

KANSAS FARMER

ESTABLISHED IN 1863.
VOL. XXXVII. NO. 19.

TOPEKA, KANSAS, THURSDAY, MAY 11, 1899.

SIXTEEN TO TWENTY
PAGES—\$1.00 A YEAR. ☐

BREEDERS' DIRECTORY.

Cards will be inserted in the Breeder's Directory as follows: Four line card one year, \$15.00; six lines, \$25.00; ten lines, \$30.00; each additional line \$3.00. A copy of the paper will be sent to the advertiser during the continuance of the card.

SWINE.

W. P. GOODE & SONS' HERD OF POLAND-CHINAS, Lexena, Kans.

We are offering boars ready for service at lower prices than ever. Sows and gilts safe in pig also very low. And we own the best bred son of Chief Tecumseh 2d 9115. Will take a few sows at low service fee. Write quick. We will please you sure.

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

M. H. ALBERTY, CHEROKEE, KANS., DUROC-JERSEY HOGS—Registered Stock.

Send stamp for 64-page catalogue, illustrated. Prices and history.
J. M. STONEBRAKER, Panola, Ill.

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.

Silver Spring Herd Poland-China Hogs. Headed by HADLEY'S MODEL T. Bred sows, gilts and boars of choicest breeding for sale. Address WALTER ROSWURM, Council Grove, Kas.

KAW VALLEY HERD OF POLAND-CHINAS—1899 pigs from the following prize-winning boars: Perfect I Know, Chief I Am, Gem's U. S. Chief and Dick Wainwright. M. F. Tatman, Rossville, Kans.

V. B. HOWEY, TOPEKA, KAS.

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

KANSAS HERD OF POLAND-CHINA SWINE—Has eight yearling sows. They have had pigs and bred to U. S. Tecumseh (20368), he by old black U. S. Also some fine boars by U. S. Tecumseh ready for service; and one Tecumseh-bred boar. Address F. F. Maguire, Haven, Kans.

CRESCENT HERD POLAND-CHINAS.

Boars and gilts for sale.

S. W. HILL, Hutchinson, Kas.

VERDIGRIS VALLEY HERD—Large-Boned Poland-Chinas.

Three hundred head, six good spring boars, good bone, large and growthy, very cheap. Six June boars, very heavy bone and fancy, four of them will make herd-headers. Twenty yearling sows and spring gilts, good ones, at from \$12 to \$15. One hundred and fifty of the finest fall pigs we ever produced. For sale cheaper than you ever bought as good pigs before. WAIT & EAST, Altoona, Wilson Co., Kans.

HORSES.

PROSPECT FARM—CLYDESDALE STALLIONS, SHORT-HORN CATTLE, and POLAND-CHINA HOGS. Write for prices of finest animals in Kansas. H. W. McAfee, Topeka, Kas.

CATTLE.

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.

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

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

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

NORWOOD SHORT-HORNS—V. B. Ellis, Gardner, Kas. Rose of Sharons, Lady Elizabeths and Young Marys. Richest breeding and individual merit. Young bulls by Godwin 115676 (head of Linwood herd). Sir Charming 4th now in service.

SHROPSHIRE SHEEP

For sale. A strictly choice lot of young high-grade sheep of both sexes, located on Col. W. A. Harris' Linwood farm. Address Philo Jewett, Shepherd, Linwood Kans.

If you have timothy, clover, prairie, alfalfa, or mill hay to market, correspond with J. W. Lowe & Co., 1313 W. Eleventh street, Kansas City, Mo. Liberal advances on shipments.



PERCHERON STALLION ONTARIO 22001 (42805).

First prize in class and prize of Honor *au lot* at the Great Government Show of France, 1898. Imported by and the property of the Estate of M. W. Dunham, Oaklawn Farm, Wayne, Du Page County, Illinois

CATTLE.

ROCKY • HILL • SHORTHORNS

Five yearling Scotch and Waterloo bulls for sale. Now offer one choice seven-eighths Scotch by the Linwood Lord Mayor, which we had reserved for service in our herd. Send for catalogue.

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

RIVERSIDE STOCK FARM.

Percheron and Roadster Horses and Shetland Ponies; also one Denmark Saddle Stallion; also Shorthorn Cattle. Stock of each class for sale.

Also a car-load of young Shorthorn bulls for sale. Pedigrees guaranteed. Address
O. L. THISLER, Chapman, Kas

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 DUROC-JERSEY SWINE. Can ship on Santa Fe, Frisco and Missouri Pacific railroads.

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

D. P. NORTON,

Breeder of Registered Shorthorns,
DUNLAP, KANSAS.

