

KANSAS FARMER

ESTABLISHED IN 1863.
VOL. XXXVII. NO. 41.

TOPEKA, KANSAS, THURSDAY, OCTOBER 12, 1899.

SIXTEEN TO TWENTY
PAGES—\$1.00 A YEAR.

BREEDERS' DIRECTORY.

Cards will be inserted in the Breeters' Directory as follows: Four-line card one year, \$16.00; each additional line \$4.00. A copy of the paper will be sent to the advertiser during the continuance of the card.

SWINE.

N. B. SAWYER, Cherryvale, Kansas, breeder of N. Duroc-Jersey swine. Write me.

J. L. BIGELOW, Coffeyville, Kansas, breeder of J. Poland-China swine. Stock as represented.

TAMWORTH HOGS. (Bacon type.) C. F. ARMSTRONG, Clyde, Kans. . .

D. TROTT, ABILENE, KAS., famous Duroc-Jerseys and Poland-Chinas.

M. H. ALBERTY, CHEROKEE, KANS., DUROC-Jerseys and Pig Teeth Clippers.

DUROC-JERSEY HOGS—Registered Stock. Send stamp for 6-page catalogue, illustrated. Prices and history.

J. M. STONEBRAKER, Panola, Ill.

KANSAS HERD OF POLAND-CHINAS—Will sell U. S. Tecumseh 20368, he by old Black U. S. 4209, and a few of his gilts bred to Black Chieftain. Inspection preferred to description. Also two nice fall boars. Address F. P. MAGUIRE, Haven, Kans.

J. U. HOWE, Wichita, Kans., Maple Avenue Herd of J. pure-bred Duroc-Jersey hogs. Choice stock for sale. Reasonable prices. Personal inspection and correspondence invited.

BASSETT BROS., Burlingame, Kans., Breeders of Pure-Bred Poland-China Swine and Fancy Poultry

Pigs sired by Chief Tecumseh, Hadley I Know, and Lone Tree Chief. Fowls and eggs from famous Black Langshans. Farm five miles north and two west of city. Correspondence solicited.

Wamego Herd Imp. Chester Whites and Poland-Chinas.

Special Prices on Chester Whites—close cut herd by end of the year. Correspondence or inspection invited. Mention Kansas Farmer.

C. J. HUGGINS, Proprietor, Wamego, Kans.

H. W. CHENEY, North Topeka, Ks.

POLAND-CHINAS

of the fashionable prize-winning Chief I Know strain. Cheney's Chief I Know at head of herd. Pigs for sale. Prices low.

Mains' Herd of Poland-Chinas.

Chief Tecumseh 2d, Klever's Model, U. S. Model, Moorish Maid and Chief I Know strains. A selected lot of bred sows and young stock for sale at very reasonable prices. Over thirty years in the business. Stock equal to any. Satisfaction given.

JAMES MAINS, Oskaloosa, Jefferson Co., Kas.

VERDIGRIS VALLEY HERD—Large-Boned Poland-Chinas.

200 head. Twenty good spring boars, good bone, large and growthy. Also twenty "Fall of '98" boars; a few very fancy. Thirty yearling sows and spring gilts, bred or unbred; good ones. We can furnish males and females, not related, of any of the fashionable and prize-winning strains.

WAIT & EAST, Altoona, Wilson Co., Kans.

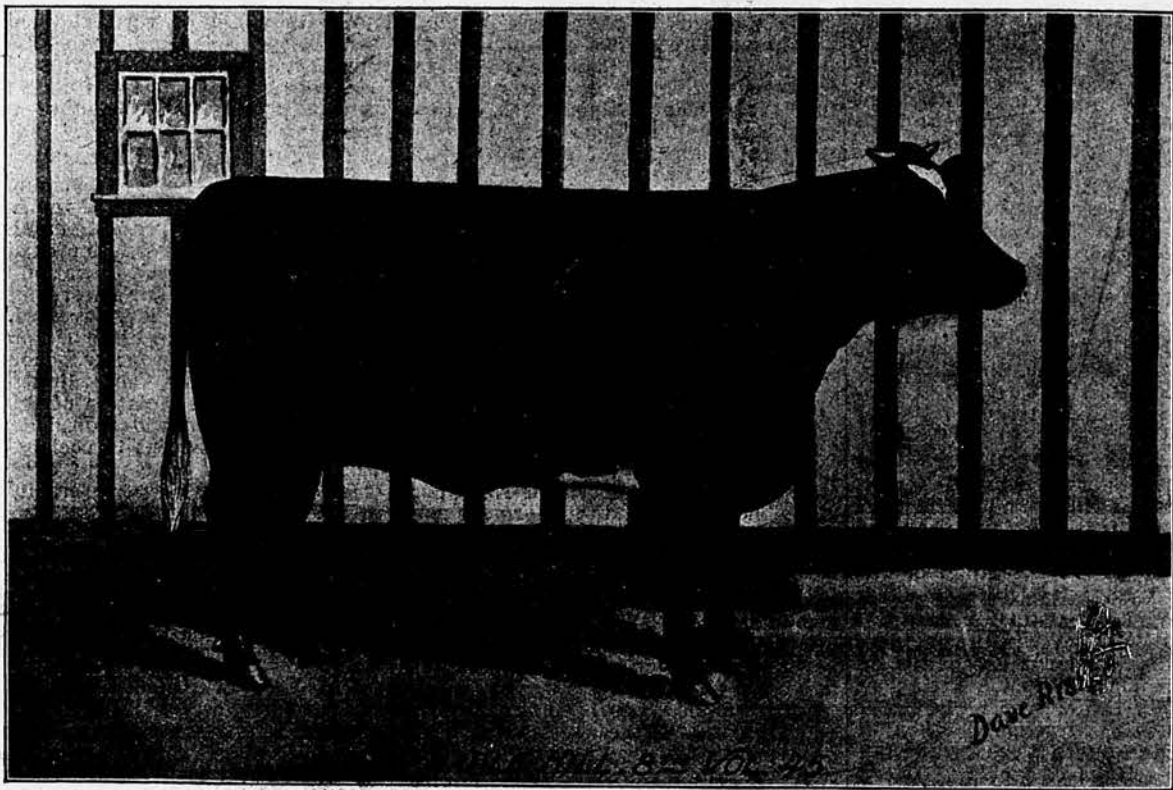
T. A. HUBBARD, Rome, Kansas, Breeder of Poland-Chinas and Large English Berkshires. Two hundred head. All ages. 25 boars and 45 sows ready for buyers.

THE WILKES QUALITY HERD OF POLAND-CHINA SWINE.

Thos. Symms, Prop., Hutchinson, Kas.

Herd boars, Darkness Quality and Beno Wilkes. For ready sale 45 very choice pigs out of Bessie Wilkes, Beauty Sedom, Chief I Know, Standard Wilkes, Ideal Black U. S. and Chief Tecumseh 2d sows. Farm one mile west of Hutchinson, near Star Salt works

PUBLIC SALE—One hundred head of pure-bred Poland-China hogs of both sexes. Sale to be held at Olathe, Kans., on November 13, 1899. Sows sired by the best son of Hadley Jr. 13314 and three of the best sons of old Chief Tecumseh 2d 9115. Like all former sales these hogs will go at the bidders' prices if only one bid is made. I have the best bred son of Chief Tecumseh 2d living and he weighs over 900 pounds and is a great breeder. Come and see him and his get. Many line-bred to this great boar. Write immediately for catalogue, description, and terms. W. P. Goode, R. F. D. Route No. 1, Lenexa, Kans.



OWNED BY H. C. DUNCAN, OSBORN, MO.

Violet of Maple Hill 8th will be sold at the combination sale at Kansas City, Mo., Oct. 17, 18, 19, 20.

SWINE.

POLAND-CHINA SWINE.

Chief I Know and Hadley Jr. strains.

J. H. TAYLOR, Rhinehart, Kans.

CRESCENT HERD POLAND-CHINAS.

Ten bred sows for sale. Ninety pigs for fall trade. Come or write.

SAM W. HILL, Hutchinson, Kansas.



D. L. BUTTON, North Topeka, Kas., breeder of Improved Chester Whites.

Stock for sale. Farm 2 miles northwest of Reform School



RIVERDALE HERD of Chester White swine and Light Brahma poultry. J. T. LAWTON, BURTON, KAS., proprietor. All stock guaranteed. I can also ship from Topeka, my former place.



RIDGEVIEW FARM HERD OF BERKSHIRES

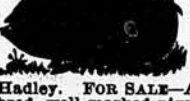
Buy your Berkshires from our prize-winning herd and get your money's worth. First-class stock of either sex at reasonable prices. Breeding and prices furnished upon application.

MANWARING BROS., Lawrence, Kans.

R. S. COOK, Wichita, Kans., BREEDER OF.....

POLAND-CHINA SWINE.

The Prize-Winning Herd of the Great West. Seven prizes at the World's Fair; eleven firsts at the Kansas District Fair, 1893; twelve firsts at Kansas State Fair, 1894; ten firsts and seven seconds at Kansas State Fair, 1895. The home of the greatest breeding and prize-winning boars in the West, such as Banner Boy 28441, Black Joe 28603, World Beater and King Hadley. FOR SALE—An extra choice lot of richly bred, well-marked pigs by these noted sires and out of thirty-five extra large, richly-bred sows. Inspection or correspondence invited.



SWINE.

V. B. HOWEY, TOPEKA, KAS.

Breeder and shipper of thoroughbred Poland-China and Large English Berkshire swine and Silver-Laced Wyandotte chickens.

SPRING GROVE POLAND-CHINAS.

Growthy, strong-boned pigs. Tecumseh, U. S. Model, and Darkness families. Herd boars, Moorish King 25513 O., Tecumseh I Am 21595, and Darkness U. S., by Darkness Model, a grandson of Klever's Model. Write or call.

A. O. NORTHRUP, Boyle, Jefferson Co., Kans.

SUNNYSIDE HERD POLAND-CHINAS

Corwin, Black Bess, Black U. S., Sanders, and Short-stop Strains.

I have for the season's trade, about fifty head of pigs, sired by Sanders of Sunnyside, and Corwin Black Stop, at prices from \$10 and upwards, according to quality. Correspondence solicited.

M. L. SOMERS, Altoona, Kans.

Dietrich & Spaulding, Franklin Co. Richmond, Kas.

We have some extra good Poland-China boars at prices to sell you. Two very fine yearlings, good enough to head any herd; breeding unsurpassed; good head and ears; good bone and feet; good back and heart girth. Some extra good spring boars. Write for prices if you need a boar. We guarantee them to be as represented.

PRIMROSE HERD... OHIO POLAND-CHINAS

ONE PRICE. BLACK U. S.

FOR SALE—My herd boar, Sixteen to One 41627 O., sired by Welch's Black U. S. 33521 O., dam Nina One Price 81852 O., she by old One Price 18639 O. He is a good individual and sure breeder; no better bred boar anywhere. Two boars of spring farrow, sired by Priceless 30169 O. by One Price and out of Nellie One Price 81796 O. by One Price. Write for prices and description.

C. P. SHELTON, Osawatomie, Kans.

J. N. HARSHBERGER, LIVE STOCK AUCTIONEER, LAWRENCE, KAS

Years of experience. Sales made anywhere in the United States. Terms the lowest. Write before claiming date.

POULTRY.

CHOICE BREEDING COCKS AND COCKERELS.

Fifteen White P. Rocks, 15 Silver Wyandottes, 20 Brown Leghorns, 10 Light Brahmas, 10 S. S. Hamburgs, 10 Black Langshans, 5 Black Javas, 12 Pekin drakes. All strictly first-class. Some are scored by Hewes and others.

A. H. DUFF, Larned, Kans.

Barred and White Rock COCKERELS.

Ringlet and Empire Strains

Now is the time to buy, as I can sell you fine early hatched birds at \$1 each, which will, later on, command from \$3 to \$5 each. Finest lot of youngsters I ever had. Fuliets, 75 cents. Order quick and get the best.

T. E. LEFTWICH, Larned, Kans.

PRIZE-WINNING LIGHT BRAHMA CHICKENS ...EXCLUSIVELY...

Our record for 1898-99: Won 5 out of 6 first premiums at State show in Topeka, including sweepstakes, in January, 1899. Won 6 out of 7 first premiums, including sweepstakes in Asiatic class, at Sedgwick (Kansas) show in December, 1898. Won 6 out of 6 first premiums, including sweepstakes, at Butler County show, held in Eldorado, December, 1898. Eggs \$1 to \$3 per sitting. Also breeders of Red Polled cattle. Address CHAS. FOSTER & SON, Eldorado, Kans.

200 BREEDERS—Also SPRING CHICKS.

Barred P. Rocks, White P. Rocks, Partridge Cochins, Buff Cochins, Light Brahmas, Black Langshans, Black Javas, Silver Wyandottes, White Wyandottes, S. S. Hamburgs, Brown Leghorns, White Leghorns, Pearl Guineas, and Pekin ducks. All our fine breeders of this season, and our earliest spring chicks will go at half price during summer. Write me your wants. Circular free.

A. H. DUFF, Larned, Kans.

DAVE RISK, Weston, Mo., LIVE STOCK ARTIST

Price very reasonable. Satisfaction guaranteed.

Agricultural Matters.

THOUGHTS ON FARMING.

Excerpts from the address of President W. D. Hoard, of Fort Atkinson, Wis., at the nineteenth annual meeting of the Farmers' National Congress, at Faneuil Hall, Boston, October 3, 1899.

THE FARMER AND THE TEACHER.

The principal drawback and hindrance to agricultural thought, profit and progress, is a lack of union and sympathy between scientific theory and the every-day practice of the farm. As yet there is a wide gulf between the teacher of agricultural science and the working farmer, and our farmers are especially lacking in appreciation of the great value to them of the scientific teacher. A moment's study of the situation will disclose a reason for this. The farmer knows from hard experience what he knows. He has worked it out with his hands. He may not have used his mind as he ought; may not have seen what science has to give him, but it is because he has had but little time to leave hand work for brain work.

But beyond this is a lack of sureness in his mind of the truth of what the agricultural teacher is saying. He is not sure that the facts which environ him are the same as those which surround the teacher. His isolation on the farm compels him to be independent and self-reliant. He can depend on no one but himself for the soundness of his judgment or a hand to execute it. He thinks that very much of what is done at experiment stations, taught at agricultural colleges, or related in dairy and farm papers, for instance, is nothing but theory. He can not see how it is going to help him. And because he does not see he does not accept.

The Southern Farm Gazette, in noting the fact that the German farmers import from 4,000,000 to 5,000,000 bushels of corn a week to feed their fattening animals, says:

"It does seem a little strange that German farmers are able to import American corn for hog and cattle food, while southern farmers claim they can not afford to raise pork on corn. Where is the difference—in the stock or the feeders?"

The German farmer is a scientific feeder. He is a believer in the balanced ration. He makes large use of his experiment stations. When a little boy, he was taught the elements of agriculture in the primary school. When he became a man he was a reader and student of the science of feeding. If any professor, like Wolfe, had patiently experimented on the feeding question, the German farmer did not sneer at him and call it "all book farming and theory." He reached out after the truth wherever he could find it. As a consequence, he can pay the freight on American corn for 4,000 miles, pay the speculator's profit for it besides, and make money by feeding it. When our American farmers evidence a disposition to respect what science is patiently doing for them, and become more studious and intelligent, they will make more money with their farm animals.

EDUCATION.

God said: "Let there be light." The average farmer of this country does not yet squarely believe in that principle as an aid to himself and his farm. He has too little sympathy for agricultural schools or for organized methods for a better agricultural education. This is seen in the fact that, as a class, he spends thousands of dollars to educate his children to be lawyers or doctors, where he spends one dollar to especially fit them to be intelligent farmers. This strange indifference to the advantages which a trained use of knowledge imparts, is difficult of explanation. But few farmers believe that there is such a thing as a science of agriculture. The great mass do not believe that the thing we call farming can be taught to their children from books or schools. The American farmer will admit the necessity of a special intellectual training to be a lawyer, doctor, preacher, editor, merchant, or mechanic, and his sacrifice for the education of his children in everything but farming is without parallel in the history of any other nation. He sees clearly that if his boy is to understand the principles of law, of medicine, of mechanics, or of banking, he must look into books and read there the record of the experience and judgment that have gone before him. That boy's intellect must be trained to discern a principle on the printed page and then, by practice, learn how to apply

that principle to produce material results.

Do you suppose that the farmers who swarmed out of New England and New York into Ohio, Michigan, Indiana, and the farther West, would have reduced the fertility of their lands as they have done, if they had been taught in the country schools, when boys, the meaning and methods of conserving nitrogen, phosphoric acid, and potash, as fertilizing agents?

Is there a farmer here that ever heard those agents of all plant growth mentioned in the studies of his boyhood?

I feel deeply on this great lack of primary farm education. I had to face it in my own young life, and the boasted statesmanship of my country has not yet provided conditions much if any better in this direction than those which obtained fifty years ago.

The difference between successful and unsuccessful men in all callings is not luck, but rather judgment and energy. Good judgment is an act of the mind, and one must have a mind well stored with sound knowledge, and well trained to use it, in order to exercise the best judgment. I see a ray of hope in the fact that this great national body of farmers have come to see the tremendous importance of this question. I hope you will include it every year in your programs until discussion is crystallized into action all over the nation.

Ideas govern. Wrong ideas or lack of right ideas govern just as rigidly as the best of ideas. Good sound thought, correct ideas of theory and practice must take the place of unsound ones, or there can be no improvement in the productivity and profit of our soil or animals.

When we see a man farming in a wasteful way, or with animals unfitted to his purpose, we know conclusively that that man lacks right ideas of his business.

The outcome of the labor of his hands will depend not on the strength of the hands, but upon the soundness of the ideas which govern the hands.

It has been stated, with how much accuracy I can not say, that the decline in the values of farm lands in the last thirty years in the State of New York alone, has reached the enormous sum of over \$1,000,000,000. The same condition applies to the farming lands, in greater or less proportion, from Indiana eastward to the Atlantic coast. The loss in agricultural wealth to the nation, arising from this condition, is almost beyond calculation. The only increase in either population or wealth, in the territory named, has been in the cities and villages. In the country there has been a manifest decline in the productivity of the farm, and the pride and ambition of the farmer. Two causes, in my opinion, have conspired to this lamentable result. (1) The drainage to the city of the best mental elements of the farm. Mind always goes before matter. (2) A corresponding and consequential drainage in the same direction of the productive elements of the farm. Fertility has been sold out of the soil by the bushel and by the ton.

In the great Middle West a different condition exists, which, up to the present time, has arrested this great current of waste and destruction to a certain extent. As fast as the sons of American-born farmers have abandoned the old farm there has come in a farmer from Germany or other countries in Europe. This European farmer possesses two valuable traits of mind and training: (1) His home government has taken pains to give him, in the primary schools, some education at least in the elements of agricultural science. He has been severely trained by practice in the art of soil preservation. He is a careful, painstaking husbandman. (2) His sons have an ambition to become farmers. The father is on the lookout for farms near his own for his children. This creates a demand for farms, because, first, there is a farmer.

The agricultural mind of this country must come to a better comprehension than it has had of this chain of causes for the decline or enrichment of a country. We must settle down practically and hard, to the conclusion that we must commence with the child if we are going to make good farmers, for without good farmers the country will soon go to destruction. There is the highest statesmanship and love of country involved in this question. It should engage the earnest attention of the educational and political forces of the nation.

PRESERVATION OF POLITICAL INDEPENDENCE.

For our own sake as farmers, and for the sake of our country, we need to be constantly agitated and aroused in another direction. There is larger need

than ever in our nation's history for the old-time resolute independence of character and political judgment which once characterized the American farmer. Fifty years ago the present corrupt party boss, with his assessment of corporations and control of legislation, would not have stood for a moment before the courageous farm judgment of the country.

To-day this political merchant, who trades in the temple on the political and material fortunes of his fellows, has fastened, octopus-like, on the nation and exercises a most dangerous power in State and national legislatures.

The sentiment of the farming classes is no longer regarded by the political boss with the wholesome dread that ought to exist. This is largely due to a serious decline among farmers of individual independence of political thought and action, a substitution of mere party for patriotic standards of judgment.

A corrupt and debauching spirit of commercialism pervades our political atmosphere and poisons the fountains of law, liberty, and progress. I would not advocate the formation of an agricultural party to correct this evil, for I do not believe that any man should administer his political duty in this country according to the trade he follows, the race he belongs to, or the religion he professes. But I do hope to see the farmers stand forth as strongly as they did of yore, the terror of corrupt politicians and the hope of honest government everywhere. This can only be brought about by a sturdy refusal to follow the lead of corrupt party leaders, in all parties.

UNFAIR TAXATION.

It is largely through this submergence of the political influence of the farming classes that the present unfair and offensive systems of taxation exist.

Property is property. Taxation should be based on the dollar's worth of property, no matter how it is invested. That which the law recognizes as property and defends as property, should be taxed as property, according to its value. A general violation of this principle is producing widespread demoralization and discontent in society. Men who pretend to be men in everything else, coolly become perjurers in order to save a few dollars in taxes.

The final effect may be comprehended in this question: If a man will swear falsely to cheat the public, how long will it be before he will perjure himself to rob his neighbor?

Let me suggest a partial remedy, at least: After the assessor has completed his work, and a month before the final review, let it be required by law that the personal property list shall be published and placed before the public eye. There is great moral force in publicity. As farmers especially, we should create public sentiment in favor of such laws, for a very large proportion of the property of the country escapes taxation.

Soy-Beans.

Press Bulletin No. 46.

There are a number of varieties of soy-beans, but the early yellow soy has proved the best. Soy-beans are erect growing, with from one to six or more stems branching out from near the ground and reaching a height of from 1½ to 3½ feet; seldom falling down, except in very rich, loose land. The branches are thickly studded with pods from the surface of the ground to the top; a single plant having sometimes as many as 200 pods, containing from one to four beans, the usual number being three. Soy-beans are wonderful drought-resisters and will do comparatively well on thin land. However, they respond very readily to plenty of moisture and a good soil. Being a legume, if the bacteria which produce the tubercles on the roots are present in the soil, they leave the land richer in nitrogen the same as clover does. The land may be inoculated by getting earth from a field that has the bacteria in the soil and planting it in the rows with the beans. We used a fertilizer attachment to a hose drill this year with good success. Planting should not be done until the weather is warm—after corn planting. The beans will make a fair crop after rye or wheat if the season is favorable. The ground should be well-prepared, and the beans planted near the surface. We plowed the ground last spring, going over what we plowed each day with Campbell's subsurface packer, and planted the beans immediately, with a press drill, stopping holes so as to plant in rows 30 inches apart and from one to two inches in the row. This required 30 pounds (½ bushel to the acre.)

They may be cultivated as other crops; keeping the soil in good shape and the weeds down is all that is re-



quired. We used the spring-tooth cultivator, except in a few places where the weeds obtained a start on account of the wet weather. The crop can be handled so it will not be necessary to use the hoe at all. Land that has been lately manured is liable to give trouble, as it is usually weedy.

Until this year the harvesting has been the great problem, but we found that there are machines manufactured for the purpose, and have tried several of them and found them to be successful, so the harvesting no longer stands in the way. The yellow soy does not shell readily, and so can be let stand until well ripened. We began harvesting when most of the pods had turned brown, and a few of the top leaves were sticking on. The bean harvester has large knives which cut the stem just under the ground, cutting two rows at a time and throwing them together in a windrow. An ordinary one-horse hay-rake will take two of these windrows at a time and the horse walks between them. We raked and shocked immediately after the harvester, and left them to cure in the shock. Threshing was done in the field with an ordinary separator, using all blank concave and running no faster than necessary to keep the machine from clogging in the shakers and riddles, so as not to crack the beans.

The following is the cost of production on the college farm this year. The work was conducted as nearly as possible on a commercial basis, the object being to find what could be done on a large scale. The 60 acres from which the following is taken comprise several fields, which vary widely in many respects from good land to very poor, on the whole perhaps below the average of farm land. Labor is computed at \$1.25 per day for a man and \$2.50 per day for a man and team. The cost per acre for the various items was as follows: Preparation of land, \$1.35; planting, \$0.30; cultivating, \$2.00 hoeing, \$0.70, which was confined to a few patches; harvesting, \$1.40. The harvesting is considerably above what it will be when the regular harvester is used, but we did not receive the harvesters in time to begin, and the old method is much more expensive.

The threshing required four teams and six men, besides the machine force, which was hired at \$15.00 per day, board and coal not included. The total expense for threshing the 60 acres, which took 4½ days, aside from cost of coal, was \$155.25. The yield of the 60 acres was 932 bushels, making the cost of threshing 16.6 cents per bushel. The 60 acres of beans averaged 15½ bushels per acre, making the cost of production 55 cents per bushel, or about \$8.40 per acre.

Soy-beans as a feed take the place of oil- or gluten-meal and in composition are richer than oil-meal. In feeding them to milch cows, fattening cows and hogs, they have given astonishing results. In two experiments carried on last winter in feeding hogs the addition of one-fifth soy-bean meal to Kaffir-corn gave practically double the returns from Kaffir alone. The ten hogs fed Kaffir-meal alone, during a period of 50 days, ate 2,872½ pounds, and gained 441 pounds; the ten fed Kaffir-meal four-fifths and soy-bean meal one-fifth ate 3,766 pounds of the mixture, gained 866 pounds, and sold for 10 cents more on the hundred than the other lot.

When the beans are let thoroughly ripen in the field the straw is worthless, but if cut and cured while green it makes excellent hay. They make excellent hog pasture and are good crop for soiling.

TO CURE LA GRIFFE IN TWO DAYS

Take Laxative Bromo Quinine Tablets. All druggists refund the money if it fails to cure. E. W. Grove's signature is on each box. 25 cents.

When writing any of our advertisers, please state that you saw their "ad." in Kansas Farmer.

The Stock Interest.

THOROUGHbred STOCK SALES.

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

OCTOBER 14—Gus Aaron and John Bollin, Leavenworth, Kans., Poland-Chinas.
OCTOBER 17—George Bothwell, Shorthorns, Kansas City, Mo.
OCTOBER 18—H. C. Duncan, Shorthorns, Kansas City, Mo.
OCTOBER 19—Thos. W. Ragsdale, Shorthorns, Kansas City, Mo.
OCTOBER 20—John Burrus, Shorthorns, Kansas City, Mo.
OCTOBER 23—E. E. Axline, Poland-Chinas, Oak Grove, Mo.
NOVEMBER 1-2—W. T. Clay and T. J. Young, Shorthorns, Kansas City, Mo.
NOVEMBER 16—W. P. Harned, Shorthorns, Vermont, Mo.
DECEMBER 6-7—Armour, Funkhouser, Sparks, Herefords, Kansas City, Mo.

TWELFTH CENSUS OF LIVE STOCK.

The coming census of live stock, especially that of cattle, must depend largely for fullness and accuracy upon whether the stock and dairymen themselves shall be prepared to reply accurately to the inquiries contained in the schedules which the enumerators will carry.

The expectation is that, with the active coöperation of the stock and dairymen of the United States, the twelfth census of live animals will be reasonably full and satisfactory. Very soon a general schedule for enumerating live stock will be put forth for discussion and correction. In the meantime it may be outlined as follows:

ANIMALS ON HAND JUNE 1, 1900.

