meet with the exporters, dealers and shippers at this convention and unite in organizing a national association, that is more urgently needed now than ever before to encourage and direct American horse breeding.

For program and particulars, address F. J. Berry, Chairman committee, Union Stock Yards, Chicago, Ill. T. BUTTERWORTH, Secretary.

Chicago's Favorite Passenger Station.

Reasonable success seems to have followed the efforts of the management of the Nickel Plate road to make it popular as a passenger line for travel East. It is regarded as a favorite by many in making the journey from Chicago to Eastern points.

Patrons of that line will be gratified to learn that arrangements have been made, effective March 6, for all passenger trains of the Nickel Plate road to arrive at and depart from the Van Buren Street Station in Chicago.

The many advantages afforded by this great Union Depot, located in the heart of the business portion of Chicago, and the continued advantage afforded by lower rates than over other lines, having three express trains daily, with through sleeping cars to New York and Boston, and the advantage of superior dining car service, when all considered, should show increased travel over the Nickel Plate road. (9)

Educate Your Bowels With Cascarets. Candy Cathartic, cure constipation forever. 20c. 25c. If C. C. C. fail, druggists refund money.

Brass, Aluminum, Grey Iron Castings.

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Free Farms

of the best quality. Rich soil. On railroad. Streams and Lakes. Coal. Big crops. Your last chance to secure a Government free homestead of 160 acres. Also rich, low-priced lands in North Dakota, Minnesota, Wisconsin and Michigan.

LOOK THIS UP. It will pay you. For free maps and descriptive books write to D. W. CASSEDAY, Land and Industrial Agent, "SOO" Railway, Minneapolis, Minn. Mention this paper.

HOUSE PAINTS

Victory Implement and Wagon Paints, Nonpareil Carriage Paints. Home-made and the best made for all purposes. Window and Picture Glass, Hot-bed and Greenhouse Glass. If your dealer does not carry these goods send direct to CUTLER & NELSON PAINT AND COLOR CO., Manufacturers and Jobbers, N. W. Cor. 11th and Mulberry Sts., Kansas City, Mo.

Horticulture.

GREEN PEAS FOR PROFIT.

Heavy yields and big profits are not always synonymous. In trying to get a big crop from a small area the extra labor sometimes crowds the profit off the program. This is nowhere more likely to be true than in growing green peas.

The way I figure is something like this: I can use a hundred baskets of green peas for my season's trade. With close planting, extra care and good luck, I might get this from three-fourths of an acre of land. But it takes much less labor by allowing the same amount of seed and same number of rows to cover an acre and a half of land, and then do the work mostly with horses. So, instead of putting the rows twenty inches apart, they are set forty inches apart and the acre and a half of land used. With me land is cheaper than muscle, the rental value of land here being usually set at about two dollars per acre. And two dollars will make but little showing when invested in hand work on a weedy garden.

When the land is ready for planting I begin the work by marking off into rows with a corn-marker which makes three rows at a time. Less than a mile of travel is required to the acre, so this task is quickly accomplished. The garden seed drill is used for planting the peas. As the marking is all done and there are smooth furrows for the wheels to follow, the seeding is a light job. The furrow is nearly deep enough for the peas, so the seed is scarcely more than covered with the soil along its bed. If the ground is wet and cold, as it generally is when the first ones are planted, I leave the furrows this way until the peas are well sprouted or about ready to come up. Then the furrows are filled to a level with loose soil. This work is quickly done with a garden rake, or still more rapidly with a rake attachment to a wheel hoe. It is a good time to do this work at the close of some warm day, so as much as possible of the warmth may be preserved. The sprouts grow rapidly in this light soil and the plants are soon up, and some days in advance of the growth they would have made if they had been covered deeply at first. As the plants now stand in freshly-stirred soil they have a start of the weeds, so the latter will have little show of doing harm along the row, and the cultivator will take care of them elsewhere.

All the work of weeding is done with horses and a riding cultivator. No brushing is done. The dwarf varieties do not need any support, and all the early varieties do very well without. The late tall kinds are planted in an even number of rows, to be treated in pairs. When they get too tall to stand upright the rows of each pair are thrown together and sometimes a wire stretched between them for support.

The work up to picking time is but little more than that needed when the same area is devoted to corn. The cost of seed is the most expensive part of the business up to the gathering of the crop. It takes about two and a half or three bushels of seed per acre. I grow the greater part of my seed, but have to buy some nearly every year in order to keep the varieties distinct. It isn't convenient for a market gardener to have six or eight different patches so as to keep each kind by itself; and when different varieties are planted side by side the seed of neither is likely to be pure.

Whenever seed is to be preserved it should be from rows planted on purpose for seed and from which no pods are taken for green peas. The remnants that ripen on the rows that have been picked are not fit for seed. But the hogs will gladly make use of them if the vines are pulled up and thrown to them.—C. L. Hill, in Ohio Farmer.

Be Sure Your Plants Are True to Name.

When every new variety is found to be of value and in great demand throughout the country a strong temptation is offered unscrupulous men to send out spurious varieties, for which there is no demand, giving it the name of the popular new variety. In this manner every year planters are imposed upon. These planters, thinking they have a valuable new variety, plant these spurious plants, fruit them, and finding the quality, size or the color defective, give the supposed new variety a bad report; whereas, they have never had the new variety properly named.

In buying new varieties of fruit, more particularly than old, planters should be careful to purchase of reliable nurseries. We know of an instance where a nurseryman had a valuable new variety which could only be purchased of a certain man,

and since this nurseryman never bought a plant, it is safe to assume that for several years he sold spurious plants labeled with the new variety, which he was advertising. The introducer of a new variety is generally a safe party to buy that variety of, and he can generally sell it as low as any other plant grower.—Green's Fruit Grower.

The Farm and Orchard.

Paper by Phillip Lux, read before the March meeting of the Shawnee County Horticultural Society.

There has been a prevailing idea that if a man is a failure at everything else, then, as a last resort, he can go to farming, and often does, to the discredit of one of the noblest and most ancient occupations.

Now, to be a success in farming and horticulture, a man must have the best judgment and the most polished ability and energy. What is success? The great problem is life and its comforts, and how to obtain them in an honorable way. In order to accomplish this there are underlying principles which must be observed, yet in farming and horticulture we cannot lay down definite rules, for what would be done this year with crowning success, might not succeed next year because of different climatic conditions.

It requires good judgment to do the proper thing at the proper time, to obtain the remuneration which is necessary to a happy family. The following are some underlying principles: Deep plowing and thorough cultivation; everything must be done in the best order possible, and at the proper time. One must not undertake more than he can do right; for instance, the hog not properly cared for is capable of destroying the profits of a farm as much as the hog properly cared for can increase them. Likewise, with everything we undertake. In horticulture, for instance, trees not properly planted or cultivated and cared for, or not the right kinds planted—any one of these points neglected, is cause enough to make the orchard prove a failure.

There are too many farmers who think that, when an orchard is once planted, all they have to do is simply to wait three or four years, and then to pick the apples and take in the money. For such there is nothing but sure disappointment. The orchard must be cared for just as corn or anything else on the farm.

There is no farm complete without an orchard and all kinds of fruit, from the strawberry up to the apple, twelve months in the year. There is nothing so conducive to the health and happiness of a well-regulated farm family as plenty of good, delicious fruit the year around.

Now the orchard as an annex to the farm: I would say all, outside of family use, for a commercial purpose, plant only about six leading winter varieties, for they can be picked and cared for when other work on the farm is not pressing. For such an orchard take the most suitable ground on the farm, and the larger the orchard the cheaper and better it can be managed, and with more profit, because there is quite a decided advantage in a good-sized orchard.

Campbell's Early Grape.

All the merits of Campbell's Early grape, and there is a long list of them, are dwelt upon in the reports from thirty-nine States and from the Canadas in a pamphlet recently issued by Mr. George S. Josselyn, of Fredonia, N. Y., the introducer of the grape. Among some six hundred letters in praise of Campbell's Early, from nurserymen, growers, editors, dealers and connoisseurs, the majority dwell enthusiastically upon the size, beauty and delicious quality of the bunches, how well adapted for shipping it is and comment upon the health and hardiness of the vine, its vigorous growth and great productiveness.