Imp. British Lion 133692 and Imp. Lord Lieutenant 120019 in service. Sixty breeding cows in herd. Lord Lieutenant sired the second prize yearling bull at Texas State Fair, 1898, that also headed the second prize herd of bull and four females, any age, and first prize young herd of bull and four females.

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

SWINE.

Standard Herd of Poland-Chinas

Has some fine sows, 1 year old this fall, sired by Tecumseh Chief (he by Chief Tecumseh 2d), and are bred to Look Over Me (he by Look Me Over); also, an extra lot of Spring Gilts, bred the same, and some good Spring Males of the same breeding. Come and see, or write and get prices. Wm. Maguire, HAVEN, KAS.

H. W. CHENEY, North Topeka, Kas. 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.

BARGAINS.

We have a few very fine Poland-China Boars ready for service that we will sell you so cheap you cannot afford to buy a scrub. Sired by Knox All Wilkes and Highland Chief. Some fancy fall boar pigs by same sires.
DIETRICH & SPAULDING,
Richmond, Kans.

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.

BLUE MOUND HERD BERKSHIRE SWINE.

Herd boars, Victor Hugo 41799 (sire imp.), Barkis 30040 (weight 800 lbs.), Prince Jr. 17th, from World's Fair winner. Choice pigs from five different strains. Also bred Shropshire sheep, M. B. turkeys and B. P. Rock chickens. Write.

Allen Thomas, Blue Mound, Linn Co Kas

SWINE.



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

Young boars and gilts bred in the purple for sale at prices that would astonish the natives. We keep nothing but the best. Get our prices and be convinced.

MANWARING BROS., Lawrence, Kans.

CAP-A-PIE HERD OF Poland-Chinas

Geo. W. Falk, Richmond, Mo.,

Is still doing business at the old stand, where, for the past fifteen years, he has been breeding and selling a class of hogs that have been winners at the leading State fairs, and have been topping the markets in Chicago and Kansas City—the end of all hogdom. Has constantly on hand boars large enough for service and sows bred and unbred. Write for prices, which are always reasonable.

SIR CHARLES CORWIN 14520



HEAD OF HERD.

We breed POLAND-CHINA HOGS of the latest and best blood. Full of prize-winning blood. Largest hog-breeding farm in the West. Prices the lowest.

ELM BEACH FARM, WICHITA, KANSAS

Agricultural Matters.

A BILL-BUG ON CORN.

During June of the past year, a few specimens of a snout-beetle were sent to this department from Cloud County, together with a note to the effect that the beetles were seriously damaging the corn in one vicinity by boring and eating into the young growing corn just below the surface of the ground. Later, specimens of a smaller size were received from Wabaunsee County.

An examination of both lots proved the beetles to be the same species (*Sphenophorus pertinax*), which belongs to a family of insects called Calandridae. As will be seen by the accompanying cut, the insect is fitted with a strong bill or proboscis. It is by the means of this organ that this insect punctures and destroys the plant upon which it is living.

This same species (*perlinax*) is very common and destructive to corn in the lowlands of the Southern States. It has been recorded from New Jersey and Canada, so that it will be seen that the species is widely distributed.

Corn seems to be its favorite food plant, though experiments that were carried on at the station would seem to indicate that the pest thrived equally as well upon the sod of blue-grass. As the number of specimens that were sent us was rather small, our observations and experiments with the insect were necessarily limited. We hope that readers of the Kansas Farmer, troubled with the pest, will forward us specimens to continue our work already commenced.

When the young corn is attacked, the destructive work of the pest is more apparent. The injuries to the stalks extend from a little below the ground to an inch or two above. By means of its proboscis, the insect makes slits in the stalk a little over a quarter of an inch in length, and will often increase the wound by hollowing out a cavity beneath the surface. When the corn is more mature the injuries from the adult beetles are not so evident. Where the larvae, or worms, are numerous in the base of the stalk, the corn often fails to produce ears, or, if any, the ears are of an inferior quality.

REMEDIES.

If, after an attack by the beetles, the corn should be seen to wilt and die, a number of the stalks should be opened and examined. If larvae, or worms, are found in them, the remaining infested stalks should be rooted up and destroyed. In the fall after the corn is cut, all the stumps should be rooted up and burned in order to destroy all pupae. If an attack by the beetles is anticipated, much of the young corn could doubtless be saved by an application of Paris green or London purple. In our experiments kerosene and salt were tried, and, while the corn was not killed by the kerosene, it suffered a serious check in its growth, from which it never fully recovered. While fatal to the pest, it was also destructive to the corn. Salt was of little avail. Lintner suggests the use of a handful of sand saturated with kerosene, dropped about the shoots of the corn. The following rains will carry the oil into the ground. Reports indicate that quicklime, ashes, landplaster, and guano are of little benefit in combatting this pest. Should this insect be found to be common in the coarse grasses in swampy or moist tracts, such places should be drained and cultivated.