	Age.	Number.	Value.
Calves.....	Under 1...	.....	.....
Steers.....	1 to 2.....	.....	.....
Steers.....	Over 2.....	.....	.....
Bulls.....	1 and over	.....	.....
Hifers.....	1 to 2.....	.....	.....
Cows kept for milk.....	Over 2.....	.....	.....
Cows and hifers not kept for milk.....	Over 2.....	.....	.....
Colts.....	Under 1.....	.....	.....
Horses.....	1 to 2.....	.....	.....
Horses.....	Over 2.....	.....	.....
Mule colts.....	Under 1.....	.....	.....
Mules.....	1 to 2.....	.....	.....
Mules.....	Over 2.....	.....	.....
Asses and burros.....	All ages.....	.....	.....
Lambs.....	Under 1.....	.....	.....
Sheep (ewes).....	Over 1.....	.....	.....
Sheep (bucks and wethers).....	Over 1.....	.....	.....
Swine.....	All ages.....	.....	.....
Goats.....	All ages.....	.....	.....
Llamas.....	All ages.....	.....	.....

PURE-BLOODED ANIMALS BY FAMILY, NAME AND THE NUMBER OF EACH PER FARM.

Kind.	Number.	Kind.	Number.
Horses.....	Sheep.....	.....
Mules.....	Swine.....	.....
Goats.....	Cattle.....	.....

Total receipts from sale of live stock in 1899..... \$.....
Market value of all animals, slaughtered on the farm, 1899 \$.....

Number of fleeces
Shorn fall 1899.....
and spring of 1900.....
Wool..... No.....
Mohair..... No.....

In the above the term "horses" is intended to include ponies.

Swine reach market or killing size so quickly, and pigs are bred so continuously from one year's end to another, that age-classification of them has not been requested or thought to be of much value, and is therefore not contemplated in the above outline schedule.

The foregoing more than fulfills the requirements of the law, but it does not embrace all the questions certain live stock interests have submitted to the census office for incorporation in the schedule. These special interests desire to have a census of pure-blood animals by families and ages; also a census of "grade" animals by similar classification. As there are scores of these families, and innumerable grades below that of pure-blood in each family, a schedule which would secure the census of them thus classified would be as elaborate as the entire scheme of census schedules and expensive beyond the allowance made by Congress.

However, all that is indicated in the above table may be secured if every related interest, beginning now, will work to that end. Special methods are contemplated for gathering a reasonably elaborate census of pure-blood stock, after the country shall have been covered by the general schedule, thus serving all classes to a rational extent.

To bring about desired results a general propaganda is required through stock and dairy journals and the various associations which shall so arouse the active interest of all concerned in the country as to lead them to open and keep such books or accounts as will enable them, on the arrival of the census enumerator, to answer his questions (practically as above indicated) promptly, fully, and accurately.

For this purpose, local and provincial terms and descriptions must be under-

stood and reduced to a common schedule language that will comprehend all the conditions of the country. In the extreme South calves are dropped early in the year, in Maine and the extreme North they are dropped late in the spring—in some instances six months later than in the South. The enormous and increasing consumption of milk in cities has made fresh cows for winter milk very profitable. Therefore hundreds of thousands of calves are now dropped in the autumn, where, a score of years ago, they were dropped in the spring. Thus, a June enumeration will include as "calves" a great number of animals which are almost yearlings. Although in the West and Southwest a calf 8 or 9 months of age is described as a "yearling," there will be few or none on the ranges on June 1, 1900, subject to this erroneous classification, and the dairymen of the East will be asked to list their young stock literally according to age.

In the dairy sections cows are kept for milk only and to the inhabitants of those sections all cows giving milk or suckling young are "milch" cows. In the West and Southwest, on the great ranches and ranges, according to local parlance, there are no "milch" cows. Breeding cows are simply "cows," while all other female bovines are "she cattle"—a term never heard in the East and South.

Cattle and dairymen are expected to describe these classes to the enumerator in census schedule terms, or in such a way that he can reduce them to those terms, otherwise proper classification and tabulation will be impossible. Any suggestions intended to improve the schedule, or aid in the work of gathering live stock statistics, should be forwarded at once to the Director of the Census, at Washington, D. C. They are solicited, and will be considered and acted on according to their value. The names and addresses of the great ranch and range owners and managers are especially desired at an early day.

Fifteenth Annual Report of the Bureau of Animal Industry.

The Fifteenth Annual Report of the Bureau of Animal Industry for the year 1898 is a volume of 647 pages, and is illustrated with a frontispiece, 25 plates, and 69 text figures.

It contains the annual report of the Chief of the Bureau, giving in detail the operations of the Bureau during the year in relation to the inspection of meats and animals, experiments, investigations, etc., and the following miscellaneous articles:

Blackleg in the United States and the Distribution of Vaccine by the Bureau of Animal Industry, by V. A. Nörgaard—Report upon Experimental Exports of Butter, 1897, by Henry E. Alvord—Breeds of Dairy Cattle, by Henry E. Alvord—Fifty Dairy Rules—Meat and Milk Inspection in Shanghai, by W. J. Blackwood, U. S. N.—Agriculture and Dairying in Scotland, by John C. Higgins—The Vitality and Retention of Virulence of Certain Pathogenic Bacteria in Milk and Its Products, by Charles F. Dawson—Colored Spots in Cheese, by R. A. Pearson—The Serum Treatment for Swine Plague and Hog Cholera, by E. A. de Schweinitz—Experiments in "Stamping Out" Hog Cholera in Page County, Iowa—The Enzymes, or Soluble Ferments, of the Hog Cholera Germ, by E. A. de Schweinitz—The Production of Immunity in Guinea Pigs from Hog Cholera by the Use of Blood Serum from Immunized Animals, by E. A. de Schweinitz—Inoculation to Produce Immunity from Texas Fever in Northern Cattle, by E. C. Schroder—Investigations Concerning Tuberculosis and Glanders, by E. A. de Schweinitz and Marion Dorset—Asthemia (Going Light in Fowls, by Charles Dawson—Laboratory Methods for the Diagnosis of Certain Micro-organismal Diseases, by Charles F. Dawson—Breeding Zebruids—The Military Administration of Germany in Its Relation to National Horse Breeding—The Cattle Industry of Colorado, Wyoming, and Nevada, and the Sheep Industry of Colorado in 1897, by John T. McNeely—A Cattle Disease in Marshall County, Kansas—A Cattle Disease in Uruguay, by Albert W. Swalm—The Cattle Tick and Tuberculosis in New South Wales, by George S. Baker—Preliminary Catalogue of Plants Poisonous to Stock, by V. K. Chestnut—Feeding Wild Plants to Sheep, by S. B. Nelson—Coöperation Between the Experiment Station Veterinarian and the local Veterinarian, by A. W. Bitting—Contagious Diseases of Animals in European Countries—American Animals and Animal Productions in Great Britain, by W. H. Ray—The Feeding of Lambs, by James Wilson and C. F. Curtis—Feeding Range Lambs, by C. F. Curtis and James Wilson—Feeding for Mutton in South Dakota, by E. C. Chilcott and E. A. Burnett—Larkspur Poisoning of Sheep, by E. V. Wilcox—Tuberculosis in Kansas, by N. S. Mayo—Experimenting with Blood Serum as a Preventive and Cure for Texas Fever, by J. C. Robert—Steer-feeding Experiments to Ascertain the Comparative Value of Corn and Red and White Kaffir-corn, by C. C. Georgeson—Feeding Sheaf Wheat to Steers, by H. T. French—Texas Itch in Kansas, by N. S. Mayo—Dehorning Cattle, by Gilbert M. Gowell and Fremont L. Russell—Dehorning Cattle, by F. Wm. Rane—Milking Scrub Cows—Wheat in the Sheaf and Chopped Wheat for Pigs, by H. T. French—Feeding Sheaf Wheat to Hogs, by H. T. French—Corn, Cow-peas, and Sweet Potatoes as Food for Hogs, by J. F. Dugger—Gape Diseases of Young Poultry in Kentucky, by H. Garman—Experiments in Egg Production, by James Dryden—Food Value of California Eggs, by M. E. Jaffa—Draft upon Horses—Feeding Value of Potatoes—Animal Products in South America—Trichinae: German Inspection of American Hog Products—American Hams in Germany—Horses, Cattle, etc., in Switzerland—Animals and Animal Products in Malta—Butter in Paraguay—American Butter in Japan—Sheep and Wool in Cape Colony—Somali, or Black-headed Sheep—Prices in Cape Colony—Imports of Hides and Skins from Calcutta—Movement of Farm Animals—Range or Average Price of Farm Animals at Chicago—Imports and Exports of Animals and Animal Products—Numbers and Values of Farm Animals, 1897 and 1898—State Live Stock Sanitary Boards, Secretaries of State Boards of Health, etc.—Rules and Regulations of the Bureau of Animal Industry.

The report is printed in accordance with an act of Congress and is for distribution principally by Senators, Representatives, and Delegates in Congress, only a limited number of copies being allotted to the Department. By applying early to one of your Senators or to the Congressman from your district you may be able to obtain a copy.

Judging Cattle by Points.

There are few farmers and even breeders of pure-bred stock that are capable of judging stock by means of a score card. Could it be done it would be a good innovation at many of our local fairs. It requires practice with a lot of animals of different styles, types and handling qualities to enable one to be proficient with the use of a score card. Besides, a man to be a successful scorer must be able to compare and balance truly what he sees before him. Could such a system be adopted and the score posted up beside the animal those anxious to know would be able to learn what perfection or nearly so in any one point was. The following score card has been suggested, and will give the reader an idea of the proportionate value placed upon the different parts of the animal frame:

Rump—level, with good length and breadth.....	6
Thigh and twist—full and well down	5
Hips—broad, level and well covered.	5
Flanks—well let down and full.....	3
Loin—broad, level and meaty.....	8
Ribs—fleshy, and broadly sprung....	7
Crops and chine—well filled, meaty, and no depression.....	7
Heart-girth—full and large.....	7
Shoulders—smooth and well covered	5
Brisket—well let down and forward, with little or no dewlap; broad between fore legs.....	3
Neck—clean and tapering.....	2
Horns—medium size, clean, tapering, and well formed.....	1
Ears—medium size, fine and lively....	1
Eyes—mild, but full and bright.....	2
Head—clean and fine; masculine in bull.....	2
Bones and legs—fine and shapely; medium length.....	6
Tail—well set on, tapering and fine.	3
Hair—abundant and mossy.....	3
Handling—mellow, neither soft nor unyielding.....	6
Skin—fine, elastic, loose, and medium thickness.....	2
Upper line—level and straight.....	4
Lower line—low down and even from brisket to twist.....	3
Weight for age of bull, on basis of 1,000 lbs. at 12 months, 1,400 lbs. at 24 months, 1,800 lbs. at 36 months, 2,100 lbs. at 42 months. Of female, on a basis of 850 lbs. at 12 months, 1,100 lbs. at 24 months, 1,400 lbs. at 36 months, 1,600 lbs. at 42 months.....	5
Symmetry, smoothness, style and general attractiveness.....	5
Total.....	100

"A Good Name At Home"

Is a Tower of Strength Abroad." This truth has been perfectly verified by the history of Hood's Sarsaparilla,

which effected its first cures in Lowell, Mass., where it is made and where it still has a larger sale than all other blood purifiers. Its fame and cures and sales have spread abroad all over the world, and it is universally recognized as the best blood medicine money can buy.

Hood's Sarsaparilla
Never Disappoints

Hood's Pills cure liver ills; the non-irritating and only cathartic to take with Hood's Sarsaparilla.

On the Southern Border.

Editor Kansas Farmer:—We have had a fearful summer here in a dry belt 10 miles wide and 50 miles long, with no rain since the first of July. Our crops generally are poor, but some late feed is all right. I have 200 acres of Kaffir-corn that, on account of a beautiful rain we had the first of this month, will make feed and lots of it. Our pastures were as white as ghosts, but now everything is like spring, all greening up. As for our cattle, they were hungry, and no cattle in this dry belt did any good in August, but this rain will make late grass. Our feeding steers are being shipped and sold at 4 cents, natives, weighed here. The calf crop is pretty good. The boys all want native cattle now. These little western cattle are good for suckers to learn the cattle business, providing they can sell enough to pay the six months' installment of interest. It takes the best in the herd and a lot of them too, but we are grading them up and our calf crop is good. The Shorthorns and Herefords are all the kinds of cattle we want. What some are trying to raise is a Shorthorn with a white face. It is hard to please all.

Last week I took a trip to the Strip. One day's time took me to Alva and I had to take off my hat to those new beautiful homes, with corn-fields 40 to 50 bushels to the acre, and wheat by the millions of bushels. Oh, it is a grand sight, and Alva is clear out of sight—new houses going up all over the little city, two brick bank buildings going up, and everything on the move. Every man has his pockets full of money. West of that little city, in the foot-hills are miles and miles of grass, but the land is too rough to farm. South and east for 40 miles there is a house on every quarter-section, and the ground as level as a floor, with the richest of black sandy loam soil and easy to plow. I priced some of these farms and was surprised at the price, \$700 to \$1,000 a quarter-section, 100 acres under the plow, good house, stables, young orchards, all fenced. I thought "What a chance, what an opportunity for eastern renters to get them a home." It is cheaper than to make the run and get it wild and for nothing. Schoolhouses all over, and beautiful roads but worn out hauling wheat. Alva has a fine normal school building of which she may feel proud, and such a site it is located on. It was grand a year ago. I was down there to the fair and bought a few lots. Now it is all built up solid around them and I could have taken double my money for them. I just bought them for fun a year ago.

Of course I like to ride my pony through my herd of sleepy cattle along the Medicine River, but I tell you, boys, who read this, Alva and the surrounding country have inducements, opportunities right now that are interesting. Come and see me and let me show them to you in one day's time. Those farmers in the eastern part of the State, stuck in the mud winter and summer, should come and see this new country and locate their children in a nice home for from \$700 to \$1,000, with every advantage, no bonds. ELI C. BENEDICT.
Medicine Lodge, Kans.

UNDERWEAR FROM THE MILL.

We make Underwear of every description for Men, Women and Children and sell to you at lower prices than your local dealer pays. Every kind of wearing apparel is advertised in our immense 304 page General Book of everything to Eat, Wear and Use, which costs us 69c to mail, but is sent free to you. Our Made-to-Order Clothing Catalogue with large samples attached is also free. We guarantee to fit you, and prepay expressage. Which book do you want. Address this way:

JULIUS HINES & SON,
BALTIMORE, MD. Dept. 216.

Violet of Maple Hill.

Violet of Maple Hill 8th, the subject of our illustration this week, is considered one of the valuable heifers that will be offered in that most interesting combination sale, to be held at Kansas City, October 17, 18, 19 and 20 by H. C. Duncan, Joseph Duncan, George Bothwell, Thos. Ragsdale & Son, and John Burruss. This beautiful Violet was bred by H. C. Duncan, of Osborn, Mo., and belongs to Amos Cruickshank's oldest tribe, the tribe with which he began his career as a Shorthorn breeder. Imported Marsh Violet, the granddam of the subject of our illustration, is now in her eighteenth year, and is still grazing contentedly at Maple Hill. The imported cow was sired by Pride of the Isles, a famous prize-winner himself, and a son of Scotland's Pride, winner of the Highland Society's challenge cup in 1867, and valued at \$250. The dam of Pride of the Isles was by Lord Raglan, and the sire of Scotland's Pride was by Champion of England. Immediately below that, in this wonderfully richly varied pedigree, comes the grandly bred Booth bull, Knight of Knowlmore, and behind that, the Highland Society's winner, the Knightly bull, Allan, a son of the most famous bull of his day, Forth, and as we closely scan this rare pedigree to its foundation, it will be observed that every sire in the pedigree was bred by a famous breeder, such as Smith, Linton, Torr, Barclay, Paley, and Whitaker. Rose-dale Violet 6th, the dam of the heifer under consideration, was sired by Scottish Chief, a richly bred Cruickshank bull of the Sittytton Secret Tribe, selected years ago by Professor Shelton, to head the agricultural college herd at Manhattan, Kans., who selected him as his choice out of the many herds that he had looked over that season, in search of a stock bull; and now, Baron Dudding, the sire of Violet of Maple Hill 8th, whose pedigree is as rich and varied as that of his beautiful daughter, Imported Aurora, to which Baron Dudding traces, was a second prize heifer at the Highland Society's show in 1882, and had for sire, Duke of Chalmers—a bull full of the very best blood; add to this, that Aurora was of the family that produced the famous bull, Field Marshal, that Adeline in her pedigree was full sister to Field Marshal's dam, and then the full strength of this royal breeding begins to dawn upon even the obtuse mind, but the climax is not yet reached. Add then, to all this, that the dam of Baron Dudding was by one of the most richly bred Victoria bulls ever bred in this country (sire and dam Victoria) and only a remove or two from Imported Victoria first; and now as to the sire of Baron Dudding (Godoy), whose dam was by Roan Gauntlet, inbred in Champion of England and Lord Raglan blood. The sire of Godoy was by Barmpton, dam of Royal Duke of Chester, who was also the sire of Barmpton and Roan Gauntlet. Baron Dudding topped the Mastin sale when a yearling, at \$400; since then he has sold at public auction for \$1,000. Concerning this heifer herself, she resembles her sire, resembling Baron Dudding all over, when he was her age; then add to all this, that she possibly blends more richly the best Warlaby and Sittytton blood, than any other heifer on either side of the Atlantic.

Report of Vansell's Sale.

The M. C. Vansell sale of Poland-China pigs and Shorthorn bull calves, held at his farm near Muscotah, Kans., on October 2, 1899, was a satisfactory sale. The Poland-Chinas were all young things, well bred and good quality. The swine deserved better prices than received for them. This was accounted for by the absence of breeders of thoroughbred stock, the presence of whom always adds zest to the bidding, and invariably helps both auctioneer and owner. As it was the patrons secured valuable pedigreed swine at very nominal figures, 58 head, 23 boars and 35 sows; all of which were farrowed between the dates of March 1 and May 10. Ten boars averaged \$17.80 each, and 12 sows averaged \$18.85. They mostly went to nearby parties, which showed great confidence in Mr. Vansell's breeding of fine stock.

The 11 Shorthorn bull calves, mostly sired by Golden Lad 115691, averaged \$96, going to the following purchasers: W. L. Hencken, Nortonville, \$130; G. W. Noble, Holton, \$80; E. B. Cox, Holton, \$106; C. P. Humphrey, Larkin, \$135; Wm. McDaniels, Springfield, Mo., \$130; Robt. Russell, Muscotah, \$85; John Bokaye, Whiting, \$74; W. H. Black, Bendena, \$73; J. T. Artman, Larkin, \$65. Two May calves belonging to C. B. Thummel, Axtell, Kans., brought \$81; they were small, yet good calves.

Col. J. N. Harshberger, of Lawrence, Kans., was the auctioneer of the occasion. His work was satisfactory to Mr. Vansell; he procured all that it was possible to secure. Had there been more breeders of swine present, prices obtained would have been greater for no better hogs will be offered anywhere than appeared in the sale of Mr. Vansell.

Gossip About Stock.

The dispersion sale of Hereford cattle owned by Hamp B. Watts, of Fayette, Mo., aggregated \$11,140 for 54 head, an average of \$206.33. Fourteen bulls averaged \$202.14, and 40 females, \$206.33.

J. R. Young, of Richard, Mo., made considerable reputation for his herd of Poland-Chinas at the Illinois State fair in winning first on his 2-year-old boar, Missouri Black Chief, in one of the hottest show rings of the year.

Chas. Dorr, of Peterton, has been having a very successful sale of Duroc-Jersey pigs since the Burlington fair. He still has a few fine gilts and boars for sale, and any one wanting a good Duroc will do well to write him before they are all gone.

B. W. Gowdy, of Garnett, sold to Wm. Ballard, of Wise, on September 28, one of his fine bull calves, Shannon Oakwood, sired by Kirklevington 126104 and out of Gazelle of Oakwood, she by Peculated Wild Eyes 109348. He is dark red, and is just past 6 months old.

C. M. Irwin, of the Elm Beach Stock Farm, Wichita, Kans., has 6 10-month-old boars, sired by Sir Charles Corwin and Darkness Wilkes, which he will sell cheap if sold soon. He also offers at a remarkably low price that \$500 hog of his, Sir Charles Corwin, only 5 years old.

Geo. McCollough, living 3 miles south of Overbrook, had W. Q. Hyatt, of Carbon-dale, sell his cattle, horses, and farm im-

plements at public auction on October 3. He sold 20 pigs, averaging \$32 a head. A sow and 9 pigs sold for \$22, and a grade boar pig for \$5. The horses averaged about \$30 a head. Three 2-year-old steers sold for \$25 a head, and bull calves averaged \$17 a head.

B. W. Gowdy, of Garnett, has one of the finest lots of Shorthorn cattle in Kansas. There are about 90 head in his pastures, with a good supply of young stock of special merit, sired by Kirklevington, Duke of Shannon Hill 126104, Baron Flower 14352, Bonnie Emperor 128344, and Ambassador 110811.

L. F. Wren, of Kincaid, bought 3 of B. W. Gowdy's fine Shorthorn calves, September 28. They were Kirkton Duke, sired by Kirklevington, and out of 8th Lady Bates of Shannon Hill; Rose Leaf 4th, by Bonnie Emperor 128344 and out of Rose Leaf; and Bell B. Barrington, by Valley 132286, and out of Annetta B. Barrington.

Attention is directed to the forthcoming public sale of Poland-China hogs, to be held at Richmond, Mo., Saturday, October 4. Fifty head will be sold from the noted Cap-a-Pie herd owned by Geo. W. Falk. They will be a very superior lot, and in point of breeding represent nearly all the leading strains that have made the breed famous. Full particulars will be given in subsequent issues.

C. P. Shelton, Osawatomie, Kans., makes a change in his advertisement in this issue, in which he offers for sale the herd boar, Sixteen to One 41627, by Welch's Black U. S. 33521, out of Nina One Price 18182. She is by old One Price 18639. He is a splendid individual and has given Mr. Shelton very satisfactory results, but it is now necessary to replace him, consequently he is offered for sale.

James Mains, Oskaloosa, Kans., announces in this week's Kansas Farmer that he will hold his sixth annual public sale of Poland-Chinas at his farm on Saturday, October 28, 1899. The offering consists of 100 head of Chief Tecumseh 2d, Klever's Model, Moorish King, Chief I Know, and U. S. Model strains. He will have 18 males of last fall and winter farrow that are growthy and heavy boned and in splendid breeding condition, and will also have a number of winter and spring gilts. Send for catalogue.

At South Omaha on Thursday a successful sale of Shorthorn cattle was held by B. O. Cowan, of New Point, Mo., and W. J. Ewing, of Saxton, Mo. The attendance of buyers was only moderate and competition was, therefore, not very strong. Prices realized were hardly up to expectations especially the females, some of which merited stronger values. The Cowan cattle averaged \$121 for 35 head. The nine bulls averaged \$125.55 and the 26 females, \$119.40. The nine head of Ewing cattle averaged \$11.10. The total realized for 44 head was \$4,965, an average of \$112.84.

John Bollin and Gus Aaron, of Kickapoo, Kans., hold their public sale of Poland-Chinas at Leavenworth, Kans., Saturday, October 14. They will offer a lot of hogs that are worthy the attention of breeders, farmers and pork-producers. All interested should get the catalogue and see the rich blood lines of the hogs that go to make up the sale offering. Two good herds have been closely culled out, and nothing but choice animals will go in the sale. Bollin and Aaron can be depended upon to conduct everything fairly and squarely, and all who attend the sale will have nothing but honest competition.

E. Reiser, living 3 miles northwest of Burlingame, held a closing-out public sale on October 4, at which W. Q. Hyatt, of Carbon-dale, was auctioneer. The sale was very satisfactory to all concerned as Mr. Hyatt knows how to sell stock. The cows were a mixed lot of milkers and averaged \$35. A bunch of yearling steers sold at \$32.50, while yearling heifers brought \$21.50; steer calves, 6 months old, went for \$18.50; younger steer calves, \$10. Heifer calves sold for \$10.25 per head. Chickens sold as high as \$4.50 per dozen. A pair of fine work mares sold for \$127. W. J. Tabor, of Burlingame, put in 2 grade Hereford bull calves at \$24 and \$22.

On November 13, at Olathe, Kans., Messrs. W. P. Goode & Sons, of Lenexa, Kans., will hold a public sale of 100 head of purebred Poland-China hogs. The offering comprises both sexes sired by the best son of Hadley Jr. 13314; 3 of the best sons of old Chief Tecumseh 2d 9115. Mr. Goode has what he considers the best-bred son of Chief Tecumseh 2d now living, weighing over 900 pounds. He has proven a wonderfully satisfactory breeder, and Mr. Goode will be pleased to show him and his get to visiting breeders. This sale, like all former ones by Mr. Goode, will go at the bidders' prices if a single bid is made on an animal. Write for catalogue at once.

R. H. Kellogg, Iola, Kans., writes: "I will offer for sale at a low price the great show boar, Prince Corwin Jr., farrowed September 3, 1898. He is of the Corwin, Black U. S. and One Price blood, and one of the greatest show hogs in the State today. I had him at two fairs this season and he did not fail to get first in class and sweepstakes under C. M. Irwin, judge. W. Davison, of Waverly, Kans., said: 'He could have carried off the prize at Ottawa fair if he had been there.' Mr. Wait, of Altoona, Kans., said he was the best hog he had seen out this season. Mr. Irwin said the same, and he will no doubt make a greater show hog as a 2-year-old."

W. S. Hanna, the expert judge of swine at the fair at Ottawa, Kans., calls the attention of our readers to an omission made by our representative, as follows: "Please state in your next issue that the name of J. L. Stratton, of Ottawa, Kans., who showed quite a large herd and got second premium on aged sow, was omitted in the list of awards. Mr. Stratton is a first-class man, has fine hogs, well bred, but he has not yet learned that a man must live near the creamery, brush, curry, have large grass lots, feed oil-meal, shorts and milk to show at the Franklin County fair and win. We have to take them as we find them in the ring."

J. U. Howe and E. L. Young, of Wichita, Kans., announce in this week's issue a public sale of Duroc-Jersey hogs. The sale will take place at Mr. Howe's farm, three miles west of Wichita, on Maple avenue road, October 20. They offer for sale about 25 boars and 25 gilts of last spring litters. They were sired by Pluck 5143, by Muggins, he by Model Criterion 1515; and Canton 3747 by Awake 4693, a grandson of Panic 4107, the \$225 boar. These two sires will be offered at this sale. The young stock is out of Pansy K 7652, by Butler 3749; also Fallor 6564, a granddaughter of Ruby Prince 1059. Remember the date and look for the sale card in this issue. Half rates on all railroads to street fair.

Messrs. H. Davison & Son, Waverly, Coffey County, Kansas, will hold a public sale of Poland-Chinas at their farm, Tuesday, October 24. This firm has been breeding Poland-Chinas for nearly a quarter of a century, and during nearly all of that long period has been a successful exhibitor at the fairs contiguous to its location. This firm takes an especial delight in breeding and showing hogs, and is satisfied with nothing but the best. Messrs. Davison's present stock boars are Success I Know and Ker's U. S. Success I Know is a son of Chief I Know, and Ker's U. S. was by Frazier's U. S. The present sale offering will consist of 40 head, 20 boars and 20 sows, most of them sired by the 2 stock boars. Write for the catalogue.

Note change in the advertisement of Rocky Hill Shorthorn herd of J. F. True & Son. They are getting a nice string of red bull calves for next year's business by their Waterloo bull. The yearlings by him are now offered for sale. Their herd bull, Waterloo Duke of Hazelhurst 11th 130723, is a pure Duke of a deep red color, with plenty of constitution and vigor and yet of a smooth and fine conformation, and these qualities are transmitted in a very marked degree to his yearling sons now offered for sale.