Those who have studied this new grape in all its aspects are disposed to agree with its introducer that its appearance marks an era in American grape culture to be compared only to the advent of the Delaware or the Concord grapes. It has been observed and tested very thoroughly since its growth from the seed, more than a dozen years ago, and during that time it has developed no fault, but instead has more than fulfilled the high hopes entertained concerning it.

Mr. George W. Campbell, the originator of this variety, aimed to improve upon the Concord and get a grape with all the latter's good qualities and none of its faults. The Campbell's Early is the outcome of careful experiments through successive crossings of the most promising varieties which he had produced or tested within the last thirty years.

In the new catalogue of George S. Josselyn, in addition to the Campbell's

THE DREADED CONSUMPTION CAN BE CURED

Medical Council and Laboratory Department

J. R. Slocum, Manufacturing Chemist.

No. 98 Pine Street,

New York, February 1, 1898.

To the Editor of Kansas Farmer:

My dear Sir:-

In reply to your late advice, am pleased to state that I have discovered a reliable and absolute cure for the dreaded consumption; also for throat, bronchial and lung troubles, coughs and catarrh, scrofula, rheumatism, general decline or weakness, loss of flesh and all wasting-away conditions.

By its timely use thousands of apparently hopeless cases have been permanently cured.

I know that there are many of your readers who would be benefited or cured, if they would allow me to advise them in the use of my new discoveries.

So proof-positive am I of their power to cure, based upon actual experience, and to better demonstrate their wonderful merits, I will send Three Free Bottles (the Slocum New System of Medicine) to any of your readers who will write me at my Laboratory, 98 Pine Street, New York, giving name and full address.

Always sincerely yours,

J. R. Slocum, M.D.

Editor's Note:—The above is published for our readers' benefit. Every sufferer should take advantage of the liberal offer, and we ask when writing Dr. Slocum, to kindly mention the Kansas Farmer. Editor.

We PAY CASH each WEEK the year round, if you sell Stark Trees. Outfit free. STARK NURSERY, LOUISIANA, MO., Stark, Mo., Rockport, Ill., Danville, N. Y.

SEEDS 6 Pink Flower Seeds, Giant Crispness, Mammoth Glorious, Fancy Paper, Gay Pink, Gorgeous Poppy and California Glory, all for 2c. 2 Pink Vegetable Seeds, 10c. Red V. Onion Seed, 50c. per pound. A. C. ANDERSON, LEIGH, NEB. PLANTS

Apple, Pear, Peach, Plum and Cherry Trees, Raspberries, Blackberries and Strawberries, Ornamental Trees and Shrubs. Write me for prices. C. L. YATES, Rochester, N. Y.

Mammoth White Artichoke Seed for Sale Cheapest and healthiest hog feed one can raise. Especially adapted to Kansas and Nebraska soil and climate. For further particulars and prices address Geo. A. Arnold, Haydon, Phelps Co., Neb.

1000 Box Elder & Ash \$1.25. Rus. Mulberry and Osage Hedge at about same price.

100 APPLE, 3 to 4 ft. 26 Cherry, 3 to 4 ft., \$10 Concord Grape, \$1.75 We pay the freight Complete price list free Jansen Nursery, Jansen, Neb.

WE CAN SAVE YOU MONEY On small fruit plants—100 varieties of Strawberry plants; 75,000 Kansas Raspberry, best raspberry ever introduced. Write for our new 1898 catalogue, now ready. Address, F. W. DIXON, Holton, Kas.

Plant! Plant! Plant! Strawberry Plants! I have them to sell. Best of the old with best new varieties. For my 1898 illustrated instructive catalogue, five 2-cent stamps. Price list free. B. F. SMITH, Box 6, Lawrence, Kas.

BEST CORN FOR KANSAS. One Kansas customer says: "Your C. Y. Dent corn is two weeks earlier than, and will make ten bushels per acre more than our native corn alongside." 26 best kinds. Catalogue, 2 samples and proof free. Address, J. C. SUFFERN, Seed Grower, Voorhies, Ill.

EVERGREEN NURSERY COMPANY, (Box 109) EVERGREEN, WISCONSIN. Growers of hardy, first-class evergreen and deciduous trees for shade, ornament or timber. Largest stock, lowest prices. Write for free catalogue, and let us know your wants.

WHO CARES FOR CIDER Germany's 1st bars We'll BUY A HYDRAULIC PRESS of J. E. D. and make them into Write for catalogue. It's FREE. J. E. DAVIS, 835 Old Colony Bldg., CHICAGO, ILL.

2,000,000 Strawberry Plants at \$1.50 per 1,000 and up; 12,000 Peach trees 1/4c. and up; Osage Orange Hedge \$1 per 1,000; Ash Seedlings 75c. per 1,000. A large supply of all kinds of exceedingly well-rooted, true to name and strictly first-class nursery stock. Write for price list to BOHEMIAN NURSERIES, Reynolds, Neb.

TESTED • SEED • CORN. Send five 1-cent stamps for three sample packages of the best varieties of corn grown, and book, "Hints on Corn Growing, and How the Up-to-date Farmer Grows the Big Crops." The Iowa Agricultural College grew 34 bushels per acre of this corn, which gave 62 pounds of shelled corn from 70 pounds of ears. PLEASANT VALLEY SEED CORN FARM, J. B. ARMSTRONG, Proprietor, SHENANDOAH, IOWA.

I am fishing for orders for EVERGREEN TREES, thrice transplanted, from one to five feet in height, price 10 to 30 cents each. No fall-dug, root-dried stock. Send for price list. A. W. THEMANSON, Successor to Hatch & Themanson, Wathens, Doniphan Co., Kansas.

Early, many valuable grapes are described, together with other small fruits, such as have made his nurseries at Fredonia famous throughout the country.

In the Dairy.

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

BACTERIA IN DAIRYING.

One of the papers read at the annual meeting, recently, of the Dairymen's Association of Eastern Ontario, held in Lindsay, was by Dr. W. T. Connel, professor of pathology and bacteriology at Queen's University, Kingston. The Doctor's subject is one of interest to all progressive creamerymen, it being "Relations of Bacteria and Dairying."

Dr. Connel, says the Post, of Lindsay, first took the subject of bacteria in general, considering their nature, their means of growth and their method of action. Under the latter heading comes the important subject of bacterial fermentation. Bacteria require, on a minute scale, for growth and multiplication practically the same conditions as are required by the higher plants. They thus require proper food, moisture and temperatures favorable for growth. The food varies greatly with the different species of bacteria, and the products vary with the species and the food. Moisture is essential to growth, as without it bacteria gradually die. Drying in this way checks markedly bacterial growth. Temperature is of great importance in bacterial growth. Most species flourish between 70° and 95°, yet others grow well down to 60°; as we go lower growth ceases, but death of the bacterial cell does not occur, the cell being paralyzed. If temperature be raised again most bacteria recover and begin growth again. Temperatures rising over 120° gradually begin to kill bacteria, and upon this depends the principle of Pasteurization, so much used now in butter-making. Temperatures of boiling water kill all non-spore-bearing forms at once. Bacteria grow best in the dark. Sunlight kills bacteria very quickly. In fact, sunlight is the most powerful natural germicide which we possess.