SOME NOTES.

A few notes are given from the observations which were made of the pest. They may be of interest to some. June 13, the beetles were busy puncturing the corn beneath and at the surface of the ground, as will be seen at "b" and "c" in the plate; June 14, eggs were being deposited; June 20, corn was beginning to suffer; June 26, eggs were found in the burrows of the beetles about one inch below the surface of the ground and touching the corn, as will be seen at "a;" July 18, eggs were hatching; July 27, beetles were still working. In a number of specimens of late corn, the stalks were so weakened as not to be able to carry the weight of the foliage. In other cases the stalks had withered, and the exudation of sap was forming moist spots on the surface of the ground. When not eating, the beetles were to be found in short burrows in the ground, either at the base of the corn or in some more distant spot.

PERCY J. PARROTT.
Kansas State Agricultural College.

Bermuda Grass.

Editor Kansas Farmer:—Does any reader of Kansas Farmer know whether Bermuda grass will grow in Kansas, and whether it has proved a success? One of my men who lived in Texas for several years thinks the

grass in my yard about the house is Bermuda grass. It is green and well set in the ground and has a sod much like blue-grass. It is not prairie-grass. If it is Bermuda grass it will certainly grow anywhere in Kansas. I saw a gentleman a short time ago who owns a large body of land north of Memphis, Tenn.—highland—well set in Bermuda grass, and he described it as a wonderful grass.

Cheney, Kans. A. E. HARMON.

The Effects of Insecticides Upon the Germination of Seed.

That there is need of greater protection to seed when sown, and while it is germinating, goes without saying. It is only necessary to call to mind the destructive work of gophers and moles upon the young germinating beans, peas, squash, corn, etc. Possibly in the list might be included the work of a species of cutworm which was quite destructive during the past summer to the soy bean in the college plots. It was the work of this last pest that led to an experiment to determine whether it is possible to protect seed by some substances, either poisonous or repellant to the pest, without preventing the germination of the seed; if so, what substances are the best; and how do they affect the plant growth? In the experiment, two classes of substances were used in coating the seed: First, those that were sticky, ill-smelling, or in some way offensive to the taste of the pest. Second, those that were poisonous, and would kill the pest when the seed was eaten. The seeds still under experiment are the squash, peas, beans, corn, wheat, sweet corn, soy beans and Kaffir corn. The results, when experiment is completed, will be published in greater detail.

Possibly the present results of the experiment upon the corn, though by no means complete, may be of interest if not of value to some. The substances of the



BILL BUGS AT WORK.

first class that were used were pine tar, coal tar, dendrolene, and kerosene; of the second class, Paris green, London purple, paraffine with Paris green, resin with Paris green, corrosive sublimate. The corn seed before being treated with the substances was divided into three lots; the first lot was treated unsoaked; the second lot was soaked in water for one day before treatment; the third lot for two days.

The following are the results, the percentage representing the proportion of the seed sown that germinated four days after being treated with the substance in question:

Treatment of Seed Corn to Prevent Destruction by Insects.

Substance used in coating the seed.	Seed dry when coated. Per cent. germinating.	Seed soaked after one day's soaking. Per cent. germinating.	Seed soaked after two days' soaking. Per cent. germinating.
Pine tar	6	35	*
Coal tar	4	66	92
Dendrolene	0	100	70
Kerosene (soaked for one minute)	100	84	25
Paris green	90	90	100
London purple	75	95	75
Paris green and paraffine	0	16	40 heavy coat, 92 light coat.
Paris green and resin	0	20	45

* Record lost.

Subsequent records show that in a number of the lots there was an increase in the percentage germinating.

P. J. PARROTT.
Kansas State Agricultural College.

Low Rates for Baptists

And others. Santa Fe will sell tickets to San Francisco and return for \$60. Limited for return to July 15, 1899. Pullman sleepers—palace and tourist—and free chair cars to California daily. Thos. L. King, Agent, Topeka, has illustrated descriptive literature of points of interest en route.

Improving Seed Corn.

A short time ago a brief article was sent out urging that the farmers of Kansas take steps toward the betterment of their seed corn. So many letters of inquiry have been received that it seems proper to make a few more statements concerning this subject.