M. L. Somers, of Altoona, in making up his herd of Poland-Chinas, has picked out some of the best strains. His herd is headed by Corwin Black Stop, sired by Sir Charles Corwin and out of Nellie Black Stop. Corwin Black Stop weighed 280 pounds at 8 months. He is assisted by Sanders of Sunnyside, by Gold Bar Sanders out of Stumpy 3d. His brood sows are Miss Altoona, by Duke Dimple, out of U. S. Black Boss 4th; Miss Altoona 1st, by Short Stop, out of Miss Altoona, and Miss Altoona 2d by Short Stop 2d, out of Miss Altoona.

J. B. Davis, of Fairview, Kansas, will offer at public sale, on October 19, 30 Duroc-Jersey swine. Mr. Davis has resided in Brown County for many years and is well and favorably known. Any one desiring Duroc-Jerseys should write him for full particulars. Notice his advertisement on 16th page of this issue. His herd has been built up with the best stock procurable. C. H. Holmes and C. H. Searle, of Edgar, Neb., S. E. Morton, of Ohio, J. M. Stone, of Panola, Ill., and A. F. Russell, of Missouri, are among the notable breeders from whom Mr. Davis has purchased during past few years.

The attention of our readers is again called to the coming Hereford exhibition and sale which will be held at Kansas City under the auspices of the American Hereford Cattle Breeders' Association. Such is the magnitude of the project and the excellence of the cattle, that visitors have already announced their coming from all parts of our country and territory adjoining. The Hereford breeding fraternity believes that the beef cattle breeders, regardless of their favorite breed, will enjoy the greatest of opportunities to judge of the merits of the Hereford, and they very cordially extend an invitation to all to come and fellowship as advocates of the better class of beef cattle and enjoy the very promising outlook now smiling on the future of all breeds of beef cattle.

R. S. Cook, Wichita, Kans., is rejoicing over the success of some of his Ohio patrons, Marvis Bros., who bought their herd foundation from Mr. Cook and have been showing at leading Ohio fairs with great success. The significant things about this deal is that Kansas breeders have the best, and having no State fair of their own must sell to eastern breeders who are more fortunate. Mr. Cook, in concluding a recent letter to this office, sagely says: "Oh, what a shame! Kansas can not afford a State fair and exposition where her breeders can meet and show to the world what our State can produce, not only in stock lines but farm, orchard, dairy and mineral products as well. To think that we have one of the greatest agricultural and livestock States in the United States and no State fair."

C. J. Huggins, proprietor of the Wamego herd of swine and poultry, will move soon to smaller but more convenient quarters one-half mile nearer Wamego, and on account of the change will discontinue the breeding of Chester Whites. After January 1 he expects to give his entire attention in the hog line to the growing of first-class Poland-Chinas and up to that time will make special rates on his choice collection of Chester Whites in order to close it out. Among the notably good things he has to offer is his superb 3-year-old boar, Snow Bank, by Ben Buster Jr. 7431. Snow Bank is out of a Todd's Improved Chester White sow and shows all the blockiness and feeding qualities of that strain, while his sire, by Ben Buster, traces directly to the noted Romeo 2d 6729. The Farmer calls the attention of its readers to this sale.

C. J. Huggins, proprietor of the Wamego herd of swine and poultry, will move soon to smaller but more convenient quarters one-half mile nearer Wamego, and on account of the change will discontinue the breeding of Chester Whites. After January 1 he expects to give his entire attention in the hog line to the growing of first-class Poland-Chinas and up to that time will make special rates on his choice collection of Chester Whites in order to close it out. Among the notably good things he has to offer is his superb 3-year-old boar, Snow Bank, by Ben Buster Jr. 7431. Snow Bank is out of a Todd's Improved Chester White sow and shows all the blockiness and feeding qualities of that strain, while his sire, by Ben Buster, traces directly to the noted Romeo 2d 6729. The Farmer calls the attention of its readers to this sale.

Save the Pennies.



The butter fat left in the skim-milk by the old process of dairying would go a long way toward educating the boys and girls if saved and converted into fine flavored, high quality butter.

The Sharples Separators will save the butter fat and make it sell at the highest market price. Learn all about them in our free Catalogue No. 19.

The Sharples Co.,
Canal & Washington Sts.,
CHICAGO.

P. M. SHARPLES,
West Chester, Pa.
U. S. A.

ers to the alteration in Mr. Huggins's ad., in another column.

Sparks Bros. Horse and Mule Company write: "We desire to announce to our friends and patrons the entire removal of our horse and mule business to the Kansas City Stock Yards. We make the move to obtain more room, better shipping facilities, etc., which is made imperative by our growing business. We occupy the stable between Sixteenth and Seventeenth streets on west side of Genesee street. Have a capacity for an almost unlimited number of mules and horses. Feed and handle our own stock and promise to the public an establishment economically managed in every department. We will keep at all times in our pens from 600 to 1,500 head of mules and invite the public to visit our stables and inspect our stock. Having been identified with the horse and mule trade of Kansas City during the past sixteen years, we promise the same fair and honorable treatment in the future as in the past."

Mr. D. Trott, of Abilene, Kans., in conversation with Kansas Farmer representative, said: Now is a good time for any one needing new blood in his herd to order one or more good pigs, as they are cheaper now than they will be later. I have several boars and sows sired by Tecumseh Chief 2d that are fine. Also some nice ones sired by Ideal U. S. and Corwin King. I have several Duroc-Jersey boars and sows sired by King Victor, Trott's Ruby, Young America, etc., and out of as good sows as one can find. Prices reasonable. The following letter which was received a few days ago speaks for itself. It was from an Illinois customer: "Mr. D. Trott, Abilene, Kans.: Dear Sir:—The Duroc-Jersey pig was received in good shape, and I must say I am well pleased with him. He is the best all-round pig ever shipped to this place, and farmers here all say the same thing. When I want another pig you can have my order. Thanking you for your prompt and honest dealing, I am, yours truly, Theo. D. Hoffman."

Col. J. N. Harshberger, Lawrence, Kans., is making a number of highly successful sales for our leading breeders. He thinks that there is not enough bulls of the beef breeds of any age to supply the demand.

Kirkpatrick & Son, Connor, Kans., will hold their ninth annual sale of Poland-Chinas at Tonganoxie, Kans., Thursday, Nov. 2, 1899, and say that owing to the entire destruction of their grain crop and alfalfa by backwater from the floods in the Missouri River, the valley trade being cut off thereby, they hold the sale at Tonganoxie and will reduce their stock hogs more than they will their intention of doing. They will sell a portion of their choicest breeding stock and young things they had intended to add to it. This means that they will sell 4 Chief Tecumseh 2d sows, their Perfect I Know and Missouri Black Chief gilts, and a number of choice Hadley Jr. young sows, Young Hadley and 2 Chief Tecumseh 2d fall boars. All of these are worthy the attention of best breeders. Their entire offering is from the 5 most fashionable families of the breed, and if you will send for their catalogue you will see what this means. They say they are not going to waste catalogues this year by sending them indiscriminately to possibly indifferent receivers, but will be glad to send them to all interested enough to call for them by card or letter.

Elsewhere in this issue will be found the announcement of the very successful and noted breeder, Mr. E. E. Axline, of Oak Grove, Jackson County, Missouri, who will make his fourth annual sale at his farm on Saturday, October 28. The offering will consist of 8 yearling boars, 10 extra good yearling sows, 28 spring boars and 29 nice smooth spring gilts. The visitor finds that Mr. Axline is about right when he states that "While I have not raised as many

A HINT FOR HUNTERS

YOU can get only two shots at the most with a double-barreled gun, but a

WINCHESTER REPEATING SHOTGUN.

gives you three, four, five, or even six shots before the game is out of range. The Winchester Repeating Shotgun is now made in "Take Down" style, and can be carried in a Victoria case like a double-barreled gun. It combines rapidity, reliability, and strong shooting qualities with a price within reach of everybody's pocketbook. For sale by dealers everywhere.

FREE—Send name and address on postal for 158-page catalogue
Winchester Repeating Arms Co., 188 Winchester Ave., New Haven, Ct.

pigs this year as usual, they are growthier, more uniform in size and better developed. There are far too many to specially individualize yet one cannot refrain from mentioning Nos. 1, 2, and 3, yearling boars, either of which are good enough to head herds. Then Nos. 4, 5, and 6 by the \$1,000 Model Boy 18545 S., the boar that has done great work in the herd, are good enough to go anywhere. Of the sure good things, worth more money than they will probably bring, the three Chief Tecumseh 2d pigs, 2 boars and a gilt, catalogue Nos. 17, 18, and 19, ought to please the most exacting breeder in the land. By some, the litter by A's Chief 21014, a son of Chief Tecumseh 2d, is considered the choice of the offering. There are in the litter one boar and eight gilts, Nos. 24 to 31, inclusive. If the reader will send for a copy of the sale catalogue, full particulars concerning the breeding and terms of the sale can be had. In the catalogue is a very true picture of the three herd boars, Model Boy 18545 S., A's Chief 21014 S., and Western Wilkes 12846 S. A study of this trio of sires gives one a good idea of the character of the sale offerings.

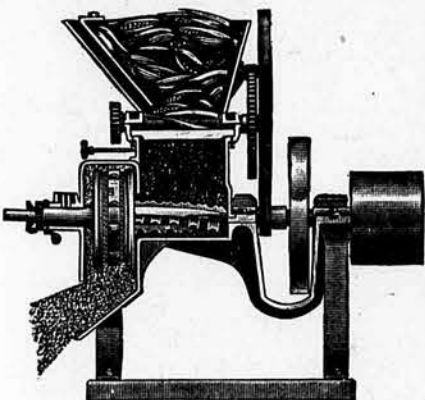
Those who have been engaged during the past quarter of a century in breeding registered Shorthorn cattle in this country are more or less favorably acquainted with the success of the Clays of Clinton County, Missouri. Mr. Clay states it about right when he says of the 58 head that have been selected and catalogued, "I have always kept the best and sold the rest. I am going to reverse the rule this time, by selling the best and keeping the rest." In the offering will be 14 bulls which lot will include the herd bull 133d Duke of Wildwood 123416. His sire, Combination 114814, is a nicely bred Cruickshank individual. His worth is very strongly attested in the very Scotch bulls and heifers sired by him now in the herd. The other bulls are a strong growthy lot possessing very desirable Cruickshank character. In the female division are 25 cows 2 years old or over that are in the judgment of the writer the best lot of females individually and collectively yet offered at public sale at Kansas City in recent years. Mr. Young has cut out 52 head from his herd, that is now under the charge of Thomas Minton, who so successfully showed the Mitchell, Ill., herd for several years, and will offer them on November 2, the day following Mr. Clay's sale. There will be 13 bulls and 28 females, 2 years old or over. There will be 11 yearling heifers and youngsters. The visitor finds a strong smooth lot of very desirable cows and the youngsters are the get of Crown Prince of Oakwood 122300, a Mastin bred bull. He is a bull of much substance, and a mellow one, the feeder's kind. His get are as good as can be found in any herd. The females old enough will have been bred to the Gentry bred \$600 bull, Victor Butterfly 140127.

Publishers' Paragraphs.

The author of "In His Steps," the famous religious book, of which over 3,000,000 copies have now been sold, has been induced to answer, in an article which he has sent to The Ladies' Home Journal, the question which unconsciously comes to the mind after reading his book: "Is this plan practicable in our present daily life?" Mr. Sheldon does not evade the question, but answers it in a direct and vigorous manner, and tells exactly what he believes would be the effect of his plan upon modern business methods and present-day social life.

The beautiful Berkshire region has found many appreciative historians, but its charms have not yet been exhausted. No better brief account of the principal business center of this region has yet appeared than the article on "Adams and North Adams," by Mr. Clinton Q. Richmond in the October New England Magazine. Mr. Richmond is a prominent citizen of North Adams, interested in promoting the welfare of his city and well informed on all points of its history. The story of the tunneling of the Hoosac Mountains is a most interesting feature of his account, while his enthusiastic description of the beauties of the scenery in that section of the State will be appreciated by all lovers of the Berkshire hills. The article is fully and well illustrated, with views which for the most part were especially prepared for use in this connection.

The Kelly Duplex Mill shown herewith is manufactured by the O. S. Kelly Co., of Springfield, Ohio. It has been before the trade for so great a length of time and



has proven so satisfactory that we can not refrain from giving it a word of commendation at this time. This mill has duplex grinders or buhrs. This is really a much greater advantage than might at first appear, for it means that the grain is ground twice at a single operation. Indeed, we think that the Duplex must be the best representative among feed-grinders of the now universally accepted gradual reduction process of grinding. First of all, it has a system of breakers, which break up the corn and cob, dropping it to the bottom of the hopper, where it is again further crushed and reduced in the process of being fed into the duplex grinders. This means that there are really four gradual reductions from the whole ear corn to the finished meal. In addition to the above advantage, this is a strong, durable mill of large capacity, and one well calculated to give satisfaction under almost any conditions. Should any of our readers be needing a feed-grinder they

will do well to correspond with these people before buying. Ask for catalogue, etc.

The Kansas Farmer takes pleasure in presenting to its readers on page 14, an advertisement for the Des Moines Incubator Co. This is a firm whose incubators and brooders have been highly successful, both at the leading shows of the country and in the hands of farmers and poultry breeders. They are simple in construction and highly effective in their work. They are so easily operated that no farmer need fear failure. On this score, however, there is little to risk as the manufacturers make abundant guarantee of the value of their machines. These incubators are made in various sizes from the little 54 egg Crescent to the 800 size, especially designed for broiler establishments. In price, they are as low as any first-class goods can be produced, although they do not pretend to compete with the firms that get out a cheap machine designed solely to sell and without regard to results in the hands of the buyers. For illustrated catalogue containing full description and illustration and prices, send 6 cents to the Des Moines Incubator Co., Box 83, Des Moines, Iowa.

Deafness Cannot be Cured

by local applications, as they cannot reach the diseased portion of the ear. There is only one way to cure Deafness, and that is by constitutional remedies. Deafness is caused by an inflamed condition of the mucous lining of the Eustachian Tube. When this tube gets inflamed you have a rumbling sound or imperfect hearing, and when it is entirely closed Deafness is the result, and unless the inflammation can be taken out and this tube restored to its normal condition, hearing will be destroyed forever; nine cases out of ten are caused by catarrh, which is nothing but an inflamed condition of the mucous surfaces.

We will give One Hundred Dollars for any case of Deafness (caused by catarrh) that cannot be cured by Hall's Catarrh Cure. Send for circulars, free.

F. J. CHENEY & CO., Toledo, O.
Sold by Druggists, 75c.
Hall's Family Pills are the best.

New Through Pullman Service Between Denver and St. Louis.

On June 18 the Great Rock Island Route inaugurated through Pullman Sleepers between Denver and St. Louis via Kansas City and the Missouri Pacific R'y. East-bound car leaves Denver daily at 2:35 p. m. on the "Colorado Flyer," arriving in St. Louis 6:15 p. m. the next day. West-bound car leaves Kansas City daily on "Colorado Flyer," at 6:30 p. m., arriving in Denver 11 a. m. next day. This is the fastest through car line between Denver and St. Louis. The cars are broad vestibuled, of the latest pattern and most luxurious type. Advantages in patronizing this service will be: The quickest time, no change of cars, absolute comfort. The best Dining Car Service in the world. For full information see your agent or write
E. W. THOMPSON, A. G. P. A., Topeka.

Kansas Farmer and Kansas City Star.
Kansas Farmer and Kansas City Weekly Star, both ordered at one time, one year, \$1.15.

Kansas Farmer and Kansas City Daily Star, both ordered at one time, one year, \$4.00.

Address all orders to the Kansas Farmer Company, Topeka, Kans.

THE STRAY LIST.

FOR WEEK ENDING SEPT. 21, 1899.
Crawford County—F. Cunningham, Clerk.

MULE—Taken up by Nels Smith, in Sherman tp., September 13, 1899, one brown mare mule, 13½ hands high, slight collar marks; valued at \$20.
MULE—By same, one brown mare mule, 13½ hands high, small white spot at top and back part of right hip; valued at \$20.
Both supposed to be about 5 years old.

FOR WEEK ENDING SEPT. 28, 1899.
Harvey County—S. M. Spangler, Clerk.

HEIFER—Taken up by F. T. Jacobs, in Newton tp., August 28, 1899, one red heifer, 2 years old, a little white between fore legs, both ears cropped; valued at \$18 or \$20.

FOR WEEK ENDING OCTOBER 12, 1899.

Nemaha County—A. G. Sanborn, Clerk.
TWO HOGS—Taken up by J. W. Everhart, in Caploma tp. (P. O. Caploma), August 17, 1899, two black shoats with white feet (one has white face), 5 or 6 months old; valued at \$6 each.

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.

WANTED—To trade for, or buy, a first-class jack and four thoroughbred Hereford bulls. Ed Warner, Mullinville, Kans.

FOR EXCHANGE OR SALE—The pure Cruickshank bull My Lord 116563. Bred by Col. Harris, sired by Imported "Spartan Hero" 77932; dam Imported "Lady of the Meadow" vol. 30, page 615. Both from Cruickshank herd in Scotland. H. W. McAfee, Topeka, Kans.

AGENTS—To sell our cut price Xmas books; 50 cent A book, 15 cents; \$1 book, 25 cents; \$1.50 book, 50 cents; \$2.50 book, 75 cents; credit given, freight paid, outfit free. Ferguson Publishing Co., 480 Fifth Street, Cincinnati, Ohio.

FOR SALE—A few Rose Combed White Leghorn cockerels; choice birds, at 50 cents each. Mrs. John Hill, Vinland, Kans.

FOR SALE—Fancy Poland-China pigs, very cheap. G. W. Harman, Ridge, Kans.

THE WIZARD OF THE WEST.

Prof. S. A. Weltmer, of Nevada, Mo., Astounds the World by His Remarkable Cures.

HIS METHOD TAUGHT TO ALL.

Disease, with its countless fears and pains, beats against the human constitution with agonizing results. This acknowledged demon to human happiness and peace was not born of Nature, nor of God;



PROF. WELTMER.

wonderful man has put his method to a severe test, and the outcome of it is, that in less than two years he has cured more than 100,000 afflicted of every disease known to man or woman. His Method goes to the very foundation of the disease, and without the aid of drugs or the surgeon's knife he in a perfectly natural manner places the entire constitution in that condition in which Nature meant it to be, thereby dispelling disease as if by magic. His Method is so perfect, that in its wide scope it reaches all classes of people, for through it, Prof. Weltmer cures patients at a distance just as readily and permanently as he does those that come to Nevada for treatment. Through the courtesy of that great scholar and scientist, Prof. Kelly, who is the collaborator of Prof. Weltmer, we are able to publish a few of the many thousands of testimonials in his possession.

Hon. Press Irons, Mayor of Nevada, was afflicted with kidney and bladder troubles for ten years and could find no relief in the usual remedies. In one week he was completely restored by Prof. Weltmer.

Mrs. Jennie L. Linch, Lakeview, Mo., was for two years afflicted with ulceration of the womb, heart and stomach troubles and general debility; was reduced to a mere skeleton. Cured by the Weltmer Absorbent Treatment. In less than 50 days gained 15 pounds.

Mrs. Lavina Dudley, Barry, Ill., suffered for thirty years with neuralgia and stomach troubles. Nothing but morphine would relieve her. Permanently cured in a few weeks by the Absorbent Method of treatment.

Mr. John S. Small, Colfax, Ill., was deaf in his left ear for seven years; could not hear a watch tick when placed against his ear. Was permanently cured in three days by Prof. Weltmer.

Anyone writing to Prof. S. A. Weltmer, Nevada, Mo., will receive a 40-page illustrated magazine and a list of testimonials from men and women who owe their health and happiness to Weltmerism; also much information on this science of healing.

TEACHES HIS METHOD TO OTHERS.

The American School of Magnetic Healing is organized under the laws of the State of Missouri. Prof. Weltmer is the president of this institution, and Prof. J. H. Kelly the secretary and treasurer. It is impossible for Prof. Weltmer to attend to the enormous demands made upon him to cure. He, therefore, wishes others to take up his profession, so that he may call upon them to assist him in his noble work. With this in view the American School of Magnetic Healing was founded. The method perfected and in use by this school is so complete in all its details that the students become as efficient as Prof. Weltmer himself, in this great art to cure, in ten days. This noble profession is taught either by mail or personal instructions. Any one who desires can learn it, and any one who learns can practice it. This has been abundantly proven by the great number who have been instructed and who are in the active practice of healing by this method. This is beyond doubt the best paying profession of the age, as students who have learned this method through the American School of Magnetic Healing are earning from \$10 to \$50 per day.

The following letter is one of the many in the possession of the American School of Magnetic Healing:

Prof. J. H. Kelly, Secretary, Nevada, Mo.:
Dear Sir:—Your mail course in Magnetic Healing was received some months ago. After reading same, I caught your idea and at once proceeded to put it into practice, and found I could accomplish all, and even more than I anticipated. I have never failed to get immediate results in all cases treated, and I have made a number of cures in cases that have been given up by the best of our physicians as incurable. I expect to devote my entire time to this work, but should I never use it outside of myself or family, would consider it the best investment I ever made.

J. T. IGLEHART, Meridian, Miss.
By addressing Prof. J. H. Kelly, Sec'y., Nevada, Mo., you will receive full instructions free of charge.



PROF. KELLY, Sec'y. and Treas.

VALUABLE HERD BOAR—Will sell or exchange for gilts. Look Me Up, by Look Me Over, out of a granddaughter of Old One Price; 3 years old; sure breeder and all right; headed my herd two years and must sell for lack of use. Address R. H. Wheeler, Lawrence, Kans.

RAMS FOR SALE—Fifty registered Merino Stock R. bucks. Inquire or address Mrs. S. A. Jewett, Station A, Lawrence, Kans.

ORCHARD PARK POULTRY YARDS—Barred Plymouth Rocks. Prize-winning high-scoring birds. Cockerels and pullets \$2 to \$6. Mrs. J. R. Whitney, Station A, Lawrence, Kans.

TREE PLANTS—Fall planting. Honey and Black Locust. 500,000 plants. 12 to 18 inches, \$2.75 per 1,000; 20 to 30 inches, \$3.50 per 1,000. J. E. Mellecker, Spearville, Ford Co., Kansas.

FOR SALE OR EXCHANGE—Percheron stud colt. Took two ribbons at Anderson county fair last week. Sire and dam will bear close inspection. J. M. Slonaker, Garnett, Kans.

FOR SALE—A boar pig which will make a fine herd header for any breeder. Sired by Greenwood Look-a-grandson of Greenwood, the prize-winner at the World's Fair. J. M. Collins, Welda, Kans.

FOR SALE—What's Wanted Jr. 2d No. 18534, good enough in show condition to go anywhere. Extra fine breeder; am closing out. Sired by the show boar What's Wanted Jr., No. 10026. First dam Fanta No. 14634, and four dams back of her are prize-winners. F. W. Baker, Council Grove, Kans.

POLAND-CHINAS—No better anywhere. \$5 each. Write for breeding. M. C. Hemenway, Hope, Kans.

STRAWBERRIES—Irrigated plants for fall and spring setting for sale. Write for price list. H. E. GOODELL, Tecumseh, Kans.

RAMS FOR SALE—A few choice thoroughbred R. Cotswold and Shropshire rams at \$10 per head. Write or call on Geo. B. Bell, Wakarusa, Kans.

FOR SALE—Twelve yearling grade Shropshire rams \$12 to \$15. Also breeding ewes. E. W. Melville, Eudora, Kans.

WANTED—To sell Polands and Berkshires; all ages. Very cheap. O. P. Updegraff, North Topeka, Kans.

\$40 to \$100 a month for man to manage an office at home, appoint and superintend agents. Chance for advancement. Permanent position. Write now. K. & K. Manufacturing Co., 56 North Sixth St., Philadelphia, Pa.

BOAR PIGS—Sired by Hadley Model T 21927 for sale. Walter Roswurm, Council Grove, Kans.

DUROC JERSEY SWINE—Choice registered stock from best of families. For sale by J. C. LEACH, Carbondale, Kansas.

DUROC-JERSEY SWINE—Young boars and gilts from best strains. None but first-class stock shipped. J. W. Shepherd, Chanute, Kans.

FOR SALE—10 high-grade Hereford and 10 high-grade Shorthorn bulls, 12 to 20 months old. Address Hugh A. Hodgins, Topeka, Kans.

BREEDERS' ANNUAL REPORT FOR 1899—The great Kansas Live Stock Manual and proceedings of the Ninth Annual Convention of the Kansas Improved Stock Breeders' Association, contains 125 pages; price 25 cents. Address H. A. Heath, Secretary, Topeka, Kans.

FOR SALE—Imported English Coach stallion and Galloway bulls. W. Guy McCandless, Cottonwood Falls, Chase Co., Kans.

100 Duroc-Jersey swine for sale. On account of health will sell all my stock except 10 brood sows, at reduced rates next 30 days. Males old enough to use; gilts and pigs in pairs and trios. Pedigree with every pig. M. H. Alberty, Cherokee, Kans.

WANTED—Every breeder in Kansas to become a member of the Kansas Improved Stock Breeders' Association. Send membership fee of \$1.00 to H. A. Heath, Secretary, Topeka, Kans., and you will receive the Breeders' Annual Report for 1899.

FOR SALE—Imported and full-blood Percheron, Clydesdale and Coach stallions. Good individuals, colors and ages. For further information address W. H. McMillen, Manager, Box 204, Topeka, Kans.

675-ACRE FARM FOR SALE—Only ten miles from the State capital; improved; has never failing water. \$15.50 per acre if taken soon. Address J. Ferguson, Station B, Topeka, Kans.

BERDEEN-ANGUS BULLS—Twelve extra individuals of serviceable ages; registered. Wm. B. Sutton & Son, Russell, Kas.

FOR SALE—Hadley Model T No. 21927. Will take a boar pig of superior breeding and difference Walter Roswurm, Council Grove, Kans.

BLOSSOM HOUSE—Opposite Union depot, Kansas City, Mo., is the best place for the money, for meals of clean and comfortable lodging, when in Kansas City. We always stop at the BLOSSOM and get our money's worth.

FOR SALE—A livery barn with complete outfit. Only one in town, has splendid business, but owing to bad health am compelled to have change of climate. Earns \$100 net per month. Address H. B. Duncan, Hope, Kans.

FOR SALE—About 175 May Lambs and 50 yearlings. Merino grades, all wethers, strong and healthy. Come and see them. A. M. Victor, Spearville, Ford County, Kans.

REGISTERED SHORTHORN BULL CALVES—P. Prices, quality considered, defy competition. D. P. Norton, Dunlap, Kans.

GOLDOMETER for locating Gold, Silver, in a pocket case; also rods and Spanish needles. Catalogue, 2c. stamp. B. G. Stauffer, DEPT. K. F., HARRISBURG, PA.

STOCK FIELD WANTED

To winter one thousand (1,000) cattle from Colorado. Also eight thousand (8,000) bushels corn to feed with it. Good timber shelter and plenty open water required. State exactly what you have, with price. Address,
OSCAR WILKINS, Alamosa, Colorado.

For Farm Loans

In Eastern Kansas and Oklahoma at favorable rates see or write

The Deming Investment Company
Real Estate Building, Topeka, Kansas.

The Home Circle.

HOW TO TELL THE AGE OF HORSE.