Now, with regard to the more direct application of bacteria to dairying: In milk and milk products we have classes of bacteria which find in them their natural habitat. Certain of these classes of bacteria bring about changes which are looked upon as natural, such as the souring and curdling of milk. Still other changes, which are undesirable, occasionally occur. These, too, are usually bacterial in origin and are in reality as natural as the former, as they mean that other species of bacteria have obtained entry and got the upper hand, out-multiplying the other forms which bring about the usual changes. Such trouble as gassy and bad-flavored milk, fowl and floating curd and off-flavored butter and cheese owe their origin to such invasion by undesirable forms of bacteria. The question then arises in these cases, where do these bacteria come from? How do they obtain entry? There are two great classes of infection, viz., infection from the factory and infection from the stable and cow. The factory conditions which are apt to lead to this infection are found in some cases in the drains and gutters, in others in the whey tank. The offensive odors, etc., which originate from these are bacterial in origin. Let these bacteria obtain entry to milk and they will tend to reproduce like conditions (modified only by different food) to that they produce in the drain or tank.

These bacteria in the foul factory surroundings get into milk, either by direct infection of dairy utensils, or by dust, or in the case of whey, by being taken home in milk cans which are not properly cleaned, so that there is seeding material present to infect the fresh milk placed in the can. Cases were cited in which infection was traced in these ways. The other great means of infection at the stables is by particles of excreta—road and stable dust (both loaded with excreta particles)—obtaining entry to milk. That excreta particles do get into milk can be seen by a careful examination of the milk sent to most factories. These excreta particles and road dust are simply loaded with bacteria, of which the colon and putrefaction groups are the chief forms. These particles get into milk by falling from the sides and udders of cows into the pail. If the bacteria so introduced get the upper hand, then we have various undesirable changes brought about. The most common of these are gassy and fowl milk, floating or fowl curd, and bad-flavored cheese. Time and again it has been demonstrated at

the dairy school that these "filth" bacteria are the active agents in these conditions, and further, that high temperatures in curing will force the growth of these bacteria over that of the other organisms present. To such an extent is this out-multiplication carried that at times does the cheese not only have bad flavor, but it fails to cure.

There is but one general principle of prevention, and that is to exclude the undesirable bacterial forms. They flourish under conditions of filth, or, rather, lack of cleanliness. To exclude them, then, cleanliness is essential—cleanliness in every particular—cleanliness of cow, milker, stables, cans, factory and curing-rooms. Cleanliness from the time the milk prepares to milk till the finished product is placed on the table for consumption.

Convention Notes.

There were many disappointed butter-makers when they received their scores.

South Dakota came prepared to secure the next convention. The delegates, numbering fifteen, had everybody wearing Sioux Falls badges for 1899.

The fine appearance of the butter packages attracted no little attention. One of the judges remarked that they were the best he had ever seen at a convention.

Two special cars were made up in Minnesota to carry those interested in the creamery business to Topeka. One started from St. Paul and one from Albert Lea. There were eighty-five in the delegation, all of whom were full of enthusiasm. The Minnesota Dairy school

quartet furnished music which was greatly enjoyed while in Topeka as well as en route.

Iowa had the largest representation and was awarded first prize for best appearance in parade. Heavy snow in Iowa prevented a good many from attending from that State.

The quality of the butter was not as good as that exhibited last year, only eighty-six exhibitors scoring 95 or over, and these will participate in the premium fund of \$3,000.

Nearly all the old favorites appear to have fallen out of the race at the national convention. Tom Milton and H. N. Miller were left in the background this time, while the honors were carried off by a man whose name is new among prize-winners. Such is history in many other walks of life.

There is a question whether the month of February is the best time in which to hold the convention in the Northern States. The matter has been discussed by a number of creamerymen and they have expressed their opinion that December would be the proper time to hold the convention.

The sooner you begin to fight the fire, the more easily it may be extinguished. The sooner you begin taking Ayer's Sarsaparilla for your blood disease, the easier will be the cure. In both cases, delay is dangerous, if not fatal. Be sure you get Ayer's and no other.

No-To-Bac for Fifty Cents.

Guaranteed tobacco habit cure, makes weak men strong, blood pure. 50c, \$1. All druggists.

"ALPHA-DE LAVAL" CREAM SEPARATORS.



De Laval Alpha "Baby" Cream Separators were first and have ever been kept best and cheapest. They are guaranteed superior to all imitations and infringements. Endorsed by all authorities. More than 125,000 in use. Sales ten to one of all others combined. All styles and sizes—\$50. to \$225.—Save \$5. to \$10. per cow per year over any setting system, and \$3. to \$5. per cow per year over any imitating separator. New and improved machines for 1898. Send for new Catalogue containing a fund of up-to-date dairy information.

THE DE LAVAL SEPARATOR CO. RANDOLPH & CANAL STS., CHICAGO. 74 CORTLANDT STREET, NEW YORK.

ARTICHOKEES

No. 1 for all Stock. Prevent Hoag Cholera. Before you buy send for ESSAY on kinds yielding (often 1000 b.p.a.) with prices and fr' rates to all points FREE. Sin. bu. St. J. P. VIGBERG, Box 55, ALTON, ILL.

The Comet SPRAYERS

\$2 to \$4 Double-Acting are the best. Sprays from bucket or barrel 50 feet. New scientific and mechanical principle. My free catalogue will make plain to you that I have the sprayer you want. Write to-day. H. B. RUSLER, Johnstown, Ohio.

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WE HAVE WORK FOR YOU!

An honest, legitimate plan for work in your home—can be done by either sex. We give full instructions free, keep you steadily employed, and pay you promptly every week.

Dear Reader, We have work for you to do at home, at which we will keep you steadily employed and for which we make no charge for instructions. Our work can be done in any part of the U. S. or Canada by any person who has two hands. Now read further and we will convince you. First let us explain that we are the Fairfield Floral Co., a strong reliable corporation, established at \$100,000 capital, under the laws of the State of Maine. Our business is making artificial flowers for wholesale and retail trade. Our flowers are such as women wear on hats or bonnets, and such as are used for general decorative purposes. This business has been marvelously increased for three reasons. 1st, the Dingley Tariff Bill protects American industry so that flowers are now made in the U. S. instead of being made in France and Germany. 2d, the great reign of general prosperity has boomed our trade enormously; and 3d, in several states laws have been enacted that women shall not be allowed to wear stuffed birds on their hats, thereby causing them to use artificial flowers. The work of making artificial flowers is such that we guarantee you can learn by our instructions in less than a week, many learn in a day. The work can be done in any room in your home. Our workers include men and women, often whole families. Artificial flowers are easily made, and a worker is indeed slothful who doesn't earn \$15.00 a week. Those who can only spend a few hours each evening can earn \$5.00 to \$8.00 a week. We give you a full \$25.00 Course of Instructions absolutely free, then when you have learned, we supply you with materials and pay liberally for all the flowers you send us. We don't want you to sell any goods, we do that ourselves through the wholesale stores and by advertisements, all



we want you to do is take our materials, make them into artificial flowers and send to us once a week by express, upon receipt of which we will promptly pay you by bank check, money order or cash in registered letter. The flowers that we want made are such as milliners and decorators use, representing Roses, Tulips, Lilacs, Pansies, Violets, Lilies, etc. All are easy to make, what we want is your time in producing them.

Read this from Annie B. Courtney, 113 Monroe Street, Lynn, Mass.: "FAIRFIELD FLORAL CO.—You are at perfect liberty to publish my name as I am only too glad to let people know how well you have done by me. I had been defrauded by bogus outfits and promised work that never came, and was sceptical when I wrote you, but I am happy to say that you are an honest and reliable company that furnishes the work and pays promptly."

A woman in Ottumwa, Ia., writes: "FAIRFIELD FLORAL CO.—Your money-order for \$17.00 just received for last week's work. This makes over \$200 you have paid me in 3 months and I am delighted. The work is easy and pleasant."

In a Southern City a clerk in a store makes flowers for us evenings. Read what he says in a recent letter: "Gentlemen:—When I first answered your advertisement I was afraid it was a humbug to sell me an outfit, but I have found you to be strictly honest with me. Your check for \$11.30 came to hand to-day for two week's work, which suits me exactly."

Another worker, Mrs. Harriet Lee, Box 1634, Phila., Pa., writes: "I see that Wannamaker's store has a big sale of artificial flowers, which are just like the kind I have been making for you, so I suppose you supply them. I am glad to see you so successful because you have fairly rescued me from poverty. Your weekly payment of \$9.00 to \$14.00 is a great help I assure you."