It is a well-known fact that in the animal kingdom the crossing of different strains or breeds is beneficial in that it breaks up the type and causes variation in the individuals. It is then easy by proper selection to establish a strain or possibly a breed that shall be especially adapted to the existing conditions of that part of the country. This is none the less true in the case of plants, especially those of long cultivation, as wheat, corn, oats, etc. The benefits are practically the same as in the case of animals. Variation is set up, the blood is invigorated, and the crop resulting from this crossed seed is larger oftentimes by a third than the crop from the uncrossed seed. It is, with many, no longer an experiment, but a well-established method by which new and better varieties are built up.

The method in outline is as follows: Through the field two rows are planted with seed, different from the rest but maturing about the same time. When the tassels begin to appear pull or cut them out from these two rows before they ripen. Usually three trips through the field will suffice. When the corn is well matured, gather the produce of the two rows separately and select the best ears for next year's planting.

Detasseling is necessary in order to prevent the two rows from fertilizing themselves. In other words, it insures that every ear obtained from the said two rows will be a cross between the two kinds of corn. A marked increase in next season's yield will be noticed, but to note the difference carefully it is suggested that a por-



YOUR WAGON WHEELS

may need new rims, new spokes or new tires. These repairs have to be made every little while with wooden wheels. Stop all this expense for all time by buying a set of our

ELECTRIC Steel Wheels

They are made with direct or staggered oval spokes, broad tires, any height, and to fit any wagon. They can't rot, go to spokes and need no tire setting—last indefinitely. There is only one thing better, and that is an

ELECTRIC HANDY WAGON.

Our free illustrated catalogue tells all about both and gives prices. Send for it.

ELECTRIC WHEEL CO. Box 46, Quincy, Ill.

stem, having branches thickly covered with pods. Cold weather hinders its growth, and for this reason it is not best to plant until the middle of May; and if the rainfall is sufficient a planting may be made as late as July 1. The ground should be in good tilth and the weeds thoroughly killed just before planting. Plant in drills, the rows 32 to 42 inches apart, dropping seeds 2 inches apart in the row. One-half bushel of seed per acre is required. Cultivate as for corn, using small shovels on the cultivator, and being careful not to ridge the ground. When the pods turn brown, cut either with a self-rake reaper or with a common cultivator rigged up with two horizontal knives bolted to the inner shanks. Put the stalks in cocks, where they should be kept until cured. Thresh with a common threshing-machine. Run slowly and use all blank concaves. The beans may be fed whole or ground.

In regard to drilling, soy beans can be put in with a one-horse corn-planter, using a plate with holes drilled to drop single grains every two inches, or a grain-drill may be used, stopping up all but two holes. The college had no seed for sale this spring. We could have sold 2,000 bushels at \$2 per bushel. From present appearances we think there will be greater demand for the seed next season than there has been this. Soy beans are worth \$1 a bushel to feed.

H. M. COTTRELL.

Kansas State Agricultural College.

A Gopher Bait.

During the past spring there have been many inquiries for remedies to protect seed corn when sown from the attacks of gophers and moles. The common method of scattering shelled corn, or some other enticing bait, soaked in poison, over the surface of the corn field, is doubtless effective at times in reducing the numbers of the pests; it is nevertheless attended with more or less risk. Such exposed bait is quite likely to be found by poultry, quail, and other beneficial forms of animal life. Often the seed sown seems to be more attractive to the pests than the baits. The gophers, particularly, seem to delight in disregarding the baits so carefully prepared for them, preferring instead to follow down a row, which they do with mathematical exactness, devouring the young germinating seed as they go. To prevent any extensive damage in this way, prepare a part of your seed corn in the following way, and sow it in that part of the field usually frequented by the pests. Soak the seed corn for two days in water. Then pour into the vessel a quantity of Paris green. Stir the corn well for a few moments and then drain it. When the Paris green has become dry, sow the corn as soon as possible. There should be enough of the poison to give the corn a green coat.

The gophers will not eat very many grains of corn prepared in this manner. By this means the seed sown is directly protected, and is not so likely to be found by birds which we desire to protect. In experiments that were made, corn prepared in this manner germinated as soon and as fully as the unprepared corn.

PERCY J. PARROTT.

Kansas State Agricultural College.

How's This!

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

F. J. CHENEY & CO., Props.,
Toledo, Ohio.

We, the undersigned, have known F. J. Cheney for the last 15 years, and believe him perfectly honorable in all business transactions and financially able to carry out any obligation made by the firm.

WEST & TRUAX, Wholesale Druggists,
Toledo, O.

WALDING, KINNAN & MARVIN,
Wholesale Druggists, Toledo, O.

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

Soy Beans.

Editor Kansas Farmer:—I want all the points on growing soy beans. There is an early kind grown in Kansas and a late kind in Virginia. Describe the difference. How shall we drill them, and what kind of a drill shall we use? How shall we cut, cure, and thresh them, and what is their market value? I shall plant twelve acres as an experiment and follow with rye to be plowed up in the spring for potatoes.