To tell the age of any horse,
Inspect the lower jaw, of course.
The sixth front tooth the tale will tell,
And every doubt and fear dispel.

Two middle "nippers" you behold
Before the colt is two weeks old;
Before eight weeks two more will come;
Eight months the "corners" cut the gum.

The outside grooves will disappear
From middle two in just one year;
In two years from the second pair;
In three the corners too are bare.

At two the middle "nippers" drop;
At three the second pair can't stop.
When four years old the third pair goes;
At five a full new set he shows.

The deep black spots will pass from view,
At six years from the middle two.
The second pair at seven years;
At eight the spot each "corner" clears.

From middle "nippers" upper jaws,
At nine the blacks will withdraw;
The second pair at ten are white;
Eleven finds the "corners" light.

As time goes on the horseman know
The oval teeth three-sided grow;
They longer get, project before
Till twenty; when we know no more.
—Farming World, Edinburgh.

The Perfect Foot.

A perfectly formed foot should, according to anatomists, be as long as the bone in the forearm, which extends from the elbow joint to the wrist. This seems to be abnormally long in a tall person, but is the measurement taken by artists. Of course, arms are sometimes out of proportion, being far too short for the general height, but it is rare that an arm is too long for the stature of a person.

On the Wrong Man.

Bret Harte is so frequently complimented as the author of "Little Breeches," says the Argonaut, that he is almost as sorry it was ever written as is Col. John Hay, who would prefer his fame to rest on more ambitious work. A gushing lady, who prided herself upon her literary tastes, said to him once: "My dear Mr. Harte, I am so delighted to meet you. I have read everything you ever wrote, but of all your dialect verse there is none that compares to your 'Little Breeches.'" "I quite agree with you, madam," said Mr. Harte, "but you have put the little breeches on the wrong man."

His Friend.

"My friend—"
"Wait. Have you come here to borrow money or to solicit a subscription for anything?"
"No, sir."
"All right; go ahead then; you may call me your friend."
"My friend, as I was about to say, life is uncertain at the best. No man knows when he starts for his office in the morning whether he will be permitted to return home alive or not. Now, the company that I represent has just opened a new policy which—"
"Oh, send your doctor around. I'm trapped."—Chicago Times-Herald.

Our Burden of Taxation.

Friends and neighbors, the taxes are indeed heavy, and if those laid on by the Government were the only ones we had to pay, we might more easily discharge them. We are taxed twice as much by our idleness, three times as much by our pride, and four times as much by our folly, and from these the commissioners can not ease or deliver us by allowing an abatement. It would be thought a hard government that should tax its people one-tenth part of their time to be employed in its service, but idleness taxes many of us much more if we reckon all that is spent in absolute sloth or doing of nothing.—Benjamin Franklin.

Jewels Possess Organic Life.

Real jewels, scientists now assert, possess organic life. It has long been known that opals and pearls grow dull when worn by invalids, and latterly rubies and the turquoise are found to share the same sensibility. Pearls are more indicative of the condition of the wearer than any other gem. Though this delicate stone lives longer than a flower, it seems to have a form of life, which, like that of the flower, loses color and brilliancy, and actually dies. Nor is this property unfounded in reason. Science has latterly learned much concerning germs and their influence in the propagation of health and disease. Those invisible emanations which surround the person wearing gems penetrate the interstices of the jewel and actually increase or decrease its brilliancy. The inference is a true one that rings and pins should be laid aside

by the invalid. Even in good health, it is better to give them an occasional rest. To inclose them in their cases and put them away, is to insure an access of luster. Even clothing should also be treated to rest. It freshens up wonderfully the frock or wrap to shake and brush the garment and hang it in a dark closet.

A Bad Habit.

The way some people drag miscellaneous French phrases into the conversation and letters reminds one of the currants distributed through a third-rate bun—what they lack in quality they make up in quantity. The use of a French term that has no English equivalent is a different matter, of course. A man who, as one of his friends puts it, knows how to keep silent in eleven languages, and has made a handbook of Chinese conversation, as well as a treatise on modern Greek, might be in darkest ignorance of any language but English for all his conversation shows. So severe is his taste for plain English that he scrupulously translates all of the foreign phrases that have crept into general use. He even disdains to say *creme de menthe*, and simply asks for cream of mint when he happens to want it. It really sounds rather distinguished.—Philadelphia North America.

Meats, and What to Serve With Them.

Roast beef—Tomato sauce, grated horseradish, mustard, cranberry sauce, pickles.

Roast pork—Apple sauce, cranberry sauce, gooseberry sauce and baked sweet potatoes.

Roast veal—Tomato sauce, mushroom sauce, onion sauce and cranberry sauce. Horseradish and lemons are good.

Roast mutton—Currant jelly, caper sauce.

Boiled mutton—Onion sauce, caper sauce.

Boiled fowls—Bread sauce, onion sauce, lemon sauce, cranberry sauce, jellies; also cream sauce.

Roast lamb—Mint sauce.

Roast turkey—Cranberry sauce, currant jelly.

Boiled turkey—Oyster sauce.

With venison or wild duck—Cranberry sauce, currant jelly, or currant jelly warmed with port wine.

Roast goose—Apple sauce, cranberry sauce, grape or currant jelly.

Boiled fresh mackerel—Stewed gooseberries.

Boiled bluefish—White cream sauce, lemon sauce.

Broiled shad—Mushroom sauce, parsley or egg sauce.

A Chinese Prayer.

A Baptist missionary once sent home an account of a prayer offered by Wang Cheng Sui on the occasion of the visit of two Americans who were on a tour around the world on bicycles. After the bicyclists had ridden to the mission station Wang prayed:

"We thank Thee, Our Heavenly Father, that our eyes have this day seen the real pattern of the 'self-going cart' of the ancients. What mysterious wisdom is Thine! How willing Thou art to impart knowledge to men! But our sins hinder Thy revelations! How stupid have we become through Satan so long! Many years have we lived, and yet to-day for the first time have we seen this marvel of Thy skill, which has enabled Thy servants in the West to understand. Forgive us our sins. Restore us to Thy favor. Communicate to us, also, Thy mysteries, and let us share in the wonderful inventions by which Thou dost make Thy name glorious amongst those who serve Thee. Let us be intrusted with Thy secrets and possess the power of the ancients; so will all our countrymen come to know that we have found the right path, and are servants of the true God."

The missionary thinks it very likely that such a prayer will provoke a smile, but he bids us believe that Wang was in red-hot earnest, and that he simply felt that he had witnessed a miracle and was giving God the glory.—Cincinnati Enquirer.

A Good Story.

The rector of a Somersetshire village, chiefly inhabited by small farmers and their laborers, was being helped one Sunday by a visitor in his house, who had once before preached for him a very learned sermon, utterly over the heads of the congregation. The rector begged him this time to use the very simplest language, and was answered: "Yes, certainly. You shall tell me afterward if I have used one sentence that your people will not have understood." The sermon was preached, and in the evening the preacher was rather hurt at being told that there was more than one sentence which could not have been understood. "Tell me one, pray." "Well, you

Scrubbing Floors

can never be made a pleasing pastime, but one-half the labor will be saved and the results improved by using Gold Dust Washing Powder.

Send for free booklet—"Golden Rules for Housework."

THE N. K. FAIRBANK COMPANY

Chicago St. Louis New York Boston



told them to 'draw their own inference' from certain facts." "But, my dear fellow, every one knows what it is to draw an inference." "Well," said the rector, "we'll ask my groom-gardener. He is one of the most intelligent men in the village, and you shall hear what he says." Accordingly, on Monday, they sought Robert in the garden, and, after a little talk about strawberries and netting and so on, the rector said: "You heard my friend, Mr. H., preach yesterday, Robert?" "Oh, yes, sir; very nice, very nice." "You understood all he said?" "Oh, yes, surely; very nice, very nice!" "Did you hear him tell you to 'draw your own inference'?" "What do you think he meant?" "Oh, yes, sir. I heard him say it, and—why—well—I don't know as I zactly understood; but I were certing o' this, that if it were anything in reason, our mare 'ud draw it!"

Strange Electrical Effect.

"I witnessed a strange and beautiful experiment the other day," said an attache of one of the electrical companies. "A friend who is an expert electrician has a private workshop adjoining his house, and in it he suspended a large sheet of zinc at a height of about ten feet from the floor." The wires holding it up were connected with a battery and the current could be switched on and off at will. The day I was there he got his sister-in-law to come out and stand under the zinc, first letting down her hair, which was chestnut in color and fell in thick tresses clear below her waist. When he turned on the current a wonderful thing happened. That magnificent chestnut mane rose bodily upward and waved out fanwise in every direction from her head like rays from a star. It literally framed her face in a golden-brown halo that must have measured nearly seven feet from side to side.

"The long locks on her crown stood almost erect, and reached to within a foot or so of the zinc, and all through the mass was a faint rippling motion like sunlight on water. The young lady who posed for us was under any circumstances decidedly pretty, but with her hair outspread in that extraordinary manner, she looked like a goddess. The phenomenon was due, of course, to the attraction of the electricity with which the zinc plate was charged, and was merely repeating on a big scale an experiment I have often performed at school. There we used to hold a stick of well-rubbed sealing wax over the head of a small doll and see its hair stand on end. I should think the zinc plate apparatus might be put to effective use on the stage."—New Orleans Times-Democrat.

Read Family Recipes.

Baking Powder Biscuits.—Hot oven—sift flour—roll dough as soft as you can handle. To a teacup of flour add a teaspoonful of powder, butter size of an egg sufficient for a quart of flour. After rolling powder and butter into flour, turn in cold water or sweet milk. Stir until right consistency is reached. Roll lightly. Bake quickly. A little salt.

Raspberry Jam.—One pint of sugar to one pint of raspberries. Mash together and boil two or three minutes.

Currant Jelly.—One pint of sugar to one pint of currant juice; boil juice ten minutes, then add the sugar, stirring until dissolved.

Damson Plums.—One quart plums, two teacups of sugar; water barely to cover.

Pickles.—Do not use metal vessel.

Escalloped Apples.—Put alternate layers of bread-crumbs, sliced apple, sugar, bits of butter, and spice in a buttered crumb-dish; have a thick layer of bread-crumbs moistened with melted butter on top; use one-half cup sugar,

one tablespoonful cinnamon or nutmeg, and a little grated rind or slice of lemon for a three-pint dish; bake one hour, or until apples are soft and the crumbs brown; cover at first to avoid burning.

Omelet.—To six eggs add one tablespoonful flour; about the same quantity of milk as egg; a little salt and pepper.

Shirred Eggs.—Butter a dish; break the eggs into it, being careful not to break the yolks, sprinkle salt and pepper over them and place a tiny lump of butter on each one; add a tablespoonful of cream to each egg. Bake in hot oven until whites are set.

Meat Croquettes.—Pieces of cold meat, boiled or fried ham, chopped as fine as possible; mix with cold mashed potato, an egg or two, a little butter or cream; form into balls; flour them; melt a little butter in a frying-pan and brown the balls; serve hot.

Ham Sandwiches.—Chop the ham fine and season it with salt, pepper and a little mustard. If quite lean add a little melted butter. Cut bread in thin slices.

Grated cheese makes nice sandwiches, as well as a pretty dish for tea table.

Rice Croquettes.—One-half cup of rice boiled tender in salt water. Drain, season with salt and pepper; add one or two eggs mixed in while rice is hot. After rice is cool wet your hands and mold into balls. Roll croquettes first in cracker-crumbs, then in beaten egg and then fry brown in smoking fat.

Duchess Loaves.—One cup mashed potato, seasoned with salt and pepper and mixed with yolk of an egg. Make into loaves half an inch thick, one inch wide, and two inches long. Brush loaves with white of an egg and brown slightly in hot oven.

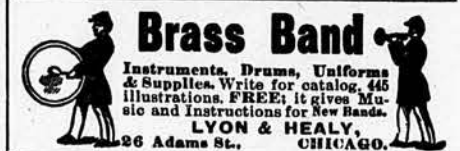
Care of Lamps.

Many housekeepers think there is nothing to learn about the care of lamps; but if the little details here mentioned are adhered to there will be a great difference in the light.

First, a lamp must be cleaned and filled every morning; the burners should be cleaned once a week, and the best way is to boil them in water in which Gold Dust Washing Powder has been added. Put a teaspoonful into a quart of water, and boil ten minutes. The flues should be put in a pan of cold water, and heated slowly until they boil, then take off and let them cool gradually—this toughens the glass.

Fruit Farming Along the Frisco.

An attractive illustrated and thoroughly reliable 64-page booklet, devoted to fruit culture along the Frisco Line in Missouri, Arkansas, Kansas, Oklahoma, and Indian Territory, just issued. A copy will be sent free upon application to Bryan Snyder, G. P. A., Frisco Line, St. Louis, Mo.



Mothers! Mothers!! Mothers!!!

MRS. WINSLOW'S SOOTHING SYRUP has been used for over FIFTY YEARS BY MILLIONS OF MOTHERS for their CHILDREN while TEething, with PERFECT SUCCESS. IT SOOTHES THE CHILD, SOFTENS THE GUMS, ALLAYS ALL PAIN; CURES WIND COLIC, and is the best remedy for DIARRHEA. Sold by druggists in every part of the world. Be sure and ask for "Mrs. Winslow's Soothing Syrup," and take no other kind. Twenty-five cents a bottle.



The Young Folks.

MY BIKE AND I.

Over the hills and away,
I ride in the rosy dawn,
Thro' meadow and dell and glade,
In the charm of the early morn,
My comrades, the little birds,
And the busy humming bee,
Just only my bike and I,
And the best of good friends are we.

Over the hills and away,
With never a thought of care,
Of the busy world behind
Or the burdens that others bear.
We ride on my sunlit way,
Where the brook runs laughing by,
Happy and fearless and gay,
Just only my bike and I.

Over the hills and away,
I ride in the rosy dawn,
Past river and lake and fen,
By orchards and fields of corn,
With a carpet of flowers below,
And a cloudless sky above,
I whistle and sing as I go,
Just I and the bike I love.
—Boston Traveler.

NUREMBURG.

BY ANNA MARIE NELLIS.

NUMBER 70.

Of buildings we concluded to first visit a church, and selected the very finest one in the city. St. Lawrence was a very good man, when he was alive, but wicked men made a martyr of him by broiling him on a gridiron. There are numerous churches in Europe named for St. Lawrence, and this one in Nuremburg bearing his name has two towers which are described as being 77 metres high, and I think that would be about 250 feet, but it makes a difference whether you measure by long metre or short metre, I suppose. Between these two towers are iron bars so arranged as to represent the gridiron upon which St. Lawrence became renowned.

The west front of the church has a magnificent sculptured doorway, and above it a window of stained glass thirty feet in diameter. It is called the "Rose window." Our guide book directed us to go to the side door and knock for admittance. I raised the metal knocker on the door and let it fall twice. It made a noise like a cannon explosion almost, and I feared I had awakened the Countess Sophia of Brandenburg—Ansbach who has been sleeping under the altar for several hundred years. She did not appear, but the old sexton opened the door and very gladly accepted the five cents apiece from us to escort us through the church.

This church was once Roman Catholic but now it is Lutheran. The beautiful stained glass windows in the choir, were made 400 years ago, but the large "Rose Window" above the huge organ, shows to excellent advantage when one is inside the building, and it is the handsomest item in the church for examination. The great "Pyx" or sacrament receptacle, however, is the greatest item for show in St. Lawrence church. It is also called a "ciborium" and "sacramentarium." It is a beautiful sculptured cabinet in the form of a tower, sixty-five feet in height. The top or apex is finished like a winding flower stalk, and bent at the top to resemble a bishop's crozier. The whole of it rests on three kneeling figures which are to represent the three sculptors who executed the work—Adam Kraft and his two assistants, who were employed in the work upon it for over seven years.

There are many other interesting points about this church, but so many other churches will have to be talked about, that a full description of this would not be desirable.

From the church we went to the "Goose market." There were no geese to be seen, but many market women sat around the "Gansemaennchen" with their baskets of fruit which they offered for sale. The "Gansemaennchen" is a fountain with a metal man holding a metal goose under each arm, and from the mouths of these geese the water flows. It was noon-time and the old women were taking "20 minutes for refreshments." They would go up to the fountain, fill their cups with water, and then sit down by their baskets and eat a bit of bread and turnip. They did not eat of the fruit, for that they could sell. I bought some fruit and entered into conversation with the oldest and largest woman there. While I lunched with her I asked her lots of questions about all her folks. She had been on the market for seven years, but then there are lots of nice ladies I know of in Pennsylvania who could beat that record. She could make a profit, sometimes, of 200 pfennigs a day, and that is equal to fifty cents. We became quite well acquainted, and when I left she said: "Aufwiedersehn," and invited me to call again if I passed that way.

Of course, Nuremburg has had its

famous men who were born from among the common people, and became illustrious by reason of superior mental and physical talents, not often possessed by kings and princes. Hans Sachs was a cobbler who lived in Nuremburg 400 years ago. He made shoes and wrote poetry. The shoes are "worn out" and they got him very little gain at the time, while his poetry has immortalized him and has given him a place in the history of Germany, and a fine statue in his native city.

Albert Durer was born in Nuremburg 428 years ago and became a very great painter. To those who are interested in art, it will be worth remembering that Durer, Titian, Raphael and Holbein were all of the fifteenth century, and that Durer was the oldest of the four. While Raphael may have been the greatest artist, Durer was the equal and possibly the superior of the others.

Near the old castle and close to the house where he used to reside, is now a fine bronze statue of Albert Durer, the pride of Nuremburg and of German art. We wandered outside the walls, a half mile from the oldest gate, to St. John's cemetery to see the grave of Germany's greatest painter. It is covered by a huge slab of marble, at the bottom of which is the number 649. It has a Latin inscription, as follows: "Quidquid Alberti Dureri mortale fuit, sub hoc conditur tumulo. Emigravit 8 idus Aprilis 1528." I don't believe Albert himself could understand the meaning of this unless some one explained it. I was informed that it meant: "Whatever was mortal of Albert Durer is contained in this mound. He passed beyond, April, 1528."

We noticed very many of the old grave-stones upon which the favorite inscription was, "Hier ruht in Gott," which means, "Here rests in God."

In the old Carthusian monastery, which is now an art museum, we saw some of the famous paintings of Albert Durer; and in one of the rooms, the manuscripts and some bound volumes of poems by Hans Sachs.

After mentioning these two illustrious citizens of Nuremburg, I will tell about two places in the city where they used to spend some of their leisure time in enjoying the goods things to eat and drink.

In the year 1250 or thereabouts, the Count of Nassau built a castle in Nuremburg. He was a rich man and he built it large and strong. It is there yet, and is known as the "House of Nassau." It has a tower or two and is an object of interest for the usual visitor in the city. We had been told not to miss seeing it. As we came out of St. Lawrence Church we saw a sign which indicated the building as the "Nassau Keller."

Now, both Hans Sachs and Albert Durer used to go to the Nassau cellar for a drink of wine and to smoke whenever their wives made it too interesting for them at home. The "Nassau Keller" is as famous as the "Rathskeller" in Bremen, and we examined it. Wine seems to be the principal beverage served by the maids in attendance, but eatables are also served, and we took a salad and chocolate. The rooms were decorated with flowers and evergreens in honor of the teachers' celebration, which had been held the day before.

There was one other place in Nuremburg which was also a favorite resort for the German poet and the German painter. We saw it on the second day of our visit as we were coming out of St. Sebald's Church, but I will mention it here. The sign over the door is, "Bratwurst-Glocklein," which translated in English would be, "Fried sausage, little bell."

It seems that hundreds of years ago the sexton of St. Sebald's Church was an enterprising German, and when his duties did not keep him busy at the church, he fitted up a little kitchen in the chapel adjoining, and at noon time would fry sausage for the priests, and when the savory meat was ready he would ring a bell above the chapel door, and that gave the name to the place. The fried sausage and the little bell have become famous and are introduced to nearly every visitor.

We first entered the kitchen and were permitted to watch the cooks fry the sausage, and it did give forth a most savory smell. We then passed into the dining-room where we gave our order for "Wurst und Kraut." When it was brought to us it proved to be most excellent to the taste, and we ceased to wonder that the place had been famous for so long a time.

On the wall hung a large picture, which was signed by the name, Carmen Sylva. The little German maid who waited on us explained that it was a picture of the Queen of Roumania, and that she, herself, had written her assumed name under the painting only a

few years ago; that she had been there three different times, the last visit in 1891. It might seem strange that a Queen would exhibit her autograph in a restaurant, but those sausages were good enough to make a king or even an emperor write an autograph a dozen times.

Our waitress seeing we were interested in the place brought me an old beer mug and said it had been Albert Durer's, and that he had drank from it hundreds of times; she also brought me the mug Hans Sachs used, and informed us that these were kept as precious relics of the two great men. Durer's mug was a double affair—a small mug within a larger one. The story goes that when his wife was good natured he brought her to the Bratwurst-glocklein with him, and the inner mug filled with beer would be for her, while he drank all the outer mug would hold; when she was in a temper, and scolded him, he came without her and would have both mugs filled for himself alone. That was the only way he could manage her. Some women are so very unreasonable.

On the wall is scribbled a German poem signed by Hans Sachs, its author; "Schumacher und poet dazu," said the little maid. The present owner of the place paid \$50,000 for it thirteen years ago, but so famous is it, that the patronage has provided him with the money to pay it all.

SAINT SEBALD'S CHURCH.

One of the most useful saints I ever read about is one who used to make headquarters in Nuremburg and vicinity. His name was Sebaldus, but I did not learn his family name. He was not always provided with articles to appease his hunger, nor with other household conveniences for his comfort—that is, in a natural way. But that didn't interfere with any of his business arrangements, for when hungry, he would turn stones into bread, when thirsty he changed water into wine, as he disliked the taste of water, perhaps; and when he was cold, with no other fuel in sight, he would gather an armful of icicles and build an elegant fire. These things they tell about him, and I am not asserting that he really did perform these miracles.

A very large and handsome church was built in Nuremburg before the year 1100, and named in honor of this useful saint. It is located on the north side of the river Pegnitz, while St. Lawrence Church is on the south side. The river thus keeps the two saints away from each other and divides the city into two nearly equal parts; the one called the "Lorenzerseite," the other "Sebaldersseite." Both these churches were Roman Catholic as to religious forms until in Martin Luther's time they became Protestant. The change was so easy and gradual in Nuremburg that everything in the churches were preserved and practically adopted by the Protestants—saints and all.

We entered St. Sebald's from the north side. This entrance is named the "Bride's Portal," and on the one side of the doorway are sculptured figures representing the "five wise virgins," who with excellent foresight had filled their lamps with kerosene early in the morning; while on the other side are represented the "five foolish" ones, who were too lazy to attend to household duties. This is why it is called the "Bride's Portal," but the reason seems a very poor one, surely.

Inside the church are several fine altars, many good sculptured figures, beautiful stained glass in the windows, some paintings by Wohlgemuth and Hans von Kulmbach, some tombs of the old Margraves and Burgraves, and other items worthy of inspection and description.

But the one thing which is most attractive to all visitors is St. Sebald's shrine and tomb, which is the finest work of its kind in any church in Europe. It was worked in bronze by Peter Vischer and his five sons, who labored at it for thirteen years. It weighs eight tons, and is supported on the backs of sixteen snails assisted by four dolphins, which stand on their chins, one at each corner, and lift by the curve of their tails. It is very beautiful.

There are twelve tall pillars supporting the fretted canopy which forms three graceful arches, with forty-six small turrets and pinnacles. In the pillars are twelve sculptured figures rep-

THESE LADIES



HAVE NEVER
Tried the great
system regulator
**PRICKLY ASH
BITTERS.**

Because they think it is
nasty and bitter, disagreeable
to the stomach and violent
in action.

ASK THESE



They will tell you it is
not at all disagreeable.
And as a cure for Indigestion,
Constipation, Kidney
Disorders it is un-
excelled.

resenting "the twelve apostles." The beautiful coffin containing the ashes of the saint, is placed high up under the canopy, and it looks like a miniature temple, in itself. Beneath the coffin on the side of the shrine are many pictures in relief, representing actual and mythical people and acts. Upon close examination I noticed one showing St. Sebald changing stones into bread; another one, water into wine, while in another he has just started a roaring campfire with icicles; so I knew the stories about him were true.

Opposite St. Sebald's Church is the old rathhouse, now in its three hundred and eightieth year. In the upper portion of this building is the municipal picture gallery. I saw there a fine painting representing the funeral of King Gustavus Adolphus, of Sweden, who was killed at the battle of Lutzen, in Saxony.

The key to health is in the kidneys and liver. Keep these organs active and you have health, strength and cheerful spirits. Prickly Ash Bitters is a stimulant for the kidneys, regulates the liver, stomach and bowels. A golden household remedy.

LAWRENCE Business College LAWRENCE, KANSAS.

A practical, up-to-date school. Facilities of the best and work most thorough. Enroll any time. Catalogue and information sent upon request.

Good... Positions

await Good Stenographers, especially men. We can fit you for good positions in one-half the time required in other schools. Much less expense, too. Why? Simple, efficient methods. Adopted by Baker University and Washburn College, two of the foremost colleges in the State. Why ride in ox carts when electric cars are available? Pupils enter any time. Individual instruction.

GEO. E. DOUGHERTY'S SCHOOL OF
SHORTHAND AND TYPEWRITING,
725-727 Kansas Ave., Topeka.

LEARN AT HOME.

If unable to come to School. Send 5 cents for First Lesson, Complete Alphabet and full particulars

The Topeka Business College

LEADING SCHOOL OF BUSINESS, SHORTHAND, PENMANSHIP & TELEGRAPHY

Large School. Reasonable Rates. Good Positions. Catalogue Free. Address L. H. Strickler, Topeka, Kans.

KANSAS FARMER

ESTABLISHED IN 1863.

Published Every Thursday by the

KANSAS FARMER COMPANY.

E. B. Cowgill, Pres. J. B. McAfee, Vice Pres.
D. C. Nellis, Sec'y and Treas.OFFICE:
No. 116 West Sixth Avenue.

SUBSCRIPTION PRICE: ONE DOLLAR A YEAR.

E. B. COWGILL, Editor.

H. A. HEATH, Advertising Manager.

ADVERTISING RATES.

Display advertising, 15 cents per line, agate (fourteen lines to the inch).
Special reading notices, 25 cents per line.
Business cards or miscellaneous advertisements will be received from reliable advertisers at the rate of \$5.00 per line for one year.
Annual cards in the *Breeders' Directory*, consisting of four lines or less, for \$15.00 per year, including a copy of *KANSAS FARMER* free.
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, Kans.

TRUST METHODS.

The once famous Belcher Sugar Refinery, at St. Louis, is now in process of dismantling. It began business in 1840, and since that time it has made and lost fortunes for its owners. A few years ago the sugar trust acquired the property at \$750,000, the amount of the indebtedness. The trust is reputed to have sunk \$200,000 in trying to operate the plant. The machinery goes to Hawaii and other distant sugar lands. The immense buildings are to be sold.
This removal of one of the "land marks" of St. Louis, at a time when anti-trust conferences are in fashion, and anti-trust speeches and essays are popular, may be taken as notice that the industry which gets in the way of a healthy and well organized trust should lose no time in making its funeral arrangements.

A case is just now at hand. In speaking of the "sugar war" now on among refineries, the American Grocer says:

"Judging from the course of events, it is apparent that the trust is being conducted on the theory that the elimination of the Doscher refinery is best for its interests and that of the jobbers. When that is accomplished, we may reasonably expect a termination of the war—a working plan between the other refineries and the trust that will mean a continuation of 12 per cent dividends on sugar stock and a profit to jobbers; cheap sugar to consumers, whose greatest prosperity lies in having all American industries on a profit-earning basis."