Harry Rice, Smithville, N. Y., writes: "I am amazed at my good luck. You have kept me supplied with work for which you have paid me promptly. I have saved over \$400 from the earnings which you paid me in the last twelve months."

Hundreds of Others Offer Similar Testimony.

Our Establishment is located in Fairfield, Maine, and not in a big city, because it enables us to operate at less expense. We send our work to you, no matter how far away you live. Flowers are light and an immense quantity can be sent for slight express charges. We easily save the difference over city prices. We sell all the flowers we can get made; our business is rapidly increasing; we want hundreds more workers. We shall give our regular \$25.00 instructions FREE if you start now. Anybody can learn in less than a week. We supply all materials to make flowers from. You must promise to send your finished work back to us and not to sell to storekeepers in your locality. Remember we are perfectly reliable in every respect, always doing exactly as we agree. We take the risks; we depend upon your honesty in doing the work for us after we give you the \$25.00 instructions absolutely FREE. Don't delay, if you want to start at once, write to us a letter plainly stating how much of your time you can devote to our business; whether you are Miss, Mr. or Mrs.; what is your nearest express office, and you must promise not to sell flowers to storekeepers after you have made them from instructions and materials that we furnish. Enclose 2 stamps in your letter and address plainly.

WE PAY YOU EVERY WEEK

FAIRFIELD FLORAL CO., 203 Floral Bldg., Fairfield, Maine.



The Veterinarian.

We cordially invite our readers to consult us whenever they desire any information in regard to sick or lame animals, and thus assist us in making this department one of the interesting features of the KANSAS FARMER.

INFECTIOUS ABORTION.—My cows are losing their calves two or three months before they are due to calve. They have the best of water and go and come as they please, with good pasture to run on.

Answer.—The trouble with your cows is infectious abortion, which disease was discussed somewhat at length in the Farmer of January 20.

LUMPY-JAW.—About six weeks after taking my cattle from pasture—they had been running to an oat straw stack with a good many light oats in it, and at the same time getting some sorghum—some of them began swelling on the throat and back part of jaw.

Answer.—This is actinomycosis or lumpy-jaw, pure and simple. Follow the directions given in a recent number of the Farmer. Lumpy-jaw is so called because it usually attacks the jaw, but it may attack any organ of the body if the germs producing it gain access and develop.

METRITIS OR INFLAMMATION OF THE WOMB.—My cow came fresh about five months ago. She was apparently all right until about the middle of December; since then a matter substance comes from her four or five times a day.

Answer.—Your cow has metritis or inflammation of the womb. Inject this organ daily with one gallon of a 1 per cent. solution of carbolic acid in tepid water.

MAMMARY ABSCESSSES.—I have a mare, 12 years old, that has lumps from the size of a pigeon's egg to the size of a goose egg. They come one at a time and are from three to five days in forming.

Answer.—Your mare has mammary abscesses, due to invasion by pus-producing micro-organisms. The abscesses are treated like all other abscesses, viz., by opening them with a sharp, clean knife at the lowest point possible, so as to provide for perfect drainage of the liquid contents, and the application, af-

terwards, of disinfectants (3 per cent. solutions of carbolic acid or of creolin). In treating mammary abscesses greater care, in every respect, is required on account of the importance of the organ affected, than in ordinary cases.

HAEMOGLOBINAEMIA OR AZOTURIA.—We have a mare, 6 years old, that has been down sick four weeks. She was in good flesh; was used to steady work. My partner took her to town and used her for a while and fed her some millet hay.

Answer.—You give a good description of the disease known as haemoglobinaemia or azoturia. This disease usually attacks horses in good flesh at the age of 4 to 8 years, and as a rule when horses used to exercise have been standing idle in the stable on high feed for several days and then suddenly put to hard work.

Good times have come to those whom Hood's Sarsaparilla has cured of scrofula, catarrh, dyspepsia, rheumatism, weak nerves or some other form of impure blood. Hood's Pills are the only pills to take with Hood's Sarsaparilla. Easy and yet efficient.

Send \$1.25 for Kansas Farmer one year and book, "Samantha at Saratoga."

Horse Owners! Use



COMBAULT'S Caustic Balsam. The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action.

EVERGREENS! 100 6 to 8 in., \$1.00; choice of 25 packages, 100 choice, transplanted, 2 feet, \$10.00 prepaid.

POTATOES \$1.50 a Bbl. Largest Seed POTATO growers in America. The "Rural New Yorker" gives Salzer's Early Wisconsin a yield of 120 bushels per acre.

SEEDS Cheapest ever grown! BEST in the world; none other as good; warranted to be by far the CHEAPEST. Prettiest book in all the world FREE.

FOR 14 CENTS We wish to gain 150,000 new customers, and hence offer 1 Pkg. 15 Day Radish, 10c

\$2.70 BOX OF KING'S SEEDS FREE

To any reliable persons who will sell for us a \$3 lot of our best Northern Grown Seeds to their neighbors. NO MONEY REQUIRED.

TREE PLANTING may be a way to wealth or a waste of money—depends on the kind of trees. All trees, plants, vines, from the Reid Nurseries are No. 1 stock, true to name.

HAMMOND'S FREE SEED DISTRIBUTION

Government Free Seeds are simply "not in it." To introduce the Best Michigan Northern Grown New Land Seed Potatoes, Farm, Garden and Flower Seeds everywhere, I will give away, ABSOLUTELY FREE, 500,000 packets of choicest Vegetable and Flower Seeds.

BURPEE'S FARM ANNUAL 1898 FOR The Leading American Seed Catalogue. The best seeds that grow, at lowest prices.

Fairbury Nurseries

Plant Our Cherry for a Sure Crop. Growers of Fruit, Forest, Shade and Ornamental Trees, Evergreens' Small Fruits and Vines. In fact, everything usually grown and sold by WESTERN NURSEYMEN.

POTATOES

AT WHOLESALE PRICES Direct from Raiser to Planter, in five Bushel or over lots. Ex. E. Acme and Ex. E. Six Weeks... 60c per bushel.

FERRY'S SEEDS In buying seeds "economy is extravagance," because the cost of cultivation wasted on inferior seeds always largely exceeds the original cost of the best and dearest seeds to be had.



WE no longer supply our seeds to dealers to sell again. At the same time, anyone who has bought our seeds of their local dealer during either 1896 or 1897 will be sent our Manual of "Everything for the Garden" for 1898 FREE provided they apply by letter FREE and give the name of the local merchant from whom they bought.

PETER HENDERSON & Co. 35 & 37 CORTLANDT ST. NEW YORK

MARKET REPORTS.

Kansas City Live Stock. KANSAS CITY, March 14.—Cattle—Receipts since Saturday, 3,925; calves, 171; shipped Saturday, 1,095 cattle, 60 calves. The market was steady to 10c lower. The following are representative sales:

Table with columns: No., Ave. Price, No., Ave. Price. Rows include various cattle and sheep prices.

Shipping and dressed beef steers. No. 1, 1.407 \$5.15; No. 2, 1.317 4.95; No. 3, 1.292 4.85; No. 4, 1.286 4.60.

Western Steers. 43 Tex., 1.222 \$4.47 1/2; 84, 1.187 4.42 1/2; 38, 873 4.35; 23, 1.035 4.10.

Native Heifers. 63, 743 4.30; 1, 750 4.25; 26, 969 4.00; 3, 648 3.60.

Native Cows. 25, 977 \$3.85; 1, 1,100 3.75; 4, 1,152 3.50; 2, 910 2.65.

Native Feeders. 20, 1,230 \$4.80; 17, 1,200 4.70; 48, 1,163 4.50; 59, 929 4.25.

Native Stockers. 27, 458 \$5.25; 18, 538 5.05; 19, 758 4.90; 77, 870 4.55.