Morantown, Kans. J. C. NORTON.

The early yellow soy bean is the kind to grow in Kansas. The late kind grown in the South has been tried frequently at the Kansas Experiment Station, and has been found to be too rank growing and too late to give a satisfactory crop. The following extract from our Press Bulletin No. 24 gives most of the information asked for:

"The soy bean is an erect-growing plant, 1½ to 3½ feet in height, with stiff

The Stock Interest.

THOROUGHbred STOCK SALES.

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

NOVEMBER 1—W. T. Clay, Plattsburg, Mo., Short-horns.

Breeding Stock and Breeding Time.

Under this heading a writer in the Home-
stead makes the following very sensible remarks:

"During the month of April the greater number of eggs are laid for breeding purposes, and it is one of the best, if not the best, months for hatching chicks for ordinary purposes. It is quite true that conditions may demand an earlier hatch, but ordinarily the month of April is considered the time when the bulk of the chicks should be hatched. In view of this fact it is necessary to select the breeding stock, and when selected they should have that care that will bring forth the best chicks with the most vigor and merit. Breeding culls for an improvement of stock is ruinous, as will be seen at a glance, and yet how often do we see this practiced and the breeders justifying their actions because chickens are only chickens, and it does not matter so much about them.

"The man who is breeding chickens or any other poultry for profit is interested in getting the most profit from the business. He is either breeding for flesh or eggs, and his purpose will dictate the management. If he wants meat he will select that fowl which will furnish the kind desired, whether it is quantity or quality; if he is seeking eggs he will select the best laying strains and will do everything in his power, by management and selection, to carry his point.

"It is a well-known fact that vigorous breeding stock insures vigorous chicks, and it is only from the vigorous chicks that future breeders should be selected. If showers and continued wet weather should prevail in any locality during this month it may be well to provide indoor runs for them to scratch and gain exercise in, rather than have them exposed to the bad weather. The roosting room will not supply this want, but it should be a separate place supplied with chaff or straw of some kind, so they may be kept in the best condition.

"Not all depends on the hens selected, but care should be given the selection of the male, and he should be cared for according to his needs. Some males are very gallant and will not eat much at this time of the year, but will let the hens eat everything in the food line and will go without themselves. They then soon get very poor and will lack the vigor necessary for the best results. When it is known that a bird acts in this manner, he should be caught at times and put in some secluded place and well fed. By so doing he may be kept in good breeding trim and fertile eggs will be the result. A starved male will not give the best results, and many of them may be starving in the midst of plenty on account of their gallantry."

Dysentery in Calves.

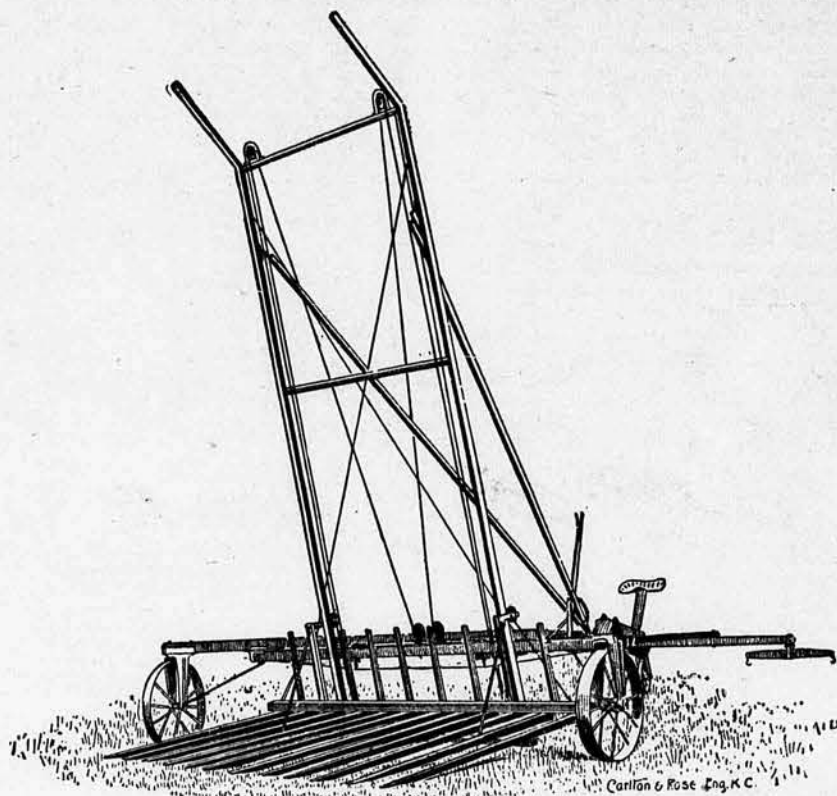
Editor of Kansas Farmer:—As there has been a great deal of complaint over the West about dysentery, or scours, in calves, I will give you our experience with what we now believe to be a sure cure. Last spring we lost more than half of our entire crop. We could find nothing then that would do any good. This spring they began in the same way. But we have not lost any out of twenty-five, and I believe every one of them has had an attack more or less severe. First, we try to keep them clean and warm; second, all new milk fed to them is carefully strained, so that there may be nothing to irritate the stomach. So much for their care. When we notice them beginning to scour, we give a teaspoon level full of subnitrate of bismuth and gum arabic in equal parts. First dissolve in warm water, then add new milk (so they will drink it better). We use a small bottle, holding three or four ounces, to give them this medicine with. We have very seldom had to give the second dose; would like others to try this, and report effect through your paper. We got this recipe out of U. S. Bureau of Animal Industry's special report on diseases of cattle, and believe it to be a sure cure.