The methods by which the sugar trust fights an adversary which it desires to "eliminate" are intricate, and too much space would be required to describe them there. That money is the chief weapon and that confidence is an important characteristic is well shown by the following statement from the American Grocer:

"This fight between the refineries, instead of being of interest to a few firms, affects the income of over 11,000 stockholders in the American Sugar Refining Company alone, and yet these stockholders, having unlimited confidence in Henry O. Havemeyer, voted to place the enormous surplus of the American Sugar Refining Company at his disposal, to do as he may deem best for the interests he represents."

BARLEY, CORN, AND BRAN FOR HORSES.

Editor *Kansas Farmer*:—What proportion of corn and barley (ground) and bran should I take to make a suitable feed for a family horse, in connection with upland prairie hay?

M. A. W. JORDAN.

Larned, Kans.

Our correspondent says nothing about the relative prices of the barley, corn, and bran. Are we to assume that the prices of these feeds at Larned are so nearly equal that this element may be left out of the consideration?

The horse needs a balanced ration. His requirements, as figured out by the German experimenter, Wolff, are, when moderately worked, 1.8 pounds protein, 11.2 pounds carbohydrates, and .6 pound of fat per day. These figures represent the digestible materials for a 1,000-pound horse. It will not do to simply find a feed containing these amounts of

the several substances, but a feed should be compounded having these substances in digestible form in about these proportions. The problem will be simplified at no serious cost of accuracy if we add the carbohydrates and fats and compare them with the protein.

The required protein is 1.8 pounds and the sum of the required carbohydrates and fat is 11.8 pounds. The ratio is about 1 of protein to 6.5 of carbohydrates and fat. In like manner the ratios in the digestible matter in equal quantities of the several feeds may be estimated from standard analytical data. The following table shows the ratios thus estimated on equal quantities of corn, barley, and bran, the mean of these ratios and the ratio required for the horse moderately worked:

DIGESTIBLE FOOD MATERIALS IN 100 POUNDS.

	Protein.	Carbohydrates and fats.	Total.
Corn.....	7.02	70.07	77.09
Barley.....	8.69	66.43	75.12
Wheat bran.....	12.01	44.10	56.11
Totals.....	28.62	181.50	210.12
Averages.....	9.54	60.50	70.04
Ratio.....	1	6.33+	

Requirements for horse moderately worked... 1

Now $60.50 \div 9.54 = 6.33$. The ratio of digestible protein to digestible carbohydrates and fats in a mixture of equal parts of corn, barley and wheat bran is as 1 to 6.33, while the requirements for a horse moderately worked are for a ratio of 1 to 6.50.

It will thus be seen that if corn, barley, and bran be fed in equal parts by weight they will constitute very nearly a balanced ration for a family horse.

Prairie hay is presumably used for roughage. It has also a value as food for the horse, and should, perhaps, be taken into consideration. Prairie hay is not strong on protein, so that if any attention is paid to it a little larger proportion of bran may be fed to balance its deficiency.

These considerations may be called theoretic. The writer has not been able to find any one who has used such a ration although many owners of horses are confronted with the problem proposed by our correspondent. The *Kansas Farmer* will be pleased to hear from practical horsemen, especially after they shall have tried this or any other scientifically balanced ration.

KANSAS CITY HORSE SHOW.

The Kansas City Horse Show will be held at Convention Hall, Kansas City, Mo., Monday, October 23, to Saturday, October 28, inclusive. This is the fifth annual show and is given under the rules of the American Horse Show and Exhibitors' Association. Liberal purses and prizes are offered for trotters, roadsters, pacers, Hackneys, and carriage and saddle horses; also for performances of high-steppers, turnouts, horse and runaway driving competitions, horn-blowing contests, tandems, four-in-hands, gaited saddle horses, hunters, jumpers, sporting tandem, etc. To the lover of the horse it will be an event of unusual attractions. Coming, as it does, during the same week as the National Hereford Exhibition, the horseman and the cattle fancier will have a great week at Kansas City. For detailed information concerning the Horse Show, address H. E. Ashbrook, secretary, 104 West Ninth St., Kansas City, Mo.

BROOM-CORN GOES UP.

The advantage of carefully studying the crop situation and acting on the results of the investigation was strikingly illustrated at Sterling last week. The *Sterling Bulletin* of October 6 tells about it as follows:

"What the farmers have long been waiting for came yesterday. There has been a quiet market for several weeks, but recently it has stiffened up and \$70 per ton has been the prevailing price. Thursday morning \$70 was being offered, but it soon jumped to \$100. W. C. Smyser first offered this amount and bought a large quantity. The growers around Sterling ought to feel good over the result, as the majority of them have been determined not to sell until \$100 was offered, believing that the conditions warranted this hope. They waited and received their reward."

The New York money market is experiencing a "stringency." London, Paris, and Berlin are said to be short of funds. War clouds in South Africa threaten to involve England in extraordinary expenses. All of these tend to put a quietus on speculation. Wall street complains that the West and South continue to absorb large amounts of currency, but hopes for a return flow at an early date. It may be well for the guardians of the strong boxes of the East to observe that we of the West have worn our working

clothes steadily for a long time and that we have earned a goodly sum of money which we are now drawing from the people who have consumed the surplus food supplies we have produced and that we consider ourselves perfectly competent to take care of this money here and have no thought of sending it back East at present or in the near future. It is our turn to have easy money markets.

A new use is reported for corn-cobs besides pipe-making and piling up and burning. A factory is now in operation at Greentown, Ind., which uses corn-cobs exclusively as its raw material, it being known as the Corona Mills. The pith is punched out of the cobs and shipped to brewers for use in the manufacture of beer, and the remainder of the cob is ground into fine meal. Its use is a mystery, but it is shipped East, where the purchasers are believed to use it as an ingredient in a live stock food preparation—in other words, a stock food adulterant. What part the pith plays in the manufacture of beer is a trade secret.

It is claimed for a Nebraska inventor that he has produced a machine which is capable of obtaining \$200,000,000 worth of nutritive stock feed from corn-stalks besides leaving millions upon millions of elegant materials for the construction of war ships.

The official statement of enrollment of students at the Kansas State Agricultural College at the opening of the fall term for four years is as follows: 1895, 645 students; 1896, 522 students; 1897, 555 students; 1898, 518 students; 1899, 639 students.

Farmer Coburn at Boston.

From the Boston Journal, October 5.

Among the delegates to the Farmers' Congress, now in session here, is a man from Kansas, the secretary of the Department of Agriculture in that State, Hon. F. D. Coburn. Mr. Coburn is a most fascinating type of the modern Kansan, energetic, wiry, and with a diction as picturesque as his personality. He is of the breed of the man who wrote the world-famous "What's the Matter With Kansas" editorial. He is enthusiastic over his State.

"Is Kansas doing pretty well these days?" asked the Journal reporter.

"Yes," said Mr. Coburn, "Kansas is now arrayed seven days in the week in much fine raiment. She is wearing a boutonniere, a perpetually expanding smile, chest ditto, a double chin, and rides in a rubber-tired wagon, which an unwavering faith has always told her was hitched to a star. The State is going steadily forward and upward, handsomely sustaining the high rank long since attained, especially as an agricultural and live stock region."

"Of our crops one of the most important is winter wheat, and in five years our prairies have yielded nearly 293,000,000 bushels. Our 1898 crop was, with one exception, greater than that of any other State in the Union, and more than the wheat crops of all New England, Iowa, Missouri, Illinois, New York, and Nevada combined."

With incredible fluency and exactness he ran over the figures of the cattle trade, which showed Kansas coming rapidly to the front with raising and dressing beef, sheep, and swine, and the shipping of the fruit of what he called "the helpful hen," and the transportation facilities of the State, whose railroad mileage is exceeded by no States except Illinois, Pennsylvania, and Texas.

"You raise fast horses out there, sometimes, too, don't you?" asked the Journal reporter.

"That's what we do," said Mr. Coburn. "Each season for the past few years the eyes of the world have been following two of Kansas's remarkable productions, namely, the famous pacers, Joe Patchen and John R. Gentry, whose record-breaking feats have excited the admiration of all; and speaking of record-breakers, it is also worthy of note that the heaviest fleece by seven and a half pounds ever taken from a sheep was produced by a Kansas-reared Merino, while our swine win prizes over all comers. Having the most extensive packing establishments in the world, barring Chicago, Kansas meats are household words and staple articles around the globe."

"A commonwealth busy with fat harvests, building churches, colleges, and better homes, using her poorhouses for granaries, jails for Sunday schools, and would-be rum-sellers for manufacturing macadam, and having 400 banks plethora with the increment from her industry, is surely enviable."

"This is Kansas."

THE WESTERN TENANT AND HIS EASTERN LANDLORD.

By H. R. Hilton, of Topeka, Kans., read before the National Farmers' Congress, at Boston, October 6, 1899.

RUSH FOR THE REMNANT.

The stream of emigrants that poured across the Missouri River into the eastern half of Kansas, Nebraska, and the Dakotas, and occupied over fifty million acres of land between the 96th and 99th meridian in the twelve years ending with 1887 has no parallel in history. It seemed like a scramble to secure a home in the rich agricultural area of the Mississippi Valley before the last of Uncle Sam's domain of homestead land adapted to farming, east of the Rocky Mountains, should be taken, and many ventured beyond the borderland of agriculture into the pastoral country and semi-arid climate still farther to the west, in the hope of reclaiming this also to the domain of agriculture.

These were twelve years of exceptional productiveness and of good prices. Crop earnings were high, averaging gross over \$10 per acre. The resulting prosperity attracted capital for investment and loans. This developed a speculative spirit in 1883 that grew to vast proportions in the following three years, and terminated disastrously in 1887. Then followed ten years with a high percentage of unfavorable seasons, greatly reduced crop yields and lower prices, the earning power of the average of all cultivated acres declining to less than \$5 in 1894, 1895, and 1896.

THE RELAPSE.

Every one borrowed in the speculative years, to get rich, either in cattle, lands or town lots. The farm that could take care of a mortgage for half its value and the owner besides when the tilled acres were earning \$10 per acre, could take care of only one of these when its earning power was reduced to below \$5 per acre. If the farmer had no other resources but the market value of the crop, the mortgage necessarily took the farm.

In 1870 the title to nearly all this vast empire was in the Government. In 1887 the title to over 75 per cent of it passed from the Government to the homesteader and in 1897 fully half of this passed from the resident to non-resident land-owners.

ADVENT OF THE LANDLORD AND RENTER.

Such a thing as a tenant farmer was practically unknown in this territory prior to 1887. Every tiller of the soil lived on a farm wholly or partially paid for. The decline in acre earnings, and especially in cattle values, commencing with 1886, and in horses commencing in 1888, simply preceded a marked decline in land values. Loss of credit was a natural sequence. Equities were soon dissipated and mortgages were obliged to take the security in payment of the debt. In this way the eastern money-lender became a landlord against his will, and many a western money-borrowing landowner became a tenant against his will. Each believed the other most to blame for the existing conditions. The outcome of the "boom" of the '80s, followed by the ten-years depression (1887-1897) no man was wise enough to foresee, and the true history of this period can not be written till the sense of personal loss on either side is effaced, and that may not be in this generation. But the following from official sources may throw some light on this question: From 1879 to 1885 the market value of all tilled crops in Nebraska and Kansas was over \$10 per acre; from 1886 to 1892, \$7.50, and from 1893 to 1898 less than \$5. On the basis of acre-crop earnings, good farms were more conservatively valued in 1885-1886 (a period of reputed over-valuation) than in 1898, and yet in 1898, with crop earnings of \$3.50 per acre, it classed as a prosperous year in the Trans-Missouri States, and in 1891, with crops valued at \$9.50 per acre, brought neither prosperity nor confidence.

LIVE STOCK PRICES.

Crop earnings do not reveal the depressed or prosperous years. It is only as we turn to the livestock interests that we get light. Assessors' returns show that in the years from 1879 to 1886 the average value was \$18 per head. This covered the period of greatest depression. From 1897 to 1899, two years of returning prosperity and increase of wealth, the average is \$26.66. The ups and downs of the horse and sheep industry follow practically the same lines, but the cattle industry gives the truest barometer of the financial condition of the West of all the factors that enter into the problem. Cattle raise and lower the market value of all the products of the farm. When assessed value is below \$20 per head the value of the grain and

forage consumed by them is decreased. As the value exceeds \$20 per head, there is a corresponding increased return from the farm crops fed to cattle and unmarketable products, such as uncut grass, straw, cornstalks, etc., become sources of wealth instead of waste.

MORE ACRES PER HAND.

The decline in prices of the staple crops and of cattle, hogs and horses following 1887 forced new problems on the agriculturists for solution. Without capital or credit the new tenant farmer was forced to adjust himself to a new environment—to new economic conditions that demanded rigid economy. In 1885 50 acres of land was the average amount of land taken care of by one farm hand, but in 1895 each farm hand took care of 90 acres. In the leading wheat counties the acres per farm hand were increased threefold. Thus the problems of lower yields and prices was met by each farmer spreading himself out over more land, and this was practiced by farmers who owned the land as well as by tenants.

The official census of Kansas shows average earnings, per man, engaged in agriculture in 1885 as \$412.65 and in 1895 as \$419. These figures will hold good for Nebraska also, where the conditions were practically the same. Gross acre earnings were reduced one-half in 1895, but at the end of ten years the gross earnings of the individual had increased.

A TRANSITION.

This method of meeting the problem might be justifiable in a period of transition and of readjustment to new conditions but the superficial methods of tillage it developed, if continued longer, can not but prove injurious to the rich heritage the Trans-Missouri States have in their fertile soil, and the prevention of further injury is the ground for presenting here to-day the subject of "The Western Tenant and His Eastern Landlord."

The relationship was an enforced and not a voluntary one. The eastern landlord (now a small army scattered over the New England and Atlantic States) with western holdings is essentially different from the same person in his relation to eastern holdings. He wants to sell his western lands. Individually and collectively he is crowding his land on the market. In his anxiety to sell he will lease only from year to year, for one year at a time, a practice that would ruin his eastern tenant.

SOIL-ROBBING.

A system of one-year farm leases is a system of waste—of land depreciation. It makes rich land poor and poor land poorer. It perpetuates a one-crop system, injurious alike to landlord and tenant. It prevents the tenant from accumulating so that he can purchase the land, and the landowner from realizing, because of the constant depreciation under a system of soil-robbing in which landlord and tenant are partners. The tenant who can only look forward to one-year possession has no stimulus to do more than get what he can out of the land that season at the smallest expense possible.

CLOVER, HUMUS, AND FERTILITY.

In the Trans-Missouri country and Red River Valley the United States has its richest agricultural heritage, because in its soil, from the surface to the greatest depth, any plant root can reach is stored an endowment of mineral elements that will supply all the demands of plant life for centuries. It only requires a clover rotation, or that green leguminous crops be plowed under every two or three years, to maintain an abundance of organic matter in the soil from which the microbic life can manufacture the valued nitrogen for the use of the plant and for the further purpose of maintaining that amount of humus so essential to a right physical condition for retaining the soil moisture and holding it against waste. The use or expense of commercial fertilizers is a very remote possibility on these fertile soils of the plains. Prior to settlement the mat of buffalo gama and blue stem grasses on the buffalo-trodden plains shed the torrential showers rapidly. All the water that found its way into the soil and not used by the growing vegetation, escaped by evaporation, not by percolation. For this reason, since the weathering of the rocks and shales that forms these plains soils, there has been a very slight waste of the mineral elements. Contrast this with the Atlantic coast States, where half the annual rainfall escapes by percolation, carrying with it the easily soluble potash and other valuable mineral elements that must now be replaced annually at great expense.

MOISTURE AND THE SOIL.

Since the top 6 feet of prairie soils can retain against drainage 18 to 20 inches of water at one time, and within

reach of the roots of all grain crops, there is not much risk of loss of summer rains by percolation, even when the entire summer rainfall is absorbed by the cultivated soil, hence but a small per cent of the mineral food is lost through drainage, and there can be no waste of these through evaporation.

Water and temperature are the two great climatic factors in crop production in the Western States. The normal rainfall of the crop-growing months, as far as the 97th meridian, is greater than that of the New England States and the lake regions and equal to that of the Middle Atlantic. The normal rainfall at Moorehead, Minn., for the six months ending September 1 is 16.8 inches; Sioux City, 18.5 inches; Omaha, 23.2 inches; Topeka, 25.6 inches.

At the following points near the 98th meridian the summer rainfall is as follows: Huron, S. D., 16.3; Concordia, Kan., 18.9; Wichita, Kan., 20.6; Oklahoma City, O. T., 21.8.

The Atlantic States sustain heavy losses of the rainwater by percolation, the West by evaporation. When all the percolated waters are deducted, the West has the greater summer supply for the use of growing crops, but owing to a less humid atmosphere and greater percentage of sunshine its loss direct to the air probably balances the account.

THE FARM OWNER, THE RENTER, AND MOISTURE.

It is true everywhere, but especially true of the West, that there is a wide difference in the proportion of the season's rainfall utilized by different farmers. As a rule the farmer owning the farm he works gets a much greater benefit than the man who rents from year to year, because the former can practice rotation and good tillage to promote the retention and storage of water; that is denied to the latter under a one-year lease.

The Trans-Missouri soils, whether the mixed limestone and shale soils of the carboniferous of eastern Kansas or the permian, Dakota sandstone and cretaceous soils of central Kansas and Nebraska, or the loose soils of eastern Nebraska and northeast Kansas, or the deep carpet of windformed or "plains marl" soil on the borderland of agriculture from the 99th meridian westward, all are supplied for centuries with the needed mineral elements that promote plant growth. All were richly endowed with organic matter, and in more favored seasons like that of 1899 it is evidently still abundant. But the supply of this valued source of nitrogen is subject to severe drafts under western climatic conditions, and especially where a one-crop system of farming is practiced.

The pioneer settler, starting with a primitive soil rich in humus and all food elements, could make a crop with almost any system of farming, but after a quarter of a century of continuous cropping the soil cries out for better treatment.

Progressive farmers, recognizing the evil, are already taking steps to remedy it by introducing rotation and improvement in the physical texture of the soil.

Under methods of farming usually practiced, not much over one-third of the normal summer rainfall has been used in crop making. That is, out of 20 inches of summer rainfall, the crop utilized 6 to 8 inches; 2 inches were lost in percolation and 10 to 12 inches by evaporation.

Under the improved practice in tillage one-half of the seasonal rainfall is utilized by the crops and this means doubling the product in the average of seasons. The restoration of the humus in the soil by plowing under manure and green catch crops, greater care in preparing seed beds and recognition of the virtue there is in a 3-inch dry soil mulch to conserve moisture, have been the greatest human factors in the increased productiveness of the best farms of Nebraska and Kansas in the past ten years.

DEBT-PAYING DAYS HAVE COME.

The pioneer and speculative days when the first settler looked to the land simply for a living and to its rise in value for a profit, is now a part of history. But a small percentage of good agricultural land in eastern Kansas and Nebraska passed from the resident farmer who borrowed, to the mortgagee. More than half of the great central grain territory is now farmed by actual owners. These are permanent residents and are looking to the crop and livestock products, and not to increment in value, for revenue. Debt paying has taken the place of borrowing and economy the place of extravagance. Method and system are being introduced. Interest centers in improvement of seed, soil and stock, and men are gradually getting hold of the science of crop and meat production. Not all of the land-owning farmers are progressive and not

all of the tenant farmers are thriftless, a day's drive in any county west of the Missouri River the difference between farms tilled by owners and those tilled by tenants are too marked to escape notice. We expect more thrift and better management when the farmer owns the land, because the tenant farmer is decreed by a one-year lease system to be a soil-robber, to perpetuate a method of land depreciation, and to work against his own interest and that of his landlord. Ambition and effort to do betterwork are discouraged. He can share only to a limited extent in the prosperity that is steadily returning to the farmer who tills his own land and has accumulated livestock to consume both the fodder and grain and grass produced.

TENANTS WOULD PURCHASE.

A large number of the present tenant class desire to own the land they cultivate and, if encouraged to adopt better methods of tillage and to practice restoration of humus and accumulate live stock, would soon be on the market to buy, but no improvement is possible with a lease shorter than three years, for no tenant could get a fair benefit from plowing under a catch crop or applying stable manure in 1900 if he can not harvest the crop of 1902.

PLANS OF LEASE.

Two plans are suggested: With tenants who have been tried and found worthy, a three-year lease could be made on condition that a rotation is adopted that shall include the plowing under of one green crop, the cleansing of the land from foul weeds and good tillage to all crops.

In such lease the right to sell in any year could be inserted, with a compensating clause that shall provide for a rebate to the tenant of an amount equal to the value of the extra labor given, for which he can not get returns till all three crops are harvested.

For instance, one lease was made in 1899 for three years, at \$300 per annum. If farm is sold in one year \$75 is to be rebated. If sold in two years, \$50 is to be rebated. If tenant retains possession until the end of the lease then there is no rebate. Tenant is made a preferred purchaser, provided he is willing to pay as much as anyone else. Or the lease can be made from year to year if there is a doubt as to the character or efficiency of the tenant, he being given the preference in re-leasing each year till the land is sold, if he does satisfactory work, and provision is made for compensation for work done for benefit of crops not yet planted.

When the landlord and tenant realize the greater value to each, of soil renovation as against soil robbing, and when the landlord appreciates how much more salable is a farm being bulld up than one being run down, a system of tenancy equitable to both will soon be worked out. This paper is written simply to call attention to the evil. When the evil is recognized it is in a fair way to be corrected. The change must necessarily be gradual, because so many agents do not know what is essential to the soil and so many tenants are too trifling and worthless to ever improve either themselves or the soil they cultivate.

THE OWNER WHO FARMS.

It is perhaps fortunate for this great combined grain and stock-producing country that it is as a rule profitable only to the landowner who himself lives on and operates the farm, for he alone can utilize and get profit out of forage crops that grow luxuriantly in any season, and that are to-day one of the most important sources of the present prosperity.

The 550,000,000 bushels of corn raised in Kansas and Nebraska in 1899 represents at present market quotations \$150,000,000 in value, but the 300,000,000 bushels of this that will be converted into beef, pork, mutton, wool, eggs, poultry, butter and cheese will at present prices bring a far greater revenue than the present market value of the entire crop.

LIVE STOCK FOR PROFIT.

This great crop is heralded everywhere as evidence of great prosperity in the Trans-Missouri country, and while it is an important factor, Nebraska and Kansas have a greater and more enduring source of wealth in their 1,200,000 milk cows, 4,000,000 beef and breeding cattle, 1,650,000 horses and mules and 1,500,000 sheep, all worth over \$200,000,000 taxable value.

The value of animals slaughtered and sold for slaughter in 1898 in these two States reached almost \$100,000,000 and will exceed this for 1899.

The tenant farmers share but lightly in this source of revenue, and are largely dependent on what can be realized from the grain product. The landlord gets rental based on grain alone as re-

Horse Owners! Try GOMBAULT'S Caustic Balsam

A Safe Speedy and Positive Cure
The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circular. O. THE LAWRENCE-WILLIAMS CO., Cleveland, O.

enue, and not on what the farm is capable of earning in finished live stock products.

It has taken the farmers of the plains a quarter of a century to find out the system of farming best adapted to soil and climate and how to save and utilize the rainfall and get the best service from the high percentage of sunshine that gives a higher nutritive value to all the grain and forage produced. Old methods and practices are passing away and better ones are taking their place, and the tenant farmer should be given a longer lease and a chance to help himself, help his non-resident landlord and help his State.

The Anderson County Fair.

The Anderson County fair was held in Garnett, September 26-29. The stock interests at this fair were up to the average. There were 3 herds of cattle, 1 lot of sheep, and 6 lots of hogs entered.

B. W. Gowdy, of Garnett, made as fine a show of Shorthorn cattle as has been shown this fall. He received 14 awards out of 15 entries, getting sweepstakes on cow and sweepstakes on herd. The following are some of the animals which took premiums: Roan Winsome (), a 2-year-old bull; his yearling bull, Kansas Lad 134085; 2 bull calves, Emperor and Washington; Ninth Lady Bates of Shannon Hill, vol. 40; Red Beauty, vol. 39; 16th Lady Bates of Shannon Hill, vol. 44; Flossie, vol. 43; Fourth Ravenswood Flower, Beauty of Sharon 4th, vol. 44.

F. A. Shoemaker, of Centerville, entered 12 head of registered Red Polled cattle and 3 grade Red Polls. His herd bull, Volunteer 4695, got first in his class of 3 years and over; he is sired by Falsetto 1807, and out of Village Lassie 3200. Mr. Shoemaker also entered bull calf, 3-year-old cow, 2-year-old cow, yearling heifer, and heifer calf, which received premiums.

R. H. Kellogg, of Iola, won first and sweepstakes with his yearling boar, Prince Corwin Jr., which took the same premiums at Iola fair; he is a fine show hog and is for sale. Mr. Kellogg also received first on sow over 1 year, sow under 1 year, sweepstakes on sow, and the special \$25 gilt offered by J. M. Collins, of Welda, for best herd.

J. M. Collins, of Welda, won first and second on boar under 1 year, first on litter of pigs, second on sow over 1 year, and second on sow under 1 year. Mr. Collins had a fine lot of young pigs for sale.

B. F. Walker, of Garnett, entered a fine herd of Poland-Chinas and received 2 premiums. His herd were good individuals and of good strains but were not in show shape.

Paul Kirk, of Garnett, entered 2 Duroc-Jersey pigs, but the show was a Poland-China show. The boar was Barbarosa 5363, sired by Rustler 4515 and out of Top Notch 8346; his sow was Lady M. 12128, by Cardinal Ross 1663 and out of Bonnie May 1606.

In the poultry department there were 27 coops of chickens, representing White Leghorns, B. P. Rocks, Buff Cochins, Light Brahmas, S. L. Wyandottes, Partridge Cochins, and Pekin ducks.

S. A. D. Shivers, of Welda, made a good display of Barred P. Rocks, Buff P. Rocks, and Pekin ducks, and took off 3 blue ribbons.

Mrs. B. W. Gowdy entered some fine chickens, which received blue ribbons.

The stock parade before the grand stand was one of the best of the season. It was headed by the Garnett band, then followed 2 vehicles decorated with farm products, 4 stallions, 1 driving team (B. W. Gowdy's), 2 single drivers, 26 horses, team of mules, 3 jacks, and about 30 head of cattle.

A Lady's Troubles Relieved.

Topeka, Kans., September 3, 1899.—Mrs. Charles S. Smith, 712 Lake street, this city, has had very poor health, owing to female troubles. She suffered much from headaches. Since taking a few bottles of Hood's Sarsaparilla she has had no headaches or sickness of any kind.

Horticulture.

KANSAS EXPERIENCE IN ORCHARDING.

From "The Kansas Apple."