Hogs—Receipts since Saturday, 4,613; shipped Saturday, none. The market was 5 to 10c lower, closing 10c lower. The following are representative sales:

Table with columns: No., Price, No., Price. Rows include various hog prices.

Sheep—Receipts since Saturday, 690; shipped Saturday, 5,536. The market was steady to 10c lower. The following are representative sales:

Table with columns: No., Price, No., Price. Rows include various sheep prices.

Horses and mules—The receipts were comparatively light. There were plenty of buyers, but the feeling was steady and the trading began actively. Southern buyers were not so plentiful, but several cars will go to Texas and into the Mississippi valley below Memphis, where they are beginning to plow for the next cotton crop.

St. Louis Live Stock. ST. LOUIS, March 14.—Cattle—Receipts, 2,000; market steady; native shipping steers, 4.50@5.50; dressed beef grades, 4.00@5.15; light steers, \$3.75@4.50; stockers and feeders, \$3.25@4.75; cows and heifers, \$2.00@4.50; Texas and Indian steers, \$3.50@4.50; cows and heifers, \$2.00@3.50.

Hogs—Receipts, 4,000; market steady; yorkers, \$3.75@3.85; packers, \$3.70@3.90; butchers, \$3.85@4.00.

Sheep—Receipts, 500; market steady; native muttons, \$4.00@4.50; lambs, \$5.00@5.50.

Chicago Live Stock. CHICAGO, March 14.—Cattle—Receipts, 10,000; best steady, others weak to 10c lower; beefs, \$3.80@5.60; cows and heifers, \$2.10@4.45; Texas steers, \$3.60@4.50; stockers and feeders, \$3.40@4.50.

Hogs—Receipts, 23,000; market slow, 5c lower; light, \$3.70@3.90; mixed, \$3.75@3.97 1/2; heavy, \$3.75@4.02 1/2; rough, \$3.75@3.80.

Sheep—Receipts, 3,000; market steady to a shade lower; native, \$3.20@4.65; western, \$3.50@4.55; lambs, \$4.00@5.50.

Chicago Grain and Provisions.

Table with columns: March 14, Opened, High'st, Low'st, Closing. Rows include Wheat, Corn, Oats, Pork, Lard, and Ribs.

Kansas City Grain. KANSAS CITY, March 14.—Wheat—Receipts here to-day were 112 cars; a week ago, 138 cars; a year ago, 46 cars. Sales by sample on track: Hard, No. 1, nominally 88 1/2@89; No. 2 hard, 86 1/2@87 1/2; No. 3 hard, 84 1/2@85 1/2; No. 4 hard, nominally 80@83; rejected hard, nominally 76@80c. Soft, No. 1 red, nominally 93@94; No. 2 red, 93c; No. 3 red, nominally 89@91; No. 4 red, 85c; rejected red, nominally 82@84c. Spring, No. 2, nominally 89@87; No. 3 spring, nominally 83@85; rejected, nominally 76@81c.

Corn—Receipts here to-day were 134 cars; a week ago, 246 cars; a year ago, 151 cars. Sales by sample on track: Mixed, No. 2, 26 1/2@26 3/4; No. 3 mixed, 25 1/2@26; No. 4 mixed, nominally 25c; no grade, nominally 26 1/2@27c. White, No. 2, 26 1/2@27 1/2; No. 3 white, 26 1/2; No. 4 white, 25 1/2.

Oats—Receipts here to-day were 17 cars; a week ago, 61 cars; a year ago, 20 cars. Sales by sample on track: Mixed, No. 2, 25 1/2@25 3/4; No. 3 mixed, 24 1/2@25; No. 4 mixed, nominally 24 1/2. White, No. 2, 26c; No. 3 white, 26 1/2@27 1/2; No. 4 white, 26c.

Rye—No. 2, nominally 45@46c; No. 3, nominally 44c. Hay—Receipts here to-day were 39 cars; a week ago, 58 cars; a year ago, 56 cars. Quotations are: Choice prairie, \$7.00@7.25; No. 1, \$6.50@7.00; No. 2, \$6.00@6.25; No. 3, \$5.25@5.75; choice timothy, \$3.50@4.00; No. 1, \$7.50@8.00; No. 2, \$7.00@7.50; choice clover, mixed, No. 1, \$6.50@7.00; No. 2, \$6.50@7.00; pure clover, \$6.50@7.00; packing, \$3.50@4.00.

Kansas City Produce. KANSAS CITY, March 14.—Butter—Extra fancy separator, 18 1/2c; firsts, 15c; dairy, 14 1/2c; country roll, 11 1/2c; extra fancy, 18c; store packed, 10 1/2c; fresh packing stock, 7@10c. Eggs—Strictly fresh, 8c per dozen. Poultry—Hens, 6c; broilers, 10c; roosters, 12 1/2@15c each; ducks, 7c; geese, 4 1/2c; hen turkeys, 9c; young toms, 8c; old toms, 7c. Pigeons, 75c per dozen.

Apples—Jonathan, \$5.00@6.00 in a small way; fancy Missouri Pippin, \$3.50; fancy Ben Davis, \$3.00@3.25; Winesaps, \$3.50@4.00; Willow Twigs, \$3.50@4.00; Huntsman's Favorite, \$3.50@4.00. In a small way varieties are selling at 40@65c per half bu. Vegetables—Cabbage, 75c@1.25 per 100-lbs. Beets, 25@40c per bu. Green and wax beans, \$2.50@3.00 per crate. Navy beans, hand picked, \$1.12 1/2@1.15 per bu. Onions, \$1.00@1.25. Potatoes—Northern stock, fancy, bulk, 65@75c; choice to fancy, 50@60c bulk; Colorado stock, 60@65c; home grown, 50@55c. Sweet potatoes, 60c. Seed potatoes, northern grown Early Rose, 65@70c; Early Ohio, 75@85c; Red River stock, 75@85c.

Special Want Column.

"Wanted," "For Sale," "For Exchange," and small or special advertisements for short time, will be inserted in this column, without display, for 10 cents per line, of seven words or less, per week. Initials or a number counted as one word. Cash with the order. It will pay. Try it! SPECIAL.—Until further notice, orders from our subscribers will be received at 1 cent a word or 7 cents a line, cash with order. Stamps taken.

FOR SALE—Famous Duroc-Jersey and Poland-China boars and sows. Barred Plymouth Rock eggs, 75 cents and \$1 per 15. Write. D. Trott, Abilene, Kas.

BLACK LANGSHAN EGGS—From hens scoring from 90 to 95, only \$1 per thirteen. A. S. Parson, Garden City, Kas.

FOR SALE—A fine Jersey bull, 2 years old. J. F. Wilson, Elmton, Shawnee Co., Kas.

WANTED—Coach stallion for this season. Address E. P. Bogle, Beulah, Kas.

MAMMOTH WHITE ARTICHOKES—For sale at 60 cents per bushel f. o. b., by A. G. Landis, Lawrence, Kas.

BLACK LANGSHANS EXCLUSIVELY.—Pen No. 1 (scored fowls), \$1 per fifteen eggs. Pen No. 2 will supply eggs in lots of 100 and 200 for incubation at reduced rates. Mrs. T. E. Whitlow, Morantown, Kas.

RASPBERRY PLANTS FOR SALE—Kansas, Palm-Root and Gregg, at \$7 per 1,000. Shipped promptly by freight or express. Order at once. L. C. Clark, Hiawatha, Brown Co., Kas.

ARTICHOKES AND BARLEY—Twin essentials to a profitable hog-growing. Improved Mammoth White French Artichokes, the best hog food known. For seed, two-bushel sack, \$1. While stock lasts, 2 1/2-bushel sack Mansbury Barley, \$1 f. o. b. J. W. Gehr, Crab Orchard, Neb.

WANTED—A registered Hereford bull. M. Mellinger, St. Francis, Kas.

I WANT TO SELL four black Percheron stallions, 1 from 2 to 4 years old, well bred and good ones. F. H. Schrepel, Ellinwood, Kas.