Winchester, Kans. SAM SWOYER.

Pork at 2 Cents Per Pound.

At the recent meeting of the Texas State Swine Breeders' Association, at Sherman, I made the remark that I believed there were feeders in Collin County that were producing pork at a cost of not to exceed 2 cents per pound. While it was plainly evident there were doubting ones among the audience, yet no one took exceptions or drew out the method by which

this cheap meat was made. Since the Sherman meeting the Arkansas Experiment Station reports that they can produce pork at a cost of 1½ cents per pound. I think it possible and quite probable that this can be done in Arkansas, and I am sure that much of Texas can produce pork fully as cheap as Arkansas can, as it is done here in Collin County. The start is made with well-matured sows of an improved breed. These sows are kept at work and produce two full litters a year. These sows are not confined to a small lot or pen, only during the farrowing season, but have the range of a large field, where they have access to some kind of green food all through the year. The pigs are early encouraged to eat at a side trough where the older ones can not get to them. This feed is soaked, either ground or whole grain, chiefly corn. They are fed regularly in just such quantities as they will readily clean up. There is a field of oats sown convenient to feed lot, of sufficient size that while using it for a pasture it will outgrow the effects of pasturing and mature seed that the hogs are allowed to harvest (and they do it well). By this time a field of ten to twenty acres of corn in the milk or dough stage is turned into, and then the pounds are made. The exercise, coupled with the most excellent food found in the oat-field, produces a growth of bone and muscle, whets their appetites and puts their internal organs in a healthy condition to take care of and assimilate all the corn they may eat. In other words, these pigs are rushed from piggery to the finish.



NEW HAYING MACHINE.

At about eight months of age they are turned off at a nice profit and their places filled by others.

Good, comfortable, but cheap houses are provided for them, plenty of water at all times convenient, shade for their comfort in hot weather; in fact, nothing is left undone—although no great expense is incurred—that would add to the comfort or well-being of the money-makers. I have in mind a farm on which fifteen brood sows are kept, the model pork-producing farm of Collin County, presided over by a very careful, painstaking young bachelor, a man of limited means, on a rented farm. I mention this that it may be seen that it does not require a great amount of capital to conduct this business. One hundred and forty acres are planted in corn, fifteen acres to be gathered by the hogs, and fifteen acres of oats sown for the same purpose. In addition, wheat, oats, barley, sorghum, etc., are grown on the farm. This gentleman informs me that he is confident that it does not cost him by this method to exceed 2 cents per pound to produce market toppers. If it can be done with fifteen sows, with a smaller number it can be more easily done.—H. E. Singleton, in Farm and Ranch.

National Educational Association. CHICAGO, ROCK ISLAND & PACIFIC RAILWAY.

In the lovely city of Los Angeles, California, the above named organization will hold its 14th Annual Meeting, July 11th to 14th, 1899.

The Great Rock Island Route has issued a handsome book containing views and necessary information as to trains, rates and routes, and this will be sent to you by addressing with postal card or letter,

E. W. THOMPSON, A. G. P. A.,
Topeka, Kans.

JOHN SEBASTIAN, G. P. A., Chicago.

The New Haying Machine.