Dr. Chas. Williamson, Washington, Washington County: I have lived in Kansas forty years. My first planted orchard is thirty-eight years old, and the second thirty years. For market I prefer Ben Davis, Winesap, Missouri Pippin, and Rawle's Janet; and for family use Ben Davis, Winesap, Jonathan, Rome Beauty, Rambo, Early June and Romanite. I have tried and discarded Cooper's Early White, because it is a short-lived tree and a shy bearer. I prefer bottom land with a black loam and a clay subsoil, with a north and east slope. I plant trees thirty feet apart. I would advise cultivation for three years; seed bearing orchard to white clover. Wind-breaks are essential; would make them of mulberries and cedar; plant seed for mulberries and set small cedars. For rabbits I use traps and dogs. I prune, but not very much; I cut out water-sprouts and dead limbs, and thin out the top so as to let sun in. I never have thinned the fruit on the trees, but think it would pay. I keep bees to help pollinize the blossoms. I fertilize my orchard with stable litter; trees and plant life, as well as stock, need food. I do not pasture my orchard; it is not advisable. I have sprayed with London purple. I protect my trees from the sun, and the bark being full of sap the borers will not trouble them. I hand-pick my apples and pack in barrels in the orchard. I sell in the orchard at retail. My best market is at home. Do not dry any. I store some apples, and find Ben Davis, Winesap and Missouri Pippin keep best. When packing apples for storing I wrap each apple in paper and put paper between the layers in the boxes; then put them in the cellar, and they keep well. I open the cellar door on warm days. Prices have been from 35 cents to \$1.10 per bushel.

There is not a State in the Union but what is profiting by the experiences of such men as friend Wellhouse, the "Apple King," and other horticulturists, who are leaving a legacy to future generations. My experience in orcharding has been as an amateur ever since 1856. My orchard has been for home use, but now, with my experience gained here in Kansas, I am planting in the Ozark country, near Olden, exclusively for market purposes (the same can be done in Kansas), but takes longer to come to maturity. Taxes are low in Missouri. The orchardist should not be assessed on his fruit-trees and pay the penalty for being energetic and a pusher in horticulture. In Kansas, thanks to the life work of the members of the State Horticultural Society, we have reached a point where the culture of fruit is an assured success; and there is more money in it than in hog- or corn-raising. The trouble has been too many worthless varieties have been planted, and now that they are bearing are profitless: the worst of it is they are repeating the same mistake each year. I have saved some valuable trees from borers by taking a quarter-inch bit and boring a hole and putting in strychnine or sulphur, and the tree lived on while others died; even in the black locust it was successful. I plug the outside portion of the hole. Let some one explain the reason who understands the circulation of the sap.

Ernest Fairchild, Hiawatha, Brown County: I have lived in Kansas thirty years; have an apple orchard of fifteen acres, twelve years old. For market I prefer Jonathan, Ben Davis, and Rawle's Janet; and for family orchard Snow, Winesap, and some sweet varieties. I prefer an east slope. I cultivate my orchard to corn or oats for eight or nine years, using a disk and harrow, and cease cropping at the end of this time and seed down to clover. Wind-breaks are essential; would make them of forest-trees set in rows, on the north and west sides. I prune my trees to give shape. I pick my apples in square tin pails which have false bottoms; slide the fruit out at the bottom. I make vinegar of the cull apples. Prices have been from 60 cents to \$1 per barrel. I employ men and boys—men at \$1 per day and boys 75 cents per day.

Neils Hanson, Willis, Brown County: I have resided in the State thirty-two years; have an orchard of 200 apple-trees twenty years old. For all purposes, I prefer Ben Davis, Jonathan, Willow Twig, and Strawberry. Have tried and would discard Willow Twig and Lawver. I prefer bottom land having a clay soil and a north or east slope. When planting trees, I dig a hole two feet deep and four feet square. I cultivate my orchard eight or ten years, using a plow, and spade around the trees. I plant corn or oats in a young orchard. Windbreaks are essential; would make them of maples or willows and cultivate the same as a crop. I prune to thin the tops, and think it beneficial. I thin the

fruit when small, if the trees are overloaded. Can see no difference whether the trees are planted in blocks of one kind, or mixed up. I fertilize my orchard, but not close to the trees; would not advise it on bottom land. I pasture my orchard with calves and hogs, but it is not advisable; it does not pay.

I do not spray. I am experimenting with my trees; I make a hole two inches deep, one-fourth inch in diameter, put in medicine and plug up tight with grafting wax over it. It is claimed to kill all the insects on the tree for four or five years to come. I can tell the results this fall. It costs me \$10 to try it. [Hear! Hear!] My neighbors spray their trees when in blossom and say it pays. I pick my apples by hand, sort into two classes, and pack in barrels, filled full, and marked with consignee's name and hauled to shipping place on wagon. I never sell apples in the orchard, because they [the pickers] ruin the trees. I wholesale my best, second and third grade apples to the one offering the most for them. I feed the culls to hogs. Hiawatha is my best market. I never tried distant markets; it would not pay, unless in carload lots. I dry apples, put them in sacks and hang in a dry place, and find a ready market for them; it pays. Am successful in storing apples in boxes—made of lath an inch apart—in an arched cave. I find Ben Davis and Rawle's Janet keep best. I have to repack stored apples before marketing, losing about one-tenth of them. I do not irrigate. Prices have been about \$1 per barrel. I pay \$18 to \$20 per month and board for help.

Isaac M. Taylor, Richmond, Franklin County: I have lived in Kansas thirty years; have about fifty apple-trees eight years old, ten feet high. For market I prefer Jonathan and Ben Davis; for a family orchard, Romanstem, Gilpin, Rawle's Janet, Winesap, and Hubbardston's Nonesuch. Have tried and discarded McAfee Nonesuch, Belleflower, and Missouri Pippin. I prefer a gentle east slope at the bottom of a hill, with a deep sandy loam or four feet of red land on lime rock. I prefer 2-year-old trees set thirty by thirty feet apart, in holes dug eighteen inches deep, and filled one-third full of surface soil. I cultivate my orchard as long as it lasts with a twelve-inch plow; throw the dirt away the first of June, and back in August; then harrow it. I plant potatoes and corn in a young orchard, and cease cropping after ten years. I plant nothing in a bearing orchard. Wind-breaks are essential; would make them of rows of Osage orange on the north and south sides of the orchard. I prune as little as possible. I fertilize my orchard with cow-stable and horse-stable litter mixed; I think it beneficial, and would advise it on all soils, unless very rich. I pasture my orchard once in a while with hogs without rings in their noses, so they can hunt worms. My trees are troubled with borers. I do not spray. I pick my apples in sacks from ladders. Sort into three classes, and peddle them. I use Topping's driers and William's parers; they are satisfactory. After drying I pack in fifty pound boxes. I find a ready market in Kansas City for them, but it does not pay. I am successful in storing apples in small boxes and barrels in a cellar; Gilpin and Ben Davis keep best. I have to repack stored apples before marketing, losing about 5 per cent. I do not irrigate. Prices were 35 to 50 cents in the fall; 75 cents to \$1 in the spring [1897].

William Cutter, Junction City, Geary County: I have lived in Kansas twenty-eight years; have an apple orchard of 4,000 trees. For a commercial orchard I prefer the list recommended by the State Horticultural Society. I prefer a rich bottom with a north aspect. I prefer 2-year-old trees four or five feet tall, branched low. I cultivate my orchard as long as it lives with a disk harrow or plow. The first five years I plant a crop that requires cultivation, and plant nothing in a bearing orchard. Wind-breaks are very beneficial; would make them of two rows of Russian mulberries set ten feet apart in a row. I prune very little when young to balance the tree; I think it pays. I do not thin my fruit while on the trees, but think it would pay if I had time. I fertilize my old orchard with stable litter, and think it advisable on all soils. If you do not do this you must prune. I do not pasture my orchard. My trees are troubled with canker-worm, root aphid, flat-head borer, round-head borer, woolly aphid, and leaf-roller, and my apples with codling-moth, curculio, and gouger. I spray for canker-worm and codling-moth—the oftener the better. I think I have reduced the codling-moth. I dig the borers out, and kill the rabbits. I carefully pick my apples by hand from a step-ladder, into half-bushel baskets, and sort into three classes—first, second, and culls. Pack in barrels rounded up and marked on the head; then send to market by rail. I sell some apples in the orchard, usually at wholesale. My best markets are south—Texas. I do not dry



The Fence That Fences

is the fence every fence user is after. For perfect security in the way of a fence, at lowest cost, for a fence that will outlast your lifetime, secure the

AMERICAN FIELD AND HOG FENCE.

Large spring steel wires, heavily galvanized, practically indestructible. Sold by our agents everywhere. If no agent in your town write to

AMERICAN STEEL & WIRE CO., Chicago or New York.

any. I am successful in storing in boxes, barrels and bulk for home market; I find Fink keeps best. Never tried artificial cold storage. I have to repack stored apples before marketing, losing about one-fourth of them. I do not irrigate. Prices have been from 50 cents to \$1 per bushel. I pay my help \$1 per day and board.

John Gregg, Willis, Brown County: I have been in Kansas since 1868; have an apple orchard of 120 trees about twenty years old. For a commercial orchard I prefer Ben Davis, Winesap, Gano, and Dominie; and would add for a family orchard Red June, Holland Pippin, and Yellow Transparent. I have tried and discarded Willow Twig on account of blight, and Missouri Pippin on account of blight and shy bearing. I prefer high land with a porous clay subsoil, and a north, northeast or northwest aspect. When planting trees I dig deep, wide holes, lean the tree to the southwest, apply water, then fill and tramp well. I cultivate my orchard for five years with an orchard disk; plant corn and potatoes. Seed bearing orchard to clover. Wind-breaks are essential; would make them of honey-locust, maple, ash, etc., on the south and west sides of the orchard. For rabbits I wrap the trees with corn-stalks. I prune mostly in June, to give the trees shape; I think it pays. I do not thin my fruit, but think it would pay. I do not fertilize my orchard to any extent; think clover is good left on the ground. I do not pasture my orchard; it does not pay. My apples are troubled with codling-moth. I do not spray. I pick my apples by hand into a basket or sack. The shippers do the sorting. I wholesale, retail and peddle my apples; sell the best to shippers, culls to neighbors or make cider of them. My best market is at home; never tried distant markets. Do not dry or store any. Prices have been from 75 cents to \$1 per barrel.

Scions from Bearing Trees.

Editor Kansas Farmer: In the Kansas Farmer of September 14, in reply to a question from H. M. Ochiltree, it is stated that grafting from bearing trees (that is using scions taken from bearing trees) was a thing of the past and that it is the universal custom at present to "graft from the nursery." While I do not question the accuracy of this statement so far as the general practice of nurserymen is concerned, especially in the West, yet it is also undoubtedly true that orchardists are coming to realize that the character of the tree from which scions are taken has a very important influence on the character of the tree produced, and nurserymen, at least in this part of the country, are beginning to offer what they term "pedigreed trees," meaning simply trees from selected scions. It is unquestionably a fact, as stated in the reply to Mr. Ochiltree, that "trees grafted from the nursery are more vigorous than those grafted from the orchard, and unfortunately in the past the vigor and size of nursery trees have been taken as the measure of desirability. Of course vigorous trees are desirable but it should be borne in mind that to a certain extent vigor of growth and freedom in bearing are antagonistic and it is very easy to overdo the matter of vigorous growth. I have in mind an instance which illustrates this subject very well. In an orchard in this section are twenty Baldwin trees which were grafted twenty-five years ago with scions taken from watersprouts. The trees have always been vigorous

and healthy and are so to-day but they have never borne satisfactorily, many years producing no fruit whatever and never bearing a full crop.

It is certainly more difficult to secure scions from bearing trees and this may be largely responsible for present methods; and furthermore the nursery trees grown from such scions may not in every instance resemble the parent in bearing habits yet the chances of getting a tree of good habits are much better in this case than where scions are taken indiscriminately from nursery trees or, as is sometimes done, from rows of trees kept for the purpose and each year's growth cut back and used for scions.

F. C. SEARS,
Wolfville, Nova Scotia.

"He Mistakes the Effect for the cause." That is what the person does who tries to cure rheumatism or any other disease by alleviating the symptoms. Hood's Sarsaparilla removes the cause and permanently cures.

Hood's Pills do not gripe. All druggists. 25c.

When writing any of our advertisers, please state that you saw their "ad." in Kansas Farmer.



PROTECT

YOUR TREES from Rabbits, Mice, Borers, etc. with our Improved Tree Protector. Less than a cent a tree. Send for our price list, circulars and testimonials. We also grow choice nursery stock at low prices.

HART PIONEER NURSERIES,
Fort Scott, Kans.

SEEDS AND POULTRY SUPPLIES.
Seeds, bulbs and poultry supplies, T. Lee Adams, 419 Walnut street, Kansas City, Mo.

TREES Large and fine stock of best varieties. Fall catalogue mailed free. Established 1869. Over 160 acres.
The Geo. A. Sweet Nursery Co., Box 1256, Dansville, N. Y.

OUR NEW CATALOGUE FOR 1900

Will be ready to mail January 1. Eighty varieties of Strawberry plants—3,000,000 plants. 100,000 Kansas Raspberry tips. If you need any plants now write for prices. F. W. DIXON, Holton, Kans.

SMITH'S STRAWBERRY PLANTS

60 VARIETIES,
Old and new. Sample—Excelsior, Lady Thompson, Biscuit, Splendid, etc. Price list free. One copy of "Strawberry Manual" sent for 10 cents. Address,
B. F. SMITH, Lawrence, Kas.



BRAND NEW TINNED STEEL ROOFING

THESE ARE THE ONLY

\$2.00 per Square of 10x10 feet, or 100 Square Feet.

WE CARRY A COMPLETE STOCK OF ALL KINDS OF SHEET METAL AND MATERIAL BOUGHT AT SHERRIS, REEDERS' AND TRUSTEES' SALES.

Write for Free Catalogue No. 61.
Our Prices Are 1/4 of Others.

CHICAGO HOUSE WRECKING CO.,
WEST 35TH & IRON STS.,
CHICAGO.





STARK TREES

best by Test—74 YEARS. Largest annual sale. High quality—not high price. FINEST sorts. We buy 4 million Apple trees, whole-root graft 5 million—1- and 2-yr. Other Trees, Vines, etc., proportion. 1400 acres Nursery 43,000 acres Orchards. FRUIT BOOK FREE.

box and pack free, ask no money till SAFE arrival,—guarantee SATISFACTORY.

We PAY CASH each WEEK and want more HOME and traveling salesmen.

Stark Market and quality Kings PAY: **STARK LOUISIANA, MO.**
Apple of Commerce, Black Ben Davis, Champion, Delicious, **STARK** **DANSVILLE, N. Y.**
Senator, Stayman Winesap, Gold plum; Kieffer; Elberta—Visitus **STARK** **MO., etc.**

In the Dairy.

Conducted by D. H. OTIS, Assistant in Dairying, Kansas Experiment Station, Manhattan, Kans., to whom all correspondence with this department should be addressed.

A DEMAND FOR COLLEGE STUDENTS.

A prominent stockman in eastern Kansas made the remark the other day that if the community needed another doctor in town they would send to a medical college; if they needed a lawyer they would send to a law school; if the community or any individual needed a bookkeeper or stenographer they would send to a business college; and when a farmer or stockman needs a man to look after his affairs why not, says he, send to the agricultural college? We need men not only to look after the stock, but men with whom we can consult, plan, and arrange our work, men who can work out a balanced ration, and at current prices tell us which is the cheapest combination. A young man just out of the college does not have a great deal of experience and if he should take up work on a stock farm, his education would be of value to the owner and the owner's experience would be of value to him, and it would be only a short time until the enterprising college graduate would be qualified both by education and experience to take a more lucrative position.

The same kind of a man that is needed on the stock farm is also needed in the creamery and skimming-station. The day is coming, if not already here, when our creamery men will demand employees who understand the art of feeding, and who can work among the patrons and give practical suggestions for increasing the yield of milk. In other words, employees are wanted who will make the creamery or skimming-station an educational center for the surrounding country. "But the wages are low," says the college student. True, they are not so very high, but what school-teacher, receiving \$30 to \$35 per month, can save as much as the young man on the farm at \$18 or \$20 with board? What doctor, lawyer or preacher expects to make more than living expenses the first year or two? In fact many of them only make that after years of experience. There is certainly an excellent opening for the young agricultural student who has lots of energy and push, and who is willing to apply himself. He may have to work for small wages at first, but if he will study how to make his services more valuable his true worth will soon be found out and paid for.

D. H. O.

The Balanced Ration.

At an institute attended by the writer some time ago a gentleman got up and said, "I don't know a thing about a balanced ration but I think that to sit down and figure out how much a cow ought to have, is all foolishness. Now I fed my cows corn-meal last winter and I never got a better milk yield in my life before, so that it is my opinion that corn-meal is the best feed for dairy cows." When asked what kind of roughness he fed with his corn-meal he replied, "Plenty of the nicest kind of alfalfa hay." Now undoubtedly this gentleman was feeding nearly a balanced ration for alfalfa hay and corn-meal make one of our best rations with the exception that it lacks variety. Last winter at the college we found that the ration giving us the best results at the lowest cost was one composed of alfalfa hay and corn-meal.

Alfalfa hay is rich in protein, the one thing most needed to make milk; the corn is rich in carbohydrates and fat which give energy and heat to the body. The farmer who raises alfalfa is far better fixed to grow and fatten all kinds

of stock than the one who does not raise it, and should be the most successful farmer.

J. A. CONOVER.

Soiling Crops, Etc.

Greetings from "Buff Jersey," Superintendent of Cedar Hill Jersey Farm, Mammoth, Ill.

Fourteen years of my life were spent in Kansas. Six of these years were spent in active dairy work. I yet keep pretty well posted on what is going on among the sunflowers. At your coming convention it would be well to call attention to soiling crops for the cow-keeper. I found with the very short season of tender native grasses we had to provide a succession of soiling crops. My greatest success was with the evergreen sweet corn, sorghum and sugar-beets, also turnips. (I raised 1,400 bushels of turnips on one acre of ground.) Where no silo is used the sugar-beets are very profitable for dairy cows. With the above feeds and cows of no particular breed my daily milk yield for the year was 12 quarts. We had cows that when fresh would give us a daily income of 90 cents and \$1, with milk selling at 20 cents per gallon. We have at Cedar Hill farm 80 head of Jerseys. Our product is butter and we realize 22 cents for the output on contract.

We have just finished a stave silo 25 by 27 feet and have now two with combined capacity of 400 tons. We have a Deering corn-binder that greatly helps with the work of putting up the corn crop and saves nearly 40 per cent of hired help. Have you at the station used cottonseed-meal as a source of protein? Try it, and note the superior quality of butter, its body, and heat-resisting quality. Kansas butter lacks body and a feed of cottonseed-meal daily will greatly improve this defect and at the same time increase the yield.

A Visit to a Pure-Blood Stock Farm.

While assisting at a farmers' institute at Beattie, Kans., the college representatives were invited to tea at the home of Mr. and Mrs. W. B. Hawk. While there we were taken a drive to Mr. Hawk's stock farm, one mile distance from town. The trip was made with a \$300 driving horse, and the rapidity and ease with which we were taken over the ground spoke volumes as to the value of improved blood in horses. On arrival at the farm Mr. Hawk showed us some more of his blooded horses, his blooded Shorthorns, his blooded hogs, all of which showed unmistakable signs of pure blood. After viewing all of these animals the question was put to Mr. Hawk whether or not it paid to give so much attention to pure blood. After giving a decided answer in the affirmative, Mr. Hawk illustrated his point by saying that he was in the habit of selling his steers when 2 years old and they weighed more than his neighbor's at 3 years.

A marked feature of this farm was the intelligence, gentleness, and contentment manifested by the animals themselves. This was undoubtedly due to the way they were handled. If Mr. Hawk wanted to show one of his large hogs he did not go at him with a club to get him to the other side of the pen, but would pat him on the back and with a little coaxing would accomplish his end. The horses, cattle and even the mules displayed the same good qualities due to good feed and excellent care.

D. H. O.

Butter-making as it Used to Be.

Butter-making has become more of a science than it used to be when we put the cream in the old dash churn and churned it at any temperature, and the butter would come any time after it got ready, and the good housewife could not tell what color it would be till after it was churned. I remember very distinctly those dark days when my mother used to set me to running that old churn, and when we started churning, no one was able to tell whether it would take one hour or six, before the butter would come. Sometimes it never came. The old women used to say it bewitched, and they would suggest a handful of nails or a horseshoe thrown into the churn to drive away the witches. But now we have got beyond those days of nails and horseshoes, and the butter always comes.

BUTTER-MAKING AS A SCIENCE.

Butter-making is a science at the present time. The eastern customer has become so critical that, unless the butter from your creamery is perfect, it is liable to sell below the market and result in a direct loss to the patrons. For this reason you expect your butter-maker to keep posted on all the new methods and modes of butter-making. If he does not, he will soon have to give way to a more gifted fellow. The question is, do you as patrons of the creamery, keep posted on your part of the work, which by all

means is the most important part, of producing fine butter, and do you furnish your creamery with the best milk it is in your power to produce? The success of your own creamery depends upon your own individual efforts, and the quality of the milk delivered by you determines the quality of the butter, and the quantity of the money which you receive each month from the creamery. There are only two essential things for the creamery patron to do in order to produce a milk which will be acceptable to any creamery. These are directly under his control, and they are cleanliness and temperature, and you can not but say that they are very simple rules. The first essential part of your work is to do the milking in a cleanly manner and in a clean place, and then to keep the temperature of the milk down to a low degree until it is delivered to the creamery.

If I were to write a few simple rules for the creamery patron on the care of milk, and write them in as few words as possible, they would be as follows: Start right by having all the pails and pans clean before commencing to milk. The milking should be done in a place where the surroundings are perfectly clean and sweet. I advise lowering the temperature of the milk to 50°, and keeping it as near this temperature as possible until it is delivered to the creamery. If these two simple rules are carried out, then you will produce milk that will be fine enough for any creamery, cheese factory or condensing factory.—F. A. Leighton, in Chicago Dairy Produce.

"Standard Food."

A correspondent from Florence, Kans., writes for information on the comparative value of "Standard Food" and cottonseed-meal. The agricultural college has had no experience in handling this feed, nor do we find any analysis of it in our feeding tables. If any of our readers have had experience with the "Standard Food" let us hear from you.

Health for 10 cents. Cascarets make the bowels and kidneys act naturally, destroy microbes, cure headache, biliousness and constipation. All druggists.

WANTED—AGENTS FOR CREAM SEPARATORS

During the next six months—in conjunction with the introduction of the improved "NEW CENTURY" De Laval Cream Separators—we shall thoroughly reorganize our system of Dairy or "Baby" separator local agencies. Out of 2,000 existing agencies and sub-agencies 1,500 will be changed, and as many additional new ones created. 1900 promises to be the greatest of separator years. Centrifugal separation and clarification must soon become universal. Machines may be sold in every township. The conceded superiority of the "Alpha" De Laval machines should give them 85 per cent. of the total trade. But live aggressive agents are equally essential to getting it. We have the machines and require more good agents. Successful separator agents are confined to no particular class. Applications should give full details.

Mention This Paper in Writing.

THE DE LAVAL SEPARATOR CO.

Western Offices:
RANDOLPH & CANAL STS.
CHICAGO.

General Offices:
74 CORTLANDT STREET,
NEW YORK.

Branch Offices:
1102 ARCH STREET,
PHILADELPHIA.

Nasal CATARRH

In all its stages there should be cleanliness.

Ely's Cream Balm cleanses, soothes and heals the diseased membrane. It cures catarrh and drives away a cold in the head quickly.

Cream Balm is placed into the nostrils, spreads over the membrane and is absorbed. Relief is immediate and a cure follows. It is not drying—does not produce sneezing. Large Size, 50 cents at Drug-gists or by mail; Trial Size, 10 cents by mail.

ELY BROTHERS 56 Warren Street, New York.



Hogs are Higher

They are going up daily. Get ready for the boom by breeding now. We send a sample pair of our

FAMOUS O. I. C. HOGS

ON TIME and allow you agency if you write promptly. Two of these famous hogs weighed 2,800 lbs. Write to-day.

L. B. SILVER CO., 179 Grand Arcade Bldg., Cleveland, O.



Gluten Feeds.

The cheapest source of Protein for a Balanced Ration.

Will produce richer milk and more of it; a more rapid growth and development of Cattle and Hogs, and better meat for market purposes than any other feed on the market. Highly recommended by Prof. H. M. Cottrell, of Manhattan Agricultural College. For information and prices address

N. T. GREEN & CO. Kansas City, Mo.

Save Hogs.

Prevent Hog Cholera by giving occasional doses of a remedy that has saved thousands.

You can buy drugs and make it for 10 cents a pound. Fifteen years a success. Recipe and full directions \$1.00. Sent to any address by H. D. RECORD, Kiowa, Kans.

Italian Bees.

Full colonies shipped any time during summer and safe arrival guaranteed. It will pay you to try my stock of Italian bees in the Latest Improved Hives. Nothing will double in value quicker.

A. H. DUFF, Larned, Kans.

The Kneeland Omega Cream Separator



adds at least \$10 a year profit to each cow, makes dairy work a source of profit. Increases yield of butter and improves the quality. Separates perfectly, at slow speed, and with half the power of others. Simple, durable, free from repairs, easiest to clean. Guaranteed to satisfy, or no sale. Send for special catalogue and our free book "Good Butter, and How to Make It." Agents wanted in localities where we have none. Address,

The Kneeland Crystal Creamery Co., Concord St., Lansing, Mich.



Remember, when you are ready to buy a cream separator, that the IMPROVED U. S. SEPARATOR EXCELS ALL OTHERS IN

Thoroughness of separation,
Little power required to operate,
Little time required to clean,
Simplicity, only three parts to the bowl,
Durability, therefore smaller repair bills,

Consequently, is the one you will wish to buy, if you desire the best. Send for our latest illustrated catalogues.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.

BREEDER'S DIRECTORY.

(Continued from page 1.)

CATTLE.

CENTRAL KANSAS STOCK FARM.—F. W. ROSS, Alden, Rice Co., Kas., breeds pure-bred Shorthorns, Poland-Chinas and Barred Plymouth Rocks. Stock for sale.

ENGLISH RED POLLED CATTLE—PURE-BRED Young stock for sale. Your orders solicited. Address L. K. Haseltine, Dorchester, Green Co., Mo. Mention this paper when writing.

W. H. McALL, COLLEGE VIEW, NEB. Two extra yearling Holstein-Friesian bulls, also cows and heifers. High milk and butter records. Special price on bulls next 30 days.

H. R. LITTLE, Hope, Dickinson county, Kans. breeder of Shorthorn cattle. Herd numbers 100 head.

FOR SALE: TWENTY-FIVE SHORTHORN BULLS OF SERVICEABLE AGE.

MEADOW BROOK SHORTHORNS.—Headed by the Scotch bull, 20th Earl of Valley Grove 122381, a son of Lord Mayor. Breeding cows by such bulls as Imported "Thistle Top" and "Earl of Gloster." A car lot of high grade cows for sale.

F. C. KINGSLEY, Dover, Shawnee Co., Kans.

BONITA • SHORTHORNS.

BATES, BOOTH, and BEST AMERICAN strains. Baron Norubi 127151, by Godwin, the sire at Linwood, heads our herd. Address WILLIAMS BROS., Bonita, Kans.

GEO. GROENMILLER & SON,

Centropolis, Franklin Co., Kans.

Breeders of RED POLLED CATTLE and COTSWOLD SHEEP. Buff and Partridge Cochins, Light Brahmas, Brown S. C. Leghorns, Golden Wyandottes. Only a few seven-eighths Red Polled bulls for sale.

CLOVER CLIFF FARM.



Registered Galloway Cattle. Also German Coach, Saddle and Trotting-bred horses. World's Fair prize Oldenburg Coach stallion, Habbo, and the saddle stallion, Rosewood, a 16-hand, 1,100-pound son of Montrose, in service. Visitors always welcome. Address

BLACKSHERE BROS., Elmdale, Chase Co., Kas.