FOR SALE—A few October pigs of 1897 farrow, and some bred sows to Kansas Boy and Success I know. Also B. P. Rock eggs, \$1 per setting. H. Davison & Son, Waverly, Kas.

FOR SALE—Imported Percheron stallion, coal black, 10 years old, weight 1,800 pounds. Can show colts from 5 years old down. Price \$200. W. C. Brown, Cedar Junction, Kas.

BAILEY'S Royal Blue Barred Plymouth Rocks won first premium Kansas State fair the last three years. Better than ever. 15 eggs, \$2. Ward A. Bailey, Wichita, Kas.

WANTED—To correspond with some breeder of Aberdeen-Angus cattle in southeastern Kansas. R. F. Bowden, 21 E. Long St., Columbus, Ohio.

FOR SALE—Jersey bulls, four months to a year old. I will also sell my breeding bull, Oakland Disk. He is a fine animal. They are all solid color and come from the best of registered Jersey stock. For further information write to Chas. H. Johnson, Minneapolis, Kas. Lindsay Creek Jersey Farm.

FARM FOR SALE.—\$500 buys an eighty-acre farm in Edwards county, two miles north of Kinsley, Kas. A living stream of water runs over the farm. The buyer will get a clear deed of it and all tax receipts paid in full. A. L. Brundage, 30 West Twenty-fourth St., Chicago, Ill.

SOMETHING NEW—Silver Gray Dorking chickens. Next the oldest of the pure-breds; scarce, yet very desirable. Eggs, \$1.50 per 15. Mrs. D. P. Cornish, Osborn, DeKalb Co., Mo.

EGGS—From three yards of Barred Plymouth Rocks, mated for individual merit and our profit, \$1 per setting. James Nourse, Ellsworth, Kas.

LIGHT BRAHMA EGGS—\$1 per 15; \$2 for 45; \$3 per 100. A few cockerels for \$1 each. Mrs. N. Van Buskirk, Blue Mound, Kas.

CHARON SPRINGS, KAS., January 28, 1898.—Does the Chicago Horse-Wrecking Company, of West 35th and Iron St., Chicago, Ill., send goods according to their catalogue and samples? Is not their roofing and belting 50 per cent. below their catalogue statements and samples? Lewis Williams.

POLAND-CHINAS FOR SALE—For next thirty days at a bargain. Choice fall pigs and bred sows. M. C. Vansell, Muscotah, Atchison Co., Kas.

FOR SALE—Light Brahma cockerels, heavy weight and first-class. Prices, \$1 and upward. Address John Kemp, North Topeka, Kas.

ALFALFA SEED.—Pure cleaned 1897 seed, \$3 per bushel. Seedless sacks, 14 cents. F. Finnup, Garden City, Kas.

BELMONT STOCK AND POULTRY FARM—Cedar Point, Chase Co., Kas. Send for descriptive catalogue. Geo. Topping, Proprietor.

BARRED AND WHITE PLYMOUTH ROCKS—White and Silver Wyandottes, White Holland Turkeys, White Pekin Ducks and White Guinea. Stock and Eggs for sale. Porter Moore, breeder and Judge, Parsons, Kas.

FOR SALE—Thirteen fine Poland-China boars. Call on or address H. W. McAfee, Topeka, Kas. (Farm three miles west of Kansas Avenue.)

VINELESS SWEET POTATOES—For sale, very productive. T. J. Skinner, Columbus, Kas.

SWEET POTATOES—Sent out to be sprouted on \$ shares. No experience required. Directions for sprouting free. T. J. Skinner, Columbus, Kas. Mention this paper when writing.

MY NEW ELEGANT POULTRY CATALOGUE—Contains colored plates, illustrations and much valuable information. Don't miss it. Will be sent for only 6 cents in stamps. Address F. B. Stork, Freeport, Ill.

PIG FORCEPS and watering fountains save farmers many dollars. Write for advertising prices. J. N. Reimers & Co., Davenport, Iowa.

75 BERKSHIRES—Boars and gilts, weighing 125 to 250 pounds, sired by imported Lord Comely \$4744 and Golden King V. 48936. These are pigs of choicest breeding and extra individuality. Prices \$12.50 and \$15 for next ten days. Satisfaction guaranteed. Wm. B. Sutton & Son, Russell, Kas.

FOR SALE—Imported English Shire stallion, weighs 1,500, jet black, gentle disposition. Will trade for stock. J. W. Shackelton, Walnut, Kas.

FOR POLAND-CHINAS—Of all ages and sexes of Cornish, Teacup, Courtney, Wilkes, Medium, and Ideal U. S. strains. Sows and gilts mated to Black Wilkes 2d 1473 C, Model King 1557 C, by King's Model 38351 A, by Kiever's Model 29719, (Guy U. S. 15559 C, by Guy Darkness 12922 A), Hadley's Model Sanders 15761 C, (by Hadley's Model 36913 A.), at special prices for thirty days. Inquire of Henry Comstock & Sons, Cheney, Kas.

SWEET POTATOES—Sent out to be sprouted on \$ shares. No experience required. Directions for sprouting free. T. J. Skinner, Columbus, Kas. Mention this paper when writing.

WE MAKE A GOOD FARMER'S SPRING WAGON, two lazy-backs and let-down end-gate, for \$55. Warranted. We will ship on approval to responsible parties. Kinley & Lannan, 424-426 Jackson street, Topeka, Kas.

PURE MAMMOTH BRONZE TURKEYS—Gobblers, \$2; hens, \$1.50. Emma Anno, Colony, Kas.

BLACK AND HONEY LOCUST—15 to 20 inches, first-class, at \$3 per 1,000 or 35 cents per 100. No extra charge for packing. J. E. Mellecker, Spearville, Kas.

500 BUSHELS SEED SWEET POTATOES—For sale. Nine best kinds. Rates low. Call on or write to N. H. Pixley, Wamego, Kas.

ALFALFA SEED—I will furnish nice, clean alfalfa seed at 4 1/2 cents per pound. Sacks 15 cents each. H. L. Zimmerman, Garden City, Kas.

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EGGS—\$1 per 15. Barred and White Plymouth Rocks, Buff Cochins, Langshans, Brown Leghorns, Cockerels and pullets, \$1 each. Mrs. W. H. Williams, Toronto, Kas.

FOR SALE—Imp. Percheron stallion, Social No. 9311 (18468), coal black, 10 years old, weighs 1,900 pounds. Can show seventy-five of his colts. Sure foal-getter. Six of his colts took six first premiums at last Kansas State fair. Price \$400. J. C. Robison, Towanda, Butler county, Kansas.

SHORT-HORNS FOR SALE.—A choice lot of young bulls; in good condition; good individuals and bred right. A few choice heifers, coming 2. H. R. Little, Hope, Kas.

PLANTS—Strawberry, raspberry, rhubarb, grape, gooseberry, currant. J. C. Banta, Lawrence, Kas.

SCOTCH COLLIE PUPS—At living prices. Highly bred. A. P. Chacey, Elmont, Kas.

WANTED—Some one to furnish 100 bushels spring wheat for seed on shares. Can buy seed here: Harry Gilbert, Macon, Kas.

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MEN'S SUSPENDERS—Fine web, 36-inch, wire buckle, drawer support, per pair 21 cents, charges paid. Consumers' Supply Co., Kansas City, Mo.

SEED CORN.—If you want the best yellow dent, quality unsurpassed, buy direct from grower. Jno. D. Ziller, Hiawatha, Kas.

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ORCHARD PARK POULTRY YARDS.—Barred Plymouth Rock cockerels and pullets for sale; finest strain; bred from prize-winners. Price, \$1 to \$5 each for a limited number. Eggs in season, \$1 per 15. Orders booked now. Mrs. J. R. Whitney, 1411 Massachusetts St., Lawrence, Kas.

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THE STRAY LIST.