The illustration herewith shows the latest and best in hay stackers, being a combined loader, stacker, and rake. After a two years' test in the field by the makers, the Kansas City Hay Press Co., 129 Mill St., Kansas City, Mo., are now putting it on sale with every confidence that it will soon win its way into wide popularity because of its manifold advantages to the busy haymaker. It is durable and simple in construction, and in stacking saves a man and a horse. It also rakes the meadow clean and loads the hay on the wagon or stack in the field. With it hay is raked from the swath or windrow as with an ordinary sweep rake with lever. When the rake is loaded the point of the teeth are raised by the operator with the use of the lever and the load driven to the stack. Thirty feet from the stack two stakes are placed about ten feet apart, connected with a steel rod about two inches above the ground. On the rear of the rake is a small anchor with three hooks or prongs. This anchor is dropped by the driver (without stopping) before reaching the rod. Attached to the anchor are two ropes, which pass through pulleys, and over top of uprights down to rake, as shown in the cut. When the anchor is engaged by the steel rod, the rake with its load is raised to top of uprights, and dumped—the team being at this time at the stack. As the load has been raised without stopping the team, there is no loss of time; and the team is immediately backed and started on the return trip. Thus with one man to operate

"The Least Hair Casts a Shadow."

A single drop of poison
blood will, unless checked in
time, make the whole impure.
Hood's Sarsaparilla is the
great leader in blood purifiers.

It casts no shadow, but brings sunshine and health into every household.

Dyspepsia—"Suffered everything but death for years with dyspepsia. Nothing relieved me until I took Hood's Sarsaparilla and it made and kept me well. Can eat anything I wish." MRS. EUGENE MURPHY, Hull's Mill, Danbury, Conn.

Consumptive Cough—"Five years ago I had a consumptive cough which reduced me to a skeleton. Was advised to take Hood's Sarsaparilla which I did and recovered normal health. I have been well ever since." MATILDA BRIDGEWATER, Cor. Pearl and Chestnut Sts., Jeffersonville, Ind.

Hood's Sarsaparilla
Never Disappoints

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

dates on which tickets will be sold, limits, and full information, call on F. A. Lewis, City Ticket Agent, or J. C. Fulton, Depot Agent.

The Strawberry Leaf-Roller.

Editor Kansas Farmer:—The work of this insect was very noticeable in the strawberry patches during the past summer. In many instances where the attacks of the insect were prolonged, large numbers of plants were killed through the loss of their foliage. Quite often the strawberry patches had the appearance of having been scorched in spots by fire. In Kansas, there appear to be three distinct broods during one season, each succeeding brood becoming more numerous, and consequently more destructive. The following observations were made during the past year: On June 14, the first brood of adults commenced to appear, and continued to emerge till June 24; on June 22, eggs for the second brood were being laid; on June 24, the second generation of larvae, or worms, were commencing to hatch out; by July 25, many of the larvae were in pupal state; from July 21 to August 10, the second generation of adults were emerged; on August 14, larvae, or worms, of the third generation were to be found in large numbers; by September 3, many of the larvae were going into the pupal state.

At present we have no new remedies to suggest aside from those usually given. Paris green applied to the infested plants at the first appearance of worms would be very effective. To determine the earliest appearance of the worms necessitates a very close watching on the part of the fruit-grower. After the crop is gathered, mow the beds, and collect and burn the leaves. Do not purchase plants from infested patches. Where new beds are to be started, plow under the old ones; for by this means many of the insects will be buried and destroyed.

PERCY J. PARROTT.

Kansas State Agricultural College.

"I deceived you about one thing," murmured the new wife to her husband. "I am older than I told you."

"Don't mention it, my angel. I find that your fortune is fully twice as large as I had supposed."—Detroit Free Press.

\$19--Pueblo and Return--Via Santa Fe Route.

Tickets on sale May 16 and 17, with return limit of June 15. No change of cars. Harvey dining rooms. Thos. L. King, Agent, Topeka.

Finest Honey in the World

Is gathered by bees from alfalfa bloom, so say best judges. Send direct to the Arkansas Valley Apiaries for prices of honey delivered at your station, in any quantity, at from 6 cents per pound up. I refer to the Kansas Farmer concerning the excellent quality of this honey, and for fair dealings of Oliver Foster, proprietor, Las Animas, Bent Co., Colo.

A \$5 Genuine Meerschaum or French Briar Pipe for 15 Cents.

This is no lottery, gift enterprise or scheme of any kind, but a square proposition and a chance for every pipe smoker to get a splendid pipe for a mere song. Send 2-cent stamp for particulars. B. F. Kirtland, The Pipe Man, Trude Building, Chicago.

A MONSTER MEETING

Of the Modern Woodmen of America, in the New Convention Hall, Kansas City.