40 Shorthorn Bulls For Sale.

I wish to sell as soon as possible 40 young bulls, 6 to 15 months old. Will spare a few females to customers. Prices will be right. Address,

GEORGE CHANNON, Proprietor Lockridge Stock Farm, Hope, Dickinson Co., Kans.



GALLOWAYS Are the original POLLED BEEF BREED

For full particulars write to FRANK B. HEARNE, Secretary American Galloway Cattle Breeders' Association, Independence, Mo. If you want to buy a Galloway he can give you the address of breeders.

H. M. Satzler,

Burlingame, Kansas,

...BREEDER OF...

HEREFORD CATTLE, BERKSHIRE SWINE, COTSWOLD SHEEP. STOCK FOR SALE.



REGISTERED Galloways FOR SALE!

IN LOTS TO SUIT. 12 2-year-old bulls, 20 yearling bulls, balance cows and heifers. Inspection desired. Call on or address,

J. M. LOWE, 311 Mass. Bldg. Kansas City, Mo. J. R. LOWE, Blue Springs, Mo.

THE VINEWOOD HERD.

SHORTHORNS THAT ARE FEEDERS.

A herd of growthy, easy fattening Scotch and Scotch-topped cows headed by the Cruikshank bulls, Lavender King 4th 108682, from J. H. Potts & Sons' young herd of World's Fair prize-winners, and Gloster Vol. 41. Visit our herd.

D. K. KELLERMAN & SON, Mound City, Linn Co., Kans. Vineyard Farm one and a half miles north of Missouri Pacific depot.



BELVOIR HERD HEREFORDS OF THE VERY BEST BREEDING.

Herd bulls: Princeps 66683, Ben Butler 54079, and McKinley 68926. Ten yearling bulls and a few females for sale.

STEELE BROS., Belvoir, Douglas Co., Kans.

SUNFLOWER HERD

Scotch and Scotch-topped SHORTHORN CATTLE. POLAND-CHINA SWINE.

Herd bulls, Sir Knight 124403 and Violet Victor 127574. Herd boars, Black U. S. 2d 50606, and L's Sensation 2d 18905. Representative stock for sale.

Address ANDREW FRINGLE, Harveyville, Kansas.

CATTLE.

ROCKY • HILL • SHORTHORNS

Waterloo Duke of Hazelhurst 11th 130723 and the Linwood Golden Drop bull, Golden Victor Jr. 137875, head of herd. Thirty-odd young bulls and a few heifers for sale. Two of the bulls cross bred Scotch and Bates are good enough to head herds.

J. F. TRUE & SON, Newman, Kans.

Newman is on Union Pacific R. R., twelve miles east of Topeka.

500 Cattle For Sale

244 3-year-old steers raised in Kansas, and are now thick grass fat, so that a very short corn feed would put them in prime condition. Three loads of native yearling steers, two loads of good yearling heifers, and some good cows; must be sold soon.

RALPH PONTIUS, Larned, Kans.

SILVER CREEK HERD SHORT-HORN CATTLE.

Scotch and Scotch-topped, with the richly-bred Cruikshank bulls, Champion's Best 114671 and Gwendoline's Prince 130913, in service. Also high-class DUDOC-JERSEY SWINE. Can ship on Santa Fe, Frisco and Missouri Pacific railroads.

J. F. STODDER, Burden, Cowley Co., Kans.

W. Q. Hyatt,

Carbondale, Kansas,

Breeder and Live Stock Auctioneer.

Public Sales Made Anywhere.

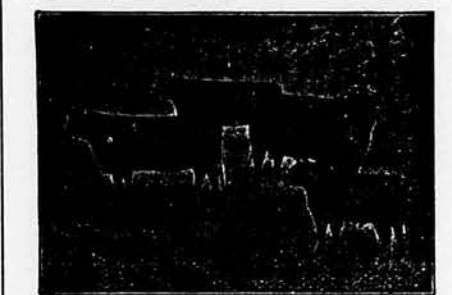
FOR SALE: A choice lot of Poland-China boars and gilts. Correspondence solicited.

ELDER LAWN HERD OF SHORTHORNS.



THE HARRIS-BRED BULL, GALLANT KNIGHT 124466, a son of Gallahad, out of 8th Linwood Golden Drop, heads herd. Females by the Cruikshank bulls, Imp. Thistle Top 83876, Earl of Gloster 74523, etc. Size, color, constitution and feeding quality the standard. A few good cows for sale now bred to Gallant Knight. A few young bulls of serviceable age for sale. Address

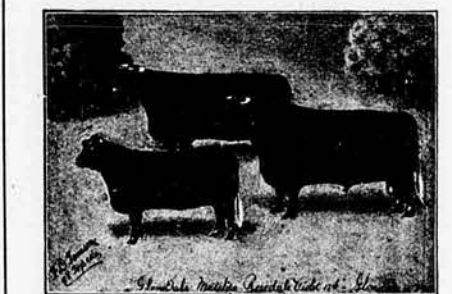
T. K. TOMSON & SONS, DOVER, KANS.



CEDAR HILL FARM.

Golden Knight 108086 by Craven Knight, out of or ton's Gold Drop, and Baron Ury 2d by Godoy, out. Mysie 50th, head the herd, which is composed of the leading families. Young bulls of fine quality for sale.

C. W. TAYLOR, PEARL, DICKINSON CO., KANS.



GLENDALE SHORTHORNS, Ottawa, Kans.

Leading Scotch and Scotch-topped American families compose the herd, headed by the Cruikshank bulls, Glendon 119870, by Ambassador, dam Galanthus, and Scotland's Charm 127264, by Imp. Lavender Lad, dam by Imp. Baron Cruikshank. Young bulls for sale.

C. F. WOLF & SON, Proprietors.



HERD BULLS FOR SALE

KANSAS LAD 134085, eighteen months old sired by Duke of Kansas 123126, and tracing to Imp Orlando and Imp. Golden Galaxy. Also CONSTANCE DUKE 134083, twenty months old, by Duke of Kansas out of 5th Constance of Hillsdale by 6th Duke of Oxford 55734.

These two grand bulls should be herd-headers. Come and see them or address

B. W. GOWDY, Garnett, Kansas.

CATTLE.

MAPLE GROVE HEREFORDS.

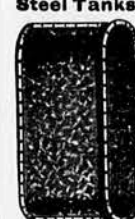
Selected from herds of Guggell & Simpson, Cross, Stannard, and Comstock. Headed by Garfield bull, Porter 48708. J. E. SMITH, Danavant, Kans.

RED POLLED CATTLE

Largest Herd in America.

S. A. CONVERSE, Proprietor, Importer and Breeder, Cresco, Howard County, Iowa.

Galvanized Steel Tanks.



Feed Cooker.



Tank Heater.



Shipped Subject to Inspection.

It costs you one cent for a card to write us and you get full particulars. Agents wanted. FREELAND MANUFACTURING CO., NILES, MICH.

When writing any of our advertisers, please state that you saw their "ad." in Kansas Farmer.

HORSES.

PROSPECT FARM

H. W. McAFEE, Topeka, Kansas.



Breeder of PURE-BRED Clydesdale Horse; and Scotch Shorthorn Cattle.

FOR SALE: Registered stallions and mares. Also the straight-bred Cruikshank herd bull, MY LORI 116563. VISITORS WELCOME.

GRIND YOUR GRAIN

on a SMALLEY MILL. Neither you nor your stock will have any fault to find. Our mills have great capacity combined with ease of operating which is simply wonderful. Don't take our word for this—try one and be convinced. Special introduction prices in all new territory. Catalogue showing the famous Smalley line complete free if you name this paper. SMALLEY MFG. CO., Sole Makers, Manitowoc, Wis.

FOR SALE.

Ten Shropshire Ram Lambs,

80 to 100 pounds each, well marked, low and blocky, and with magnificent quality of fleece. These ram lambs are the result of the eighth top cross of registered Shropshire rams on ewes from a Merino topped Cotswold cross. Price, \$10 and \$12 crated and delivered at Moran, Kans. Missouri Pacific and M., K. & T. Cash must accom. any order.

J. Clarence Norton, Moran, Allen Co., Kans.

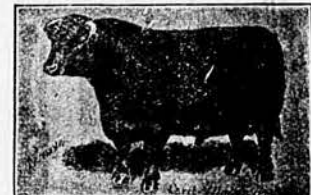
VALLEY GROVE SHORT-HORNS.

THE SCOTCH BRED BULLS

Lord Mayor 112727 and

Laird of Linwood 127149

HEAD OF THE HERD.



LORD MAYOR was by the Baron Victor bull Baron Lavender 2d, out of Imp. Lady of the Meadow and is one of the greatest breeding bulls of the age. Laird of Linwood was by Gallahad out of 11th Linwood Golden Drop. Lord Mayor heifers bred to Laird of Linwood for sale. Also breed Shetland ponies. Inspection invited. Correspondence solicited. A few young bulls sired by Lord Mayor for sale.

Address T. P. BABST, PROP., DOVER, SHAWNEE CO., KAS.

Sunny Slope Herefords.



100 HEAD FOR SALE.

CONSISTING of 32 BULLS, from 12 to 18 months old, 21 2-year-old HEIFERS, the get of Wild Tom 51292, Kodax of Rockland 40731 and Stone Mason 13th 42397, and bred to such bulls as Wild Tom, Archibald V 54433, Imported Keep On 76015 and Sentinel 76063, Java 64045.

40 1-year-old HEIFERS and 7 COWS.

These cattle are as good individuals and as well bred as can be bought in this country. Finding that 400 head and the prospective increase of my 240 breeding cows is beyond the capacity of my farm, I have decided to sell the above-mentioned cattle at private sale, and will make prices an object to prospective buyers.

Address C. A. STANNARD, Emporia, Kans.

1839.

THE "CORRECTORS" ARE HERE. THE "IMPROVERS" ARE COMING.

1899.

WEAVERGRACE BREEDING ESTABLISHMENT.

The Weavergrace Past is Sealed With the Approval Of America's Stockmen.



The Weavergrace Future Promises A Record Excelling All Previous Achievements.

The Weavergrace present will bear the closest investigation and comparison. No Hereford is too good for Weavergrace. Neither time, labor, money nor any other factor within our reach will be spared in an open, honest, energetic effort to make the WEAVERGRACE HEREFORDS the best herd of beef cattle in the world. Nothing from the herd offered privately. All reserved for annual spring auction. Three hundred and sixty-four days of the year devoted to the general Hereford interests, one day to the sale of the Weavergrace Herefords.

I have an Unrivaled List of registered Herefords (both sexes) and of grade Hereford steers and fem ales on file for sale throughout the country, in my office, New York Building, Chillicothe. There are several great bargains. All are invited to inspect this list, and spend a day at Weavergrace.

T. F. B. SOTHAM, Chillicothe, Mo.

Hereford literature on application; also a colorotype reproduction (15x22) of an oil painting of Cor-rector, free to all who will frame it.

MARKET REPORTS.

Kansas City Live Stock.
Kansas City, Oct. 9.—Cattle—Receipts, since Saturday, 16,156; calves, 639; shipped Saturday, 3,336 cattle; 822 calves. The market was steady to weak and slow. The following are representative sales:

DRESSED BEEF AND SHIPPING STEERS.			
No.	Ave. Price.	No.	Ave. Price.
41.....	1,280 \$5.80	42 Ks.....	1,117 \$4.55
2.....	1,085 4.10	29 Ks.....	1,181 4.55

WESTERN STEERS.

33.....	1,116 5.25	40.....	1,130 5.25
19.....	1,211 5.25	42.....	1,264 5.10
100.....	1,189 4.65	44 Tex.....	1,184 4.50
3.....	1,220 4.25	28 stk.....	881 3.70
178 stk.....	877 3.70	1 stk.....	890 3.35
1 stk.....	660 3.25		

TEXAS AND INDIAN STEERS.

31.....	781 3.20	101.....	721 3.00
34.....	68 2.85	2.....	755 2.75

WESTERN COWS.

26.....	1,067 4.15	39.....	1,081 3.30
42.....	1,062 3.30	20.....	1,068 3.30
13.....	1,026 3.25	13.....	855 2.95
37.....	873 2.90	28.....	764 2.85
10.....	892 2.90	5.....	888 2.75
9.....	945 2.65	30.....	746 2.45
6.....	723 2.45	15 stk.....	431 2.30

TEXAS AND INDIAN COWS.

120.....	692 3.10	28.....	675 2.65
----------	----------	---------	----------

COLORADO STEERS.

44.....	1,242 4.35	22.....	1,090 4.15
---------	------------	---------	------------

PANHANDLE COWS.

231 stk.....	489 3.90	101 LL.....	877 3.25
--------------	----------	-------------	----------

NATIVE HEIFERS.

61.....	757 5.00	10.....	763 4.50
1.....	800 4.25		

NATIVE COWS.

1.....	1,630 3.75	4.....	1,102 3.40
6.....	1,056 3.35	2.....	1,015 3.25
8.....	1,085 3.25	1.....	880 3.00
1.....	1,030 2.80	2.....	1,155 2.65
3.....	880 2.50	4.....	842 2.25
2.....	1,070 2.75	2.....	1,125 2.75

NATIVE FEEDERS.

52.....	1,093 4.47½	11.....	966 4.10
6.....	901 3.85	1.....	940 3.25

NATIVE STOCKERS.

15.....	400 5.50	6.....	450 4.75
32.....	597 4.40	23.....	638 4.30
1.....	800 4.15	2.....	50 4.00

STOCK COWS AND HEIFERS.

5.....	438 3.75	1.....	420 3.75
1.....	950 3.60	19.....	640 3.60
1.....	610 3.45	1.....	620 3.25
7.....	875 3.00	1.....	1,110 3.00
2.....	805 2.25	1.....	1,020 2.85

Hogs—Receipts since Saturday, 6,542; shipped Saturday, 184. The market averaged around 2½c lower. The following are representative sales:

34.....	168 \$4.57½	69.....	161 \$4.55	44.....	175 \$4.55
271.....	190 4.55	75.....	174 4.55	24.....	164 4.52½
1.....	215 4.50	85.....	182 4.50	74.....	187 4.47½
95.....	166 4.47½	90.....	189 4.47½	84.....	154 4.47½
95.....	186 4.47½	103.....	155 4.47½	76.....	203 4.45
70.....	202 4.45	14.....	264 4.45	20.....	174 4.45
139.....	194 4.45	90.....	189 4.45	103.....	178 4.45
20.....	217 4.42½	67.....	208 4.42½	92.....	189 4.42½
83.....	208 4.42½	71.....	230 4.42½	97.....	197 4.42½
140.....	267 4.40	58.....	270 4.40	70.....	248 4.40
80.....	224 4.40	68.....	264 4.40	53.....	61 4.40
74.....	233 4.40	78.....	237 4.40	89.....	109 4.40
43.....	256 4.37½	62.....	250 4.37½	52.....	243 4.37½
61.....	251 4.37½	81.....	248 4.37½	50.....	251 4.37½
60.....	272 4.35	14.....	272 4.35	16.....	231 4.35
75.....	279 4.35	6.....	320 4.35	69.....	273 4.35
62.....	212 4.32½	23.....	86 4.30	61.....	167 4.25
70.....	131 4.20	90.....	151 4.00	4.....	212 3.75

Sheep—Receipts since Saturday, 3,265; shipped Saturday, 2,051. The market was slow and 10 to 15c lower. The following are representative sales:

19 lms.....	75 \$4.50	2 culls.....	65 \$3.25
12 sh.....	92 3.90	2 culls.....	107 3.50
21 culls.....	83 1.75		

South Omaha Live Stock.
South Omaha, Neb., Oct. 9.—Cattle—Receipts, 6,000; market steady; native beef steers, \$5.00@6.25; western steers, \$4.10@4.65; Texas steers, \$3.75@4.05; cows and heifers, \$3.35@4.95; canners, \$2.25@3.25; stockers and feeders, \$3.70@4.70; calves, \$4.50@6.75; bulls, stags, etc., \$2.50@3.75.

Hogs—Receipts, 3,800; market steady, closed shade lower; heavy, \$1.20@4.32½; mixed, \$4.30@4.32½; light, \$4.32½@4.50; pigs, \$4.00@4.45; bulk of sales, \$4.30@4.35.

Sheep—Receipts, 11,100; market steady; yearlings, \$3.80@4.00; western muttons, \$3.65@3.85; stock sheep, \$3.40@3.70; lambs, \$4.00@4.75.

Rye—No. 2, 56½c; No. 3, nominally 55½c; No. 4, nominally 54c.

Hay—Receipts here to-day were 76 cars; a week ago, 131 cars; a year ago, 35 cars. Quotations are: Choice prairie, \$6.50 No. 1, \$5.75@6.25. Timothy, choice, \$8.00. Clover, pure, \$5.50@6.50. Alfalfa, \$5.50@7.50.

St. Louis Cash Grain.
St. Louis, Oct. 9.—Wheat—Cash, No. 2 red, elevator, 72½c; track, 72½c; No. 2 hard, 69½@70½c.

Corn—Cash, No. 2, 81c; track, 82c.

Oats—Cash, No. 2, 24c; track, 24@24½c; No. 2 white, 23@23½c.

Kansas City Produce.
Kansas City, Oct. 9.—Eggs—Strictly fresh, 14c per doz.

Butter—Extra fancy separator, 22c; firsts, 19c; seconds, 15c; dairy fancy, 16c; store packed, 13c; packing stock, 12½c.

Poultry—Hens, 7c; broilers, 5c; roosters, 15c each; ducks, 5c; geese, 6c; turkeys, hens, 8c; toms, 7c; pigeons, 75c per doz.

Vegetables—Beans, 75c@1.00 per bu. Hubbard squash, 60@75c per doz. Pumpkins, 45@60c per doz. Turnips, 35@40c per bu. Onions, 55@65c per bu. Peppers, 40@50c per bu. Cabbage, home grown, 50@55c per doz.

Potatoes—Home grown, 25@30c per bu.; Kaw valley, sacked, 28@30c per bu. Sweet, 35@45c per bu.

Apples—Choice to fancy, \$3.00@5.00 per bbl.; fair to choice, \$2.00@3.00 per bbl., 65c@1.00 per bu.; culls and wind falls, 25@40c per bu.

Game—Ducks, mallard, \$3.50@4.50 per doz.; teal, \$2.00@2.50; mixed, \$1.50@2.00; plover, \$1.00@1.25; frogs, 35c@1.00.

Miscellaneous—Popcorn, 75c per bu. Hickory nuts, 60c per bu.; shell barks, 75c per bu. Wool 10@18c per lb.

McINTOSH & PETERS COMMISSION CO.,
Live Stock Commission Merchants.
Rooms 252-3-4 Exchange Building.
KANSAS CITY STOCK YARDS.
Correspondence and Consignments Solicited. Market reports furnished to FEEDERS and SHIPPERS.
REFERENCES:
National Bank of Commerce, Kansas City, Mo.
Inter-State National Bank, Kansas City, Kans.
Bank of Topeka, Topeka, Kans. Telephone 164
Security Bank, Eskridge, Kans. Hickory.

The Greatest Invention of Modern Times.

THE DAVENPORT
WIRELESS
CHECK-ROW CORN-PLANTER

Built on Entirely New Principles.
Corn Planting a Pleasure.

THE FARMER'S DREAM REALIZED AT LAST.

Used anywhere a team can be driven with complete
SUCCESS.

Now on exhibition at the Omaha Exposition.

WATCH THIS SPACE NEXT WEEK.

Secure agency to-day by writing
THE IMPLEMENT MANUFACTURING CO.
DAVENPORT, IOWA.

STEVENS

SAFE, SOLID, ACCURATE.

The line is most complete, embracing pistols, heavy rifles for target and hunting purposes, light pocket rifles with skeleton stocks.

The "FAVORITE" RIFLES

are covered by the same guarantee. The best in the world for boys. Just as reliable and advisable for men.

No. 17—with Plain Open Sights.....\$6.00
No. 18—with Target Sights.....8.50

Where these rifles are not carried in stock by dealers we will send, express prepaid, on receipt of price.

Send stamp for catalogue.
J. STEVENS ARMS & TOOL CO., Box 1508
Chicago Falls, Mass.

Please mention Kansas Farmer when writing our advertisers.

CANNON'S KILLS

Red Bugs, Roaches, Fleas, Lice, Ticks.

Non-Poisonous.

ANTISEPTIC DISINFECTANT AND GERMICIDE.
PREVENTS CONTAGIOUS DISEASES.
25 and 50 Cent Bottles or in Gallon Lots by All Dealers.

HEALS
Sores, Cuts, Burns, Stings, Bites.

Non-caustic.

"PASTEUR"
BLACK LEG VACCINE.

The original, genuine, and successful preventive vaccine remedy for Blackleg. In powder form: "Single" application, \$1.50 per packet, (10 to 12 head); "Double" application, \$2.00 per double packet, (10 to 20 head). Also "BLACKLEGINE," Single application vaccine READY FOR IMMEDIATE USE: Ten head, \$1.50; twenty head, \$2.50; fifty head, \$3. Beware of substitutes for, or imitations of our well-known "Pasteur" Vaccines. Write for particulars and proofs of success during four years.

PASTEUR VACCINE CO.,
CHICAGO. OMAHA. DENVER. FORT WORTH.

The Kansas City Stock Yards.
FINEST EQUIPPED, MOST MODERN AND BEST FACILITIES.

The Kansas City market, owing to its central location, offers greater advantages than any other.

Twenty-Two Railroads Center at these Yards.
Largest Stocker and Feeder Market in the World.
Buyers From the.....

ARMOUR PACKING COMPANY,
SWIFT AND COMPANY,
SCHWARZSCHILD & SULZBERGER CO.,
JACOB DOLD PACKING COMPANY,
GEO. FOWLER, SON & CO., Ltd.,
CUDAHY PACKING COMPANY.

Principal Buyers for Export and Domestic Markets in Constant Attendance.

	Cattle and Calves.	Hogs.	Sheep.
Official Receipts for 1898	1,846,233	3,672,909	980,303
Gold in Kansas City 1898	1,757,163	3,596,828	815,580

C. F. MORSE, Vice-Pres. and Gen. Mgr.
E. E. RICHARDSON, Secy. and Treas.
H. P. CHILD, Asst. Gen. Mgr.
EUGENE RUST, Traffic Manager.

ARE YOU GOING TO
Chicago or the East?
THE THROUGH EXPRESS FROM
Colorado—Kansas—Nebraska
VIA OMAHA.

Great Rock Island Route

AND THE
Chicago Express from Kansas City
In addition to Pullman Sleepers, Free Chair Cars, and the Best Dining Car Service in the World, are equipped with
Buffet Library Smoking Cars
furnished in club style and supplied with latest periodicals, illustrated papers and a select library of recent fiction.

ARE YOU GOING TO
Colorado or the West?
TRY THE COLORADO FLYER
Fast, carries Dining Cars and Pullman Sleepers. Leave Omaha, 6:40 p. m.; Kansas City, 6:30 p. m.; St. Joseph, 4:50 p. m. Arrive Denver and Colorado Springs, next morning.

JNO. SEBASTION, G. P. & T. A., Chicago, Ill.
E. W. THOMPSON, A. G. P. & T. A., Topeka, Kans.

ONLY \$5.00

for this first-class cooker and water heater. Just the thing for cooking feed for stock, pigs or poultry and for heating water for scalding hogs. Burns wood only.

The Farmer's Feed Cooker
is made of best cast iron with No. 22 galvanized steel boiler, and holds 20 gallons. We make larger cookers and will quote prices on application. Send for free circulars. Reliable Inc. & Brdr. Co. Box 62, Quincy, Ill.

When writing any of our advertisers, please state that you saw their "ad." in Kansas Farmer.

Samples copies of Kansas Farmer sent free on request.

If You Are Going
—TO—
St. Paul, Minneapolis,
Northern Lake Resorts
OR TO POINTS ON THE
NORTHERN PACIFIC OR...
GREAT NORTHERN RAILROADS...

TAKE THE
MISSOURI PACIFIC RAILWAY
...TO...
..OMAHA..
...WHERE...
DIRECT CONNECTION IS
MADE WITH THE
CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RY.

NOTE NEW SCHEDULE:

Lv. Kansas City.....9:15 p. m. via Mo. Pac. Ry.
" Leavenworth.....10:15 p. m.
" St. Joseph.....8:05 p. m.
" Atchison.....11:10 p. m.
Ar. Omaha.....5:50 a. m.
Lv. Omaha.....6:10 a. m. via C., St. P., M. & O.
Ar. St. Paul.....6:50 p. m.

ELEGANT EQUIPMENT
AND QUICK TIME...

Try the New Fast Line.
SEE NEAREST MISSOURI PACIFIC AGENT
FOR TICKETS, SLEEPING CAR
ACCOMMODATIONS, ETC....

H. C. TOWNSEND, G. P. & T. A.,
ST. LOUIS.

ROOF YOUR CORN CRIB
WITH
Corrugated Iron.
Cheapest, Best and Most Easily Applied.
The Kansas City Roofing & Gorrugating Co.,
218 and 220 West Third St., KANSAS CITY, MO

The Poultry Yard

Coming Poultry Shows.

Secretaries of poultry associations are invited to send announcements of coming poultry events for publication in this column.

Harvey County Poultry Association—R. R. Hobbie, secretary; C. H. Rhodes, judge, Newton, Kans., December 4-9, 1899.

Southern Kansas Poultry and Pet Stock Association—Sealy L. Brown, secretary; L. P. Harris, judge, Coffeyville, December 11-14.

Kay County Poultry Association—Geo. M. Carson, secretary; H. B. Savage, judge, Blackwell, Okla., January 17-20, 1900.

HATCHING IN COLD WEATHER.

An English writer says: "In approaching the question of hatching, there are a number of general principles which every poultry-keeper should fully understand no matter how small his operations may be or how extensive, for upon them must depend in great measure his success. This is especially true, if it is intended to hatch out of the ordinary season, for then we have to provide against contingencies which would not otherwise arise. Fowls would naturally only develop the maternal instinct in the spring, but, as it is necessary to secure a supply of eggs during the entire twelve months, and as considerable profit may be made by early chickens, we are compelled to upset the ordinary course. When the temperature is favorable, a broody hen may be placed anywhere, in the open air, or with very little in the way of protection; but if we are hatching during the colder season, this plan would not secure the best results, for it is essential that they be kept warm at this time. Nothing can be more adverse to the prolongation of the brooding instinct than cold, and hence the desirability of devoting some special place to the purposes of a hatching-room, where proper precautions can be taken in the direction indicated.

ISOLATION OF SITTERS.

There are other reasons for doing this. The labor of attending to a large number of sitters is minimized, and they can be kept under closer observation. What the place shall be depends, of course, to a large extent upon the buildings available. There are not many who go to the expense of building with this object alone, and it is not requisite to do so in the majority of cases. There is usually some structure which can be utilized as a hatching room, especially as this will only be occupied during a few months. It is important, also, because hens sit much better during the period of hatching if undisturbed. Nothing is more likely to upset them than seeing other fowls running about, and there is further the danger of their being interfered with. Under no circumstances should they be allowed to make their nests in the roosting house. Most hens will bear removal, if this is done in a quiet and orderly manner. Personally I prefer for a hatching room one of the farm buildings, as they are usually much warmer than isolated structures, and thus the necessity of artificial heat is obviated. We must see, however, that the place is quiet, for if subject to great vibrations or shocks, the danger of deformities in the chickens is very much increased, and the same is true if doors are slammed, while the noise interferes with the comfort of the hens.