FOR WEEK ENDING MARCH 3, 1898. Pratt County—John Mawdsley, Clerk. HEIFER—Taken up by L. D. Hess, in Logan tp., October 7, 1897, one large white yearling heifer, no marks or brands; valued at \$15. Miami County—L. Flanagan, Clerk. COW—Taken up by G. K. Turner, in Marysville tp. (P. O. Spring Hill), one white and roan cow, 2 years old, small feet, both ears under-sloped, over-bit in left ear; valued at \$15. CALF—By same, one last spring's bull calf, small, dark color; valued at \$10.

FOR WEEK ENDING MARCH 17, 1898. Crawford County—F. Cunningham, Clerk. COLT—Taken up by R. D. Werley, in Crawford tp., one black horse colt, 56 inches high, two white hind feet, white star in forehead.

WOVEN WITH THE FARMER'S FENCE-TOOLS \$3 DEL. FREE. Send for an A. B. C. of Fence Making, describing the F. F. tools, which weave the best fence on earth at the very lowest cost, and also repair old fences. J. P. Vissering, Bx. 155, Alton, Ill.

SILOS HOW TO BUILD ask WILLIAMS MFG. CO., KALAMAZOO, MICH.

Kansas City Live Stock Commission Co. Rooms 277 A, B, C, D Stock Exchange, KANSAS CITY STOCK YARDS. L. A. ALLEN, CHAS. W. CAMPBELL, PEYTON MONTGOMERY, Cattle Salesmen. W. T. MONTGOMERY, Sheep Salesman. J. T. MEGREY, Hog Salesman. Correspondence and consignments solicited. Good sales, prompt returns. Ample capital. Twenty years actual experience. Market reports free on application.

Irrigated Fruits in a Rainy Country.

Editor Kansas Farmer:—At a recent meeting of the Nova Scotia Fruit Growers' Association an interesting paper was read on the subject of irrigation in Nova Scotia. It would hardly be supposed that, with the comparatively moist climate which we have here, irrigation would be at all necessary or even beneficial. Yet the results of two years' experience, as given by Mr. Henry Shaw, of Waterville, would seem to indicate that on certain soils, at least, it will pay and pay well. Mr. Shaw uses a windmill with a twelve-foot wheel and a pump with a capacity of 150 barrels per hour. The water is pumped to the highest part of an eighty-acre piece of orchard set in apples and plums, and from here is carried in ditches to the different parts of the orchard. A small part of the land, however, could not be reached with the water. In 1896, which it will be remembered was a year of large crops of fruit generally, Mr. Shaw began irrigating and had a full crop of both apples and plums, as did also his neighbors who did not irrigate. The trees in the dry parts of the orchard apparently bore as well as those irrigated. Mr. Shaw, however, was not yet convinced that further trial might not prove the irrigation to have been profitable, and the following season again irrigated his orchard. This year the beneficial effects of the water were quite evident. Trees which the previous year had received a full supply of water bore a full crop of fruit; those which had received only a small amount of water bore a half crop, while trees in parts of the orchard not reached by the water bore practically no fruit. The prospect for the coming season shows a corresponding difference. The trees on the dry parts of the orchard, after a year's rest, promise a fair crop of fruit, but those which received a moderate supply of water promise a better crop, while those which have been well watered give indications of a larger crop than any of the others, and this, too, after bearing two full crops in succession.

One of the most important problems which now confront the fruit-grower is how to make his fruit plantations bear every year, for the "off years" are the years of good prices, and if he can do anything to make the crops more regular it will be a long step toward making his orchard more profitable. Certainly, Mr. Shaw's experience would indicate most strongly that an abundant water supply is an important factor in bringing about this much-desired result.

If the effect of irrigation has been so striking here in Nova Scotia, where the rainfall is usually considered amply sufficient to mature a crop of fruit, what might we not expect from similar experiments in Kansas, where one of the chief difficulties with which the fruit-grower has to contend is lack of moisture? I shall look for most interesting results from the experience of Hon. Geo. M. Munger and others who are testing this matter.

F. C. SEARS.
Nova Scotia School of Agriculture,
Wolfville, N. S.

Insect Communities.

That bees have a sense of property rights is shown through their actions in defending their stores from plundering swarms. Bee-robbing usually takes place when there is little nectar to be taken from flowers, and probably hunger incites to ill-gotten gain. It is interesting to note that strong colonies are seldom attacked, the weaker ones being the victims. The fury with which the owners of the honey will fight for its retention is sufficient, when once seen, to convince any doubter that bees, at least, have a sense of property. When the robbed swarm is overcome and the queen killed, the bees will desert and join the robbers, and help carry their own stores to the hive of the marauders. This shows that it is a matter of property and not individual animosity which inspires them, otherwise they would fight to the death. Bee-hunters say that when taking up a bee-tree, or a bee-hive, for that matter, the bees will fight furiously until their comb is actually broken; then they give up, and, defeated and despairing, cluster on the broken comb, making no further effort to save themselves. There is something touching in the story of these brave little defenders of stores and home and their utter discouragement when they see their treasure broken and ruined. "Taking up" bee-trees and bee-hives is a barbarous performance and does not redound to the honor of man, and the thought of it quite reconciles one to all the bee stings inflicted upon the genus homo since time began.

Another sign of the sense of ownership of stored provisions is the care given it by the harvester ants of Texas and India. These wise harvesters store

their seeds in underground granaries for winter use. After the rains come the grain, if let alone, would naturally germinate or become moldy. The ants comprehend this, and when good weather comes again they bring the grain up and dry it in the hot sun and then return it to the granaries.

The fact that ants used aphids for milch cows was discovered nearly a century ago, but the special care given to their live stock has been a subject of more recent study. Almost any one may have observed ants running up and down the trunks of trees and shrubs. It is no joy of climbing nor desire for a wide outlook that leads the ants to ascend trees, but because the leaves of the trees afford pasturage for their small cattle, the aphids. These little creatures exude voluntarily drops of a sweet liquid known as honey dew. The process of milking is this: The ant comes up to the aphid and pats it on the back with her antennae, at which the flattered and pleased aphid gives forth the honey-dew, which the ant eats with every sign of enjoyment. It might seem at first glance that the benefits of this relationship accrue only to the ants. However, this is not the case. The ants are fierce defenders of their flocks and make it very uncomfortable for the many insect enemies of the aphids. Some species of ants build sheds over the aphids upon the trees, and other species remove them to the safety of their own nests, but the special claim of the ants as aphid protectors lies in the care of the aphid eggs, which are shown as much attention as their own.

This habit of ants has proven of economic importance to our farmers of the middle West. One of the serious pests in that region is the corn root plant louse. Professor Forbes has demonstrated that these corn root lice are absolutely dependent on the ants which live in the earth of the corn fields. Ants fetch the last brood of aphids in the fall into their nests, and there the oviparous generation is developed and the eggs are laid. The ants give these eggs great care, taking them into the deeper galleries during cold weather and fetching them to the surface in warm days. When the young aphids hatch the ants take them and place them upon the corn roots and thus gain a nucleus for their summer herds. This shows a process of reasoning on the part of the ants, since they do not feed upon corn roots themselves and yet seem to know that the aphids require this food.

The care of the young is always considered one of the most important of the industries of the commune. Among the bees and ants the care of the young is relegated to the younger sisters, although the elders do not scorn these duties if they find their performance necessary. However, the first work of the ant or bee just emerged from the pupa state is that of nurse, and a most tender and devoted one she is. Especially are the ant nurses solicitous about the health and comfort of their small charges. In some species the young ant grubs are assorted into sizes, those of the same age being kept in the same apartment, suggesting a graded school. When the ant babies are hungry they stretch up like young birds, and their nurses regurgitate partly digested food into the gaping, hungry mouths. The nurses keep them very clean by licking them with their long tongues, and, what is more interesting, are very careful to keep them in the right temperature. When the sun shines hot on the nest in the morning the nurses carry their charges to the lower compartments, but toward night they carry them to the upper nurseries. The nurses show great interest in the young when they emerge from the pupa state, helping them to straighten out their newly-freed antennae and legs, then taking a hand at their education by leading them around the city and showing them the ways of the formic world.