THE HATCHING PLACE.

"A most important point in the selection of a hatching house or room is that it shall be dry, by which I do not mean that there shall be any artificial dryness, but that the walls and floor shall not be damp and cold, as this would be most injurious to the birds, making them uncomfortable, and frequently explains why hens desert their nests. A damp house can never be warm. While it is always wise to select a rather dark place, it is all the better if facing the south, because there the sun has more power to keep it both warm and dry. One with a north aspect is not nearly so good, and should not be selected. The air should be sweet and pure and sufficient in quantity, for the oxygen would be speedily absorbed unless properly ventilated, if a number of sitters were kept in one building at the same time. Only within the past few years has the importance of the atmosphere in hatching been fully realized; but it is a question which can not be ignored. Some time ago a gentleman who has made very careful observations with regard to artificial incubation stated that he believed the

great majority of addled eggs and deaths in shell were directly caused by impure air, or an insufficient supply, and the same is equally true with regard to sitting hens, although, of course, from the fact that there is no lamp burning in the room, the danger of contamination is less than where artificial methods are employed. For this reason it is not desirable to make the upper part of a cattle shed into a hatching room, as the emanations arising from the animals beneath would certainly not be favorable to success. I have found the loft above a stable excellent for this purpose when properly ventilated, the heat rising from the horses at night maintaining an equable temperature in winter. Steps must always be taken to keep the air in the hatching room sweet by a proper system of ventilation, and during fine weather, especially in the middle of the day, it is an excellent plan to leave doors and windows open for an hour or two. The chief difficulty is always that by a condensation of the air it becomes damp, and also that the embryos are affected by the impure air which surrounds them. When this fact is fully realized, it is not at all difficult for any poultry-keeper to avoid the difficulty mentioned. But ventilation should be overhead, as the fowls must not be subjected to draft.

First Treatment of Brooder Chicks.

By a Brooder Manufacturer.

Chicks should be taken out of the incubator as soon as they are dry, placed in a basket with a piece of flannel under and over them, and the basket set near a stove or in a warm place and the chicks not fed for twenty-four hours. After that time remove them from the basket into the brooder, heated between 80° and 90°, and feed them with a few bread crumbs. Keep clean water constantly before them, but have the vessel containing the water so arranged that they can not get themselves wet. You can buy fountains for this purpose or can make them yourself by placing a tumbler upside down in an ordinary coffee saucer.

After the first feeding they must be enclosed under the hover of the brooder until the next feeding. Do not neglect to do that, it is very important. Feed often, but little at a time, as they can not digest much at a time, and positively must not be overfed. Overfeeding will produce bowel complaint as quickly as anything else. They should be well fed, and yet kept a little hungry. Feed them about four or five times a day at regular hours, and see that they all return to their hover after feeding. Scrape up what feed is left, if any, and throw it away or give it to the pigs or your full-grown chickens. Young chicks must never eat stale feed. They must be taught to go under the hover each day until they learn what it is for, and where to go when they get cold.

They must be taught right from the first to eat everything that is good for them, like screenings, millet seed, cracked corn, whole wheat and baked corn-meal cakes pulverized. Wheat and cracked corn should be their predominating food after the fifth day.

Some persons complain that their chicks will not eat some of these foods, but you can overcome that by giving them only a little of the foods they do not seem to care for between the regular times for feeding, and also a little with the food they do eat at their regular feeding. They must not become habituated to one food. They should become quite hungry for their last meal, which should be given them as late as possible, before dark, so that they will eat enough to last them until morning. The last feed should be hard dry grain. Some persons complain that the chicks will not go under the hover, but crowd into the corners and smother each other. If the foregoing instructions are carefully and patiently carried out, and the little chicks made go under the hover from the first, they will soon learn that the hover is a good mother to them and will not be troubled with smothering.

Other persons say they find dead chicks in the hover in the morning. If you maintain 80° to 90° of heat in your hover, this is probably because of weakness of certain chicks which have become chilled sometime during the day. See to it that they never become chilled by huddling in the corner of the brooder outside the hover, for once they get chilled they can not get warm, they become weak legged, and sit as close to the heater of the brooder as they can possibly get, while the other chicks stand upon them and crush them; or, having become chilled, their food will not digest and they die of bowel complaint.

Another cause of bowel complaint is, that in outdoor brooders and also some

When Doctors Disagree, Who Shall Decide?

Herbert M. Fish, a progressive and respected resident of Cape Vincent, N. Y., said: "The doctors disagreed in my case, one said I had the grip, another that it was jaundice, and so on. I tried many remedies but did not receive the slightest benefit. I was low spirited and nervous and had become reduced in weight from 155 pounds to less than 123. One day a friend recommended Dr. Williams' Pink Pills for Pale People. I tried them and the result was indeed marvelous. My appetite returned and I began to feel rested and restored. At the end of the tenth box my physical condition was better than it had been for years and I was a well man."

HERBERT M. FISH.

Sworn to and subscribed before me this 17th day of Nov., 1898.

LLOYD O. WOODRUFF,
Notary Public.

—From the Eagle, Cape Vincent, N. Y.

Dr. Williams' Pink Pills for Pale People contain, in a condensed form, all the elements necessary to give new life and richness to the blood and restore shattered nerves. They are an unfailing specific for such diseases as locomotor ataxia, partial paralysis, St. Vitus' dance, sciatica, neuralgia, rheumatism, nervous headache, the after-effects of the grip, palpitation of the heart, pale and sallow complexions, and all forms of weakness either in male or female.

Dr. Williams' Pink Pills for Pale People are never sold by the dozen or hundred, but always in packages. At all druggists, or direct from the Dr. Williams Medicine Company, Schenectady, N. Y., 60 cents per box, 6 boxes \$2.50.

NON-POISONOUS SURE PROTECTION



CHLORO-NAPHTHOLEUM

Death to Ticks, Scab, Mange, Foot Rot, and Disease Germs.

THE PREVENTIVE TREATMENT

TO PREVENT HOG CHOLERA.

JAMES RILEY of Indiana, the oldest and most successful breeder of Berkshire hogs in the United States, has used Chloro-Naptholeum for years as a disinfectant for his hogs, and preventive for hog cholera. In a recent article he advises every breeder to use Chloro-Naptholeum freely the year around if they wish to prevent cholera and make money.

Last year swine breeders all over the United States saved thousands of dollars worth of stock by using Chloro-Naptholeum. Can you afford to be without it?

We will send you free, our short, simple, practical book on Hog Cholera. Write for it. Ask your local dealer for Chloro-Naptholeum. If he is not up-to-date, write or telegraph.

WEST DISINFECTING CO., 25 E. 59th St., New York City.

Sample gallon can sent, express paid, for \$1.50.



HIGH-GRADE INCUBATORS

DES MOINES INCUBATOR CO. Box 85 Des Moines, Iowa.

WE CAN SUIT YOU IN PRICE AND WE GUARANTEE TO PLEASE YOU IN QUALITY.

What more could we do? Our catalogue tells all, and is devoted largely to practical matters pertaining to poultry raising. Has 148 pages; mailed to any address for 6c. No wild and woolly statements, toy outfits, nor prize package lots to offer. Fair treatment, prompt service and full value are what we try to give our customers.

Throw Away Those Pans..



You are losing time, labor and **DOLLARS** every week that a "SELDON" will save. Adds quantity and quality to your dairy product. None equals the "SELDON" in simplicity, workmanship and finish. Write at once for our special offer to first buyers and agents. It will surprise you. **DON'T WAIT.** Address, **SELDON CREAM SEPARATOR CO.,** A 34 Clark St., CHICAGO.

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.

GEO. ERTEL CO., QUINCY, ILL.

CANDY CATHARTIC
Cascarets
REGULATE THE LIVER

chicks, while confined in the brooder, than they will eat up clean, but after you let them run outside the brooder, always keep dry grain food in the brooder, in a little trough, so as to entice them to return to the brooder, their only home.

See that their feed trough in the brooder is full before sundown.

Chicks must not be overfed.

Chicks must be kept warm.

Chicks must be taught correct habits in the first days of their youth.

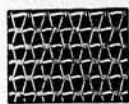
Chicks must have more attention than wheat or corn.

These rules apply to chickens, ducks, and turkeys.

A Fuel Superior to Coal.

A new mineral has recently been discovered which, as a fuel, is far superior to coal. The substance, which is of a lustrous black color, is found on the island of Barbados, and is called by the natives "manjak." It is thought that manjak is petrified petroleum, great quantities of petroleum being found on the same island. It contains only 2 per cent of water and fully 27 per cent of solid organic matter, thus surpassing in utility the best asphalt of Trinidad, in which 30 per cent of water is contained and which has been classed so far as the very finest fuel.—Journal of Geology.

Cleanse the liver and bowels, and regulate the system by using Prickly Ash Bitters. It creates and sustains energy.



FENCE! STRONGEST MADE. Built strong, Chicken-tight. Sold to the Farmer at Wholesale Prices. Fully Warranted. Catalog Free. COILED SPRING FENCE CO. Box 40. Winchester, Indiana, U. S. A.



CHEAP CORN CRIBS.

Write for Prices and Catalogue.

Combination Fence Works

Council Bluffs, Ia.



We make Steel Windmills, Steel Towers and Feed Grinders and are selling them cheaper than the cheapest. Our productions are standards; are first-class in every respect and are sold on trial. Send us a postal and we will tell you all about them.

CURRIE WINDMILL CO., Agents WANTED. Manhattan, Kas.



A MILLION dollars saved by the use of the **PEERLESS MILLS.**

Unrivalled in capacity and quality of work. Will grind ear corn and all grain to any degree of fineness. Will make family meal or feed. Agents Wanted Everywhere. Send for free circulars, prices, etc.

W. J. ADAM, JOLIET, ILL.



Farmer's Improved FEED COOKER

Is superior to all others in Safety, Durability and Economy of cost and operation. Scientifically constructed. Heavy cast iron lining in furnace. Boiler of heavy galvanized steel. Stands high from the floor and can be put up in the barn or summer kitchen with safety. Made in season. Every one guaranteed or money refunded. For descriptive book and prices send 2c stamp. Address, **ACME MFG. CO., Quincy, Ill.**

Before Buying a New Harness

Send 5 cts. in stamps to pay postage on descriptive catalogue 100 styles of single and double **oak-tanned** Leather Harness to select from. Sold direct to the consumer at wholesale price. **We can save you money.** **KING HARNESS COMPANY, Mfrs.** 220 Church St., Owego, N. Y.

LIGHTNING WELL MACHY IS THE STANDARD **STEAM PUMPS, AIR LIFTS, GASOLINE ENGINES** WRITE FOR CIRCULAR **THE AMERICAN WELL WORKS** AURORA, ILL. - CHICAGO - DALLAS, TEX.

We Save You Money

on every rod of fencing you buy from us. Why? Because we sell you the **ADVANCE FENCE**

Direct from the Factory at Wholesale. Dealers cannot buy it any cheaper than you can. We save you the middle man's profit. You get a good fence at a low price. Beats a hand fence machine all to pieces. No loose ends to unravel. All closely interwoven—cross wires cannot slip. Write at once for our free circulars and special discounts. **Advance Fence Co. 130 Old St., Peoria, Ill.**

MICA AXLE GREASE lightens the load—shortens the road. helps the team. Saves wear and expense. Sold everywhere. MADE BY **STANDARD OIL CO.**



The Fence That Revolutionized

fences is spelled "P-A-G-E" and it has been improved and improved in material and construction.



The original three-stroke Triple Lever Full Circle Steel Hay Press. Shipped anywhere on Truck and Approval. Capacity 10 to 12 tons. One or two horses. Fastest, lightest, strongest. Write for prices and get an **ADMIRAL HAY PRESS.**

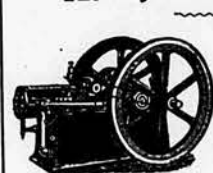
THIS GRINDER

IS THE KELLY DUPLEX Duplex means that it has a double set of grinding plates or burrs. That means that it is the fastest grinder made—doing double the work of any mill of similar size. Requires only light power.

CRUSHES AND GRINDS Ear Corn, Cob, Husk and All. Grinds cotton seed and all grains single or mixed. Makes coarse, medium or fine feed as desired and to fit the requirements of the animal to be fed. Simple, easy to operate, durable. Send for free Catalog No. 89 The O. S. Kelly Mfg. Co., Iowa City, Ia. and Springfield, O.

..HOWE.. SCALES.

The only scale with ball bearings.



Fire and Burglar-Proof

SAFES.

Foos Gasoline Engines.

Write for Catalogue.

Borden & Selleck Co.,

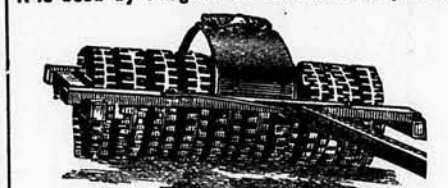
1102 Union Ave.,

Kansas City, Mo.

Here is the Implement That You Want

FOR YOUR LIGHT SOIL.

It is Used by Progressive Farmers Everywhere.



The McCalm Clod Crusher and Compress Field Roller.

It crushes and grinds all clods, packs the soil without making a smooth, hard surface, no parts to wear or get out of repair. For particulars, address

THE H. P. DEUSCHER CO.,

Hamilton, Ohio.

TWO BIG MILLS IN ONE.

BUY THE BEST



The oscillating sweep shown in above cut insures uniform grinding. It is only one of the many desirable improvements found exclusively in Giant Killer Feed Mills.

Free for the asking, our new Sweep Mill and Feed Cooker Catalogue describing large line of plain duplex and geared grinders, for 1, 2, or 4 horses. We ship from Omaha, Kansas City, St. Louis, Indianapolis, Bloomington, Minneapolis.

DAVIS GASOLINE ENGINE WORKS CO., WATERLOO, IOWA.



FREE

A valuable book for the farmer or breeder. It fully describes Hog Cholera and Swine Plague, and gives a positive and proven

CURE.

It is so plainly written that even a child can learn to know the two diseases. Free for the asking. Address the publishers,

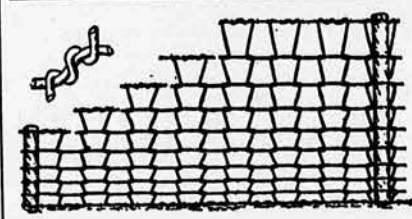
The Dr. J. H. Snoddy Remedy Co., Des Moines, Ia. Alton, Ill.

LIGHTNING HAY PRESS AND SCALE



GUARANTEED STANDARD

KANSAS CITY HAY PRESS CO. 129 MILL ST. KANSAS CITY MO



Warner "Common Sense" Fence.

Patented November, 1896.

OTHERS GOOD—NONE BETTER.

More sold in Kansas than any other fence.

It is made of heavy endless wire, with or without barbs top and bottom. Hog and pig tight. If your dealer does not sell it, write direct to us for prices and circular.

COMBINATION FENCE CO., Melvern, Kans.

DO YOU WANT A FARM OR A RANCH? 7,000,000 acres Ranch land—1,000,000 acres Farm land, located in NEBRASKA, KANSAS, COLORADO, WYOMING and UTAH. For sale by the **UNION PACIFIC RAILROAD COMPANY** at greatly REDUCED PRICES on ten years' time and only 6 per cent interest. **LIBERAL DISCOUNT FOR CASH.** Please refer to this paper when answering advt. **S. A. McALLISTER, Land Commissioner, U. P. R. CO., Omaha, Neb.**

INSURE YOUR PROPERTY THE FARMERS' ALLIANCE INSURANCE CO.

Established in 1888. Paid \$200,000 in Losses.

The mutual plan is the cheapest and best. You pay for what you get at its actual cost. Every property owner can and should have the protection we offer. For agency or further information, address **C. F. MIGNENBACK, Secretary, McPherson, Kansas.**

Union Pacific Through Trains

ARE SOLID VESTIBULED.



Direct Line to the West.

Colorado, Wyoming, Utah, California, Oregon.

AND FINELY EQUIPPED WITH Palace Sleeping Cars, Dining Cars, Free Reclining Chair Cars, Ordinary Sleeping Cars. (Pintch Lighted.)

For Time Tables, Folders, Illustrated Books, Pamphlets, descriptive of the territory traversed, call on F. A. Lewis, City Ticket Agent; or, J. C. Fulton, Depot Agent, Topeka, Kans.

LUMBER and MATERIAL AT HALF OF REGULAR PRICES.

We have just purchased the **OMAHA EXPOSITION BUILDINGS**

and if you are in the market for any Lumber, Sash, Doors, Railing, Trusses, Timbers, Pipe, Roofing, Flag Poles, Builders' Hardware, Benches, Stair Cases, Iron Columns, Iron Rods, Iron Beams, Machinery, Fire Apparatus, Statues, Copper Wire, Electric Light Fixtures, &c., &c. Write for Catalogue No. 100. **OUR PRICES WILL ASTONISH YOU.** We have a branch office on the Exposition Grounds at Omaha. Address **CHICAGO HOUSE WRECKING CO.,** Omaha, Neb., or Chicago, Ill.



Kees' Improved Corn-Husker The greatest labor and hand saving tool ever made. Sold by hardware and general stores. Sent post paid for 85 cents. Address **F. D. KEES, Beatrice, Nebr.**

RUPTURE Positively & Permanently CURED

No cutting, no pain, and no detention from business. **You pay no money until cured.** Consultation and examination **FREE.**

Dr. ERNEST HENDERSON, 103 W. 9th St., Kansas City, Mo.

Ladies Our Monthly Regulator never fails. Box **FREE.** Dr. F. May, Bloomington, Ill.

BED-WETTING CURED. Sample **FREE.** Dr. F. E. May, Bloomington, Ill.

VARICOCELE cured without knife, pain or danger. Illustrated booklet free. **10 W. 9th St.,** Call or write. **DR. H. J. WHITTIER, Kansas City, Mo.**

J. G. Peppard MILLET CANE
1400-2 Union Avenue, CLOVERS
KANSAS CITY, MO. TIMOTHY
GRASS SEEDS.

SEEDS

MAINS' SIXTH ANNUAL PUBLIC SALE OF POLAND-CHINAS!

On my farm, two and a half miles southeast of
OSKALOOSA, KANS., SATURDAY, OCTOBER 28, 1899.

One hundred head, all classes, consisting of Chief Tecumseh 2d, Klever's Model, Moorish King, Chief I Know, and U. S. Model strains. In this offering there will be eighteen fall and early winter boars that are growthy and heavy-boned and in prime breeding condition (not fat); a fine lot of sows with pigs at their side; also some to farrow soon; a number of proven sows just weaning their pigs; winter and spring gilts unbred, and extra spring and summer boars, all from sows of the very best breeding. The boars and many of the sows were sired by Model Combination (a grandson of Klever's Model on sire's side, also of Chief Tecumseh 2d on dam's side) and One Price Chief. Herd in fine condition and health and of up-to-date breeding. Send for catalogue.

COL. J. N. HARSHBERGER, Auctioneer.

JAMES MAINS.

PUBLIC SALE OF DUROC-JERSEYS

Half rates on all R. R.'s. At my farm, three miles west of (Half rates on all R. R.'s.)

WICHITA, KANSAS, FRIDAY, OCTOBER 20, 1899.

Fifty head of young stock, besides the herd-headers, Canton 3747 and Pluck 5143. Some stock sired by Gold Bug 2597, Custer 3687, Bayn 5145, and B's Best 2317.

J. U. HOWE, Wichita, Kansas.

Public Sale of Red Hogs

I Will Offer, at Public Sale, on My Farm, One-fourth Mile Southeast of Fairview, on
THURSDAY, OCTOBER 19, 1899, Commencing at 12:30 p. m., the following property:

Thirty Head of Duroc-Jersey Swine—About equal numbers of each sex, ages from 6 months to 1 year old, and a few sows bred. The hogs are all thoroughbred and bred from the best strains. **Terms of Sale:**—All sums under \$10, cash; \$10 or over a credit of 6 months will be given if paid when due; if not so paid, interest at eight per cent will be charged from date of sale.

ELI ZIMMERMAN, Auctioneer.

J. B. DAVIS.

Public Sale of Shorthorns

Of Scotch and Bates Breeding.

On Saturday, promptly at 1.30 p. m., November 18th, at the stables of M. R. Diver, corner of Douglas Avenue and Waco Streets, in Wichita, Kans., I will sell to the highest bidder, registered Shorthorns as follows:

Eleven bull calves, from 5 to 11 months old; one bull, yearling past, and my herd bull, Iowa Lord, 2 years old last March. Also, 12 head of cows and heifers. **Terms:**—Six months at 6 per cent interest; 5 per cent discount for cash.

Wm. H. RANSON,
Evergreen Ridge Stock Farm, North Wichita, Kansas.

CATTLE FOR SALE.

340 Cows, Heifers and Steers
in lots to suit the purchasers.

40 head of 2-year-old native steers at \$39.50. The Arizona and Colorado are well-bred cattle, of good colors, which we offer as follows:
Yearling steers at..... \$25 00
2-year-old steers at..... 30 00
3-year-old steers at..... 35 00
Yearling heifers at..... 22 00
2-year-old heifers at..... 23 00
3-year-old heifers at..... 26 00
These cattle are on good pasture for the season, and will be sold on easy terms to responsible buyers. Address,

J. W. HIGGINS, Jr.,
Hope, Kas.

NORWOOD STOCK FARM

BARGAINS

For Dairyman or Breeders.

I will dispose of my Herd Book and Cattle Club Jerseys at prices every dairyman can well afford to pay. Breeding the finest—individuality all that could be asked. One bull, twenty-five cows and heifers. Address for particulars—

E. A. SMITH, Lawrence, Kansas.

RAMS FOR SALE.

500 from the Champion Merino flock of the West. American, Delaine, and Rambouillet. Also forty Shropshire bucks. Address

E. D. KING,
BURLINGTON, KANSAS.

450 High Class Shropshires 450

200 registered rams, 150 registered ewes, also ram and ewe lambs. Sheep are true type, and square built beauties. Prices reasonable. Foundation flocks a specialty. Come or write. Address

W. J. BOYNTON, Breeder and Importer,
Rochester, Minn.

NATIONAL HEREFORD EXHIBITION

UNDER THE AUSPICES OF
**THE AMERICAN HEREFORD
CATTLE BREEDERS ASSOCIATION.**

KANSAS CITY, OCT. 23-28, 1899.

300 HEAD,
REPRESENTING ALL THE
PROMINENT STRAINS OF
THE BREED, WILL COM-
PETE FOR

\$8,000.00

IN PRIZES.



300 HEAD,
REPRESENTATIVES OF 60
DIFFERENT HERDS FROM
ALL PARTS OF THE : : :
COUNTRY, WILL BE

SOLD

BY AUCTION.

Sale Catalogues, Premium Lists, Entry Blanks, etc., now ready.

Address, **C. R. THOMAS, Secretary,**

INDEPENDENCE, MO.

Kansas City Horse Show will be held same week.

You Are Invited

To be present at the fifth annual sale of representative Poland-China swine, to be held at Richmond, Mo., November 4, 1899.

GEORGE W. FALK, Richmond, Mo.

PUBLIC SALE OF POLAND-CHINA SWINE!

At Waverly, Kans., Tuesday, October 24, 1899.

Sale Begins at 1 P. M., October 24.

Thirty-five High-class Recorded Poland-China Hogs, consisting of 20 boars, from 6 months to 1 year old and 15 sows, sired by Success I Know 167170 and Kens U. S. 16719 and out of Wilkes, Tecumseh, and Black U. S. sows. For further particulars, address,

J. F. GIVENS, Auctioneer.

H. DAVISON & SON, Waverly, Kansas.

FOURTH ANNUAL POLAND-CHINA SALE

Saturday, October 28, 1899.

At my farm, four miles north of Oak Grove, Jackson County, Missouri, and six miles southwest of Napoleon, Missouri. Oak Grove is east of Kansas City on O. & A. and Napoleon on the Lexington branch of Missouri Pacific. I will sell about seventy-five head of high-class Poland-Chinas, consisting of 3 good yearling boars, 5 good last fall yearling boars, 10 extra fine yearling sows, 28 early spring boars, and 29 nice early spring gilts. This offering is selected from about 150 head. All are fashionably bred and individually good. Some of the best breeding in the country will be included in the sale. For breeding, description, and terms of sale, see catalogue, which can be had free by asking. Everybody cordially invited. No postponement on account of bad weather. Free dinner at 11:30 a. m. Sale commences at 1 o'clock p. m.

COL. JAS. W. SPARKS, Auctioneer, Marshall, Mo.

E. E. AXLINE, Oak Grove, Mo.

GREAT PUBLIC SALE

110== Head of Shorthorn Cattle ==110

At Kansas City Stock Yards Sale Barn, Wednesday and Thursday, Nov. 1 and 2, 1899,

—CONSISTING OF—

Straight Bred Cruickshanks and Cruickshank-Topped Bulls, Cows and Heifers.

For Catalogues both sales, apply to

W. T. CLAY, Plattsburg, Mo., or T. J. YOUNG, Lathrop, Mo.

AUCTIONEERS:

Cols. R. E. Edmonson, Kansas City, Mo., J. W. Sparks, Marshall, Mo., J. W. Judy, Tallula, Ill., W. A. White, Plattsburg, Mo.

Great Four Days' Auction Sale===Shorthorn Cattle.

AT THE KANSAS CITY STOCK YARDS SALE PAVILION.

October 17, 18, 19, 20, 1899.

H. C. & Joseph Duncan, Osborn, Mo.,
George Bothwell, Nettleton, Mo.,

October 17 and 18,

Will sell 100 Shorthorns, consisting of Cruickshank and Cruickshank-topped. Among them 5 Cruickshank bulls and 15 other bulls Cruickshank-topped; 15 Cruickshank cows and heifers. The remainder Cruickshank-topped from old reliable American and English families, by such bulls as Imp. Grand Elector, Galahad Grand Victor and Baron Dudding. All cows of suitable age either bred or have calves at foot.

These are choice offerings.
The best we ever sold at auction.

Col. J. W. Judy,
Col. J. W. Sparks, } Auctioneers.
Col. R. E. Edmonson.

T. Ragsdale & Son,
Paris, Mo., Oct. 19,

Will sell 50 head of selected cattle from our herd, consisting of Cruickshank and Cruickshank-topped bulls and heifers, including
Our Entire Show Herd.

John Burruss, Miami, Mo., Oct. 20,

Will sell my entire Riverside Herd of Shorthorns, consisting of about 60 head, 50 females and 10 bulls, including the 5-year-old Duke Bull Sangamon, Duke of Aldrie 125174, one of the best Bates bulls of the day; one yearling bull, descended from the Attrill herd. The females consist of Kennick, Rose of Sharon, Duchess, Craigs Van Meter and Hamilton Young Marys. Several of the cows have calves at foot; others of suitable age will be bred. The young things have been inoculated against Texas fever.

SALE BEGINS EACH DAY AT 1 O'CLOCK. Catalogues ready Sept. 25.

For the Duncan-Bothwell catalogues address either H. C. Duncan, Osborn, Mo., or George Bothwell, Nettleton, Mo. For the other catalogues T. W. Ragsdale & Son, Paris, Mo., and John Burruss, Miami, Mo.

**We Will Hold Our Ninth Annual
PUBLIC SALE of**

POLAND-CHINAS

At Tonganoxie, Kans., Thursday, November 2, 1899.

The usual liberal terms and guarantees will be given. Over 75 head must be sold. 500 of You are invited. Catalogues sent only on application.

Kirkpatrick & Son, Connor, Kans.