All the members of the insect commune are shining lights in their devotion to the young. The moment an ant nest is attacked those citizens who are not detailed to fight the intruders will snatch up their babies and flee with them to places of safety, or when hard pressed will fight to the death for their protection. This is worthy of note, since it is not the mother instinct for saving her young, but is a race instinct instead. It may be here stated that the object popularly known as ants' eggs are not the eggs, but the young grub ants; the eggs are too small to be seen well with the naked eye.—Insect Communities, by Anna Botsford Comstock, in the *Chautauquan* for February.

Women are more cunning than men in concealing gray hair and baldness, and are wiser in selecting antidotes. Hall's Hair Renewer is a favorite with them.

A Mother's Misery.

The story of this woman is the every day history of thousands who are suffering as she did; who can be cured as she was; who will thank her for showing them the way to good health.

The most remarkable thing about Mrs. Nellie J. Lord, of Stafford Corner, N. H., is that she is alive to-day.

No one, perhaps, is more surprised at this than Mrs. Lord herself. She looks back at the day when she stood on the verge of death and shudders. She looks ahead at a life of happiness with her children, her husband and her home with a joy that only a mother can realize.

Mrs. Lord is the mother of three children, two of whom are twins; until the twins came nothing marred the joy of her life.

Then she was attacked with heart failure and for a year was unable to attend to the ordinary duties of the home. In describing her own experience Mrs. Lord says:

"I had heart failure so bad I was often thought to be dead.

"With this I had neuralgia of the stomach so bad it was necessary to give me morphine to deaden the pain.

"Sometimes the doctors gave me temporary relief, but in the end it seemed as if my suffering was multiplied.

"Medicine did me no good and was but an aggravation.

"I was so thin my nearest friends failed to recognize me.

"No one thought I would live.

"I was in despair and thought that my

days were numbered. My mother brought me Dr. Williams' Pink Pills for Pale People and the first box made me feel better. I continued the treatment and to-day I am well.

"When I commenced to take the pills I weighed 120 pounds; now I weigh 146 and feel that my recovery is permanent. I owe my happiness and my health to Dr. Williams' Pink Pills. My husband was benefited by them. I have recommended them to many of my friends and will be glad if any word of mine will direct others to the road of good health."

Dr. Williams' Pink Pills for Pale People have cured many cases of almost similar nature.

The vital elements in Mrs. Lord's blood were deficient. The haemoglobin was exhausted. She was unfit for the strain she was compelled to undergo. Her nervous system was shattered and her vitality dropped below the danger point.

A collapse was inevitable. Dr. Williams' Pink Pills cured her by supplying the lacking constituents of health by filling the veins with blood rich in the requisite element of life. The heart resumed its normal action; the nervous system was restored to a state of harmony, and the neuralgic affection disappeared.

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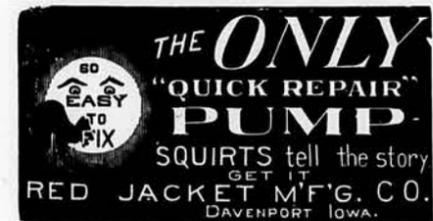
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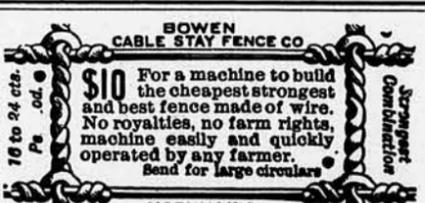
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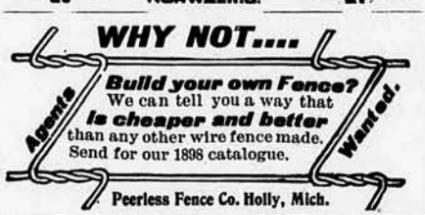
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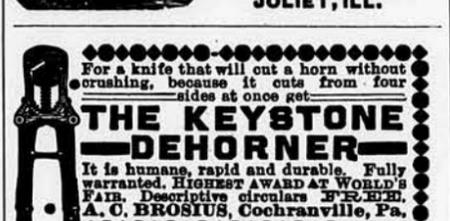
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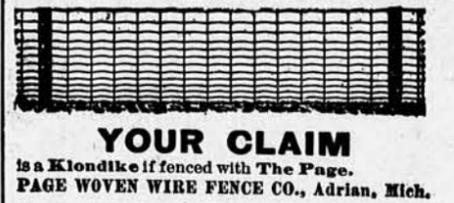
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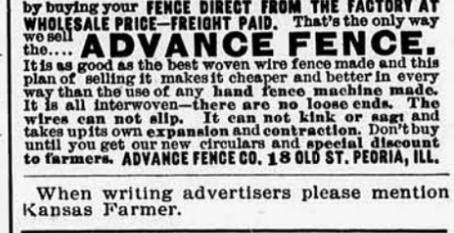
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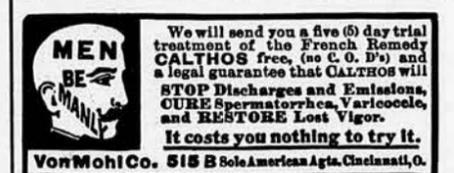
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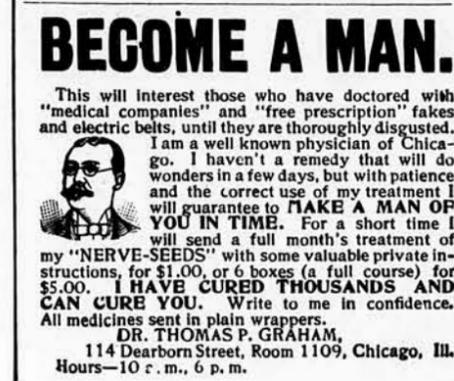
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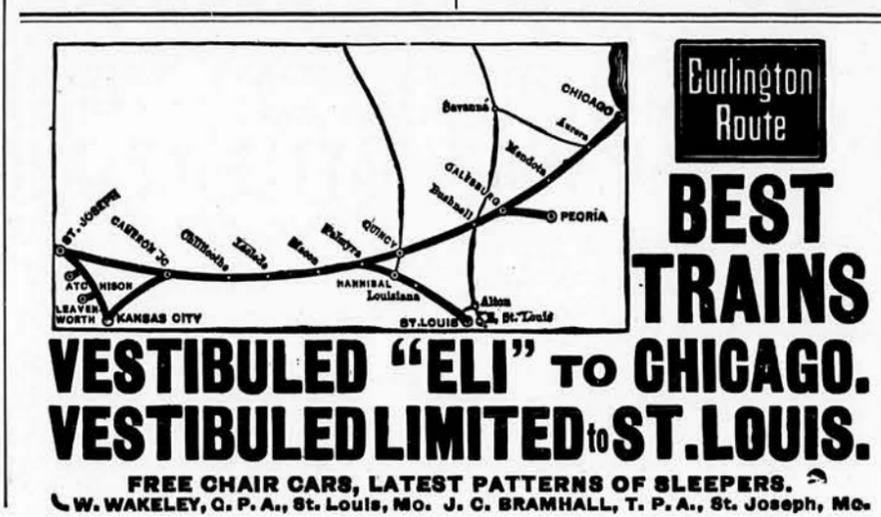
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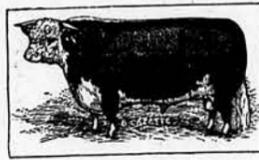
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A SPECIAL TRAIN will leave Union Depot at Kansas City via Kansas City, Fort Scott & Memphis railroad, at 8 a. m. and arrive at Belton at 9:20 a. m. RETURNING TRAIN will leave Belton at 7 p. m. and reach Kansas City at 8:20 p. m. Usual sales-day lunch at 11:30 a. m. Sale will open at 12:30 sharp. For further information write for a free copy of sale catalogue. COL. F. M. WOODS, COL. J. W. SPARKS, Auctioneers. SCOTT & MARCH, Belton, Cass Co., Mo.