The Head Camp Meeting of the Modern Woodmen of America, during the week beginning June 6, at Kansas City, Mo., promises to be one of the largest attended meetings ever held in the West. The Kansas City committee on arrangements have secured the new Convention Hall with a capacity of twenty thousand people for its sessions. One hundred thousand visitors are expected. Thirty-five bands and seventy-five Forester teams (uniform rank) with fully fifteen thousand marching men will be seen in line Thursday morning, June 8, in the great parade. Band and Forester team contests will extend through the week. The prizes are the largest ever offered. For Forester teams: First prize, \$500; second prize, \$200; third prize, \$100; fourth prize, \$75; fifth, \$50. Local Kansas City teams are excluded. Band prizes: First prize, \$150; second prize, \$100; third prize, \$50. All delegation bands admitted. Special railroad rates to this meeting.

J. H. LYON,

Western Passenger Agent, Missouri Pacific Railway, Kansas City, Mo.

One Fare

for the round trip, via the Union Pacific, to San Francisco, Cal., for National Baptist Societies Anniversaries, May 25, 1899. For

Horse Owners! Use
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 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 circulars.
THE LAWRENCE-WILLIAMS CO., Cleveland O.

Gossip About Stock.

Stockmen will be interested in the automatic waterer and pig forceps advertised by our old customers, J. N. Reimers & Co., Box L, Davenport, Iowa.

Red Polled cattle seem to have a ready go. Our advertiser, L. K. Haseltine, Dorchester, Mo., writes that he is having a great many inquiries and made a number of good sales.

The patent wire halters and yokes made by our advertiser, Rogers Manufacturing Co., Harper, Kans., are proving to be quite popular with stockmen. Notice their advertisement and secure a sample set.

O. P. Updegraff, Topeka, Kans., leaves this week for New Orleans to attend the exposition and horse show. He is to be the announcer for the horse show and expert judge of light harness horses. They always come to Kansas to get the best.

The Denver Field and Farm says: "A good many new men are going into the sheep business and are buying ranches all over the country. They figure that the sheep will pay 20 per cent annually while cattle can not assure more than 10 per cent at best for a period of years. Besides, the sheep industry returns quicker money and there is not so much loss by rustling."

Col. J. W. Sparks, live stock auctioneer, Marshall, Mo., has gotten out a little booklet, which he will be glad to send to breeders who will mention Kansas Farmer. This little book gives sale pointers concerning the selling of pure-bred stock at public auction—when to sell, how to get ready, and how to conduct the sale. It also contains a gestation table. Col. Sparks is an active, intelligent, hustling salesman, who has given great satisfaction wherever he has performed.

In a letter dated April 26, Mr. Chas. Faulhaber writes to Mr. T. F. B. Sotham as follows: "I received the bull you bought for me all right, and am well pleased with him. Refused \$50 for my bargain as I led him from the car. Enclosed please find commission due you. Please accept thanks for your trouble." This is a fair sample of many endorsements Mr. Sotham is constantly receiving in approval of purchases made for his countless customers, on commission. In this respect we can conscientiously recommend Mr. Sotham, knowing that he will do well whatever he undertakes.

The Hereford cattle breeding fraternity propose to out-Herod Herefordshire by holding a great Hereford show at Kansas City next October. They intend to make the greatest exhibition of pure-bred cattle ever held in the world. The American Hereford Association offers \$5,000 in cash prizes, which, with the special prizes offered by others, will probably amount to \$10,000. The management of this show expects to provide accommodations for from 500 to 600 head of Herefords. For detailed information concerning this exhibition address Dr. J. E. Logan, 1208 Wyandotte street, Kansas City, Mo.

A Farmer representative visited the second largest Hereford breeding establishment in Kansas last week. It is owned by Steele Bros., Belvoir, Douglas County, Kansas, about twelve miles southeast of Lawrence. The present herd numbers about 125 head, especially strong in Lord Wilton, Anxiety and other popular Hereford strains. The foundation of this herd was the very cream of the herd of the Kansas Hereford Cattle Co., of Lawrence, which was purchased by the father of the present firm. The brothers have always had active charge of the herd and have added to the original purchase by very select additions from other leading herds of America, until at present Steele Bros. have as representative a herd as may be found anywhere. Their herdsman, Mr. Jas. Gault, is one of the most skillful in the West, having had a very extensive experience with leading beef herds, both in England and America. He is fitting ten head, five females and five bulls, for the October show and sale, to be held at Kansas City, and this consignment is certain to distinguish the firm of Steele Bros. as breeders, and Mr. Gault as a herdsman. The yearling heifer, Miss Plutarch 3d 83887, by McKin-

ley 68926, and out of Dot 47411, is the premier animal, and last year won first and sweepstakes wherever shown. Next week the Farmer will contain a picture of one of the herd bulls and further information of some of the notable animals in the Belvoir herd.

Mr. C. A. Stannard, owner of Sunny Slope Herefords, Emporia, Kans., makes an interesting announcement in his new advertisement this week, especially to those of our readers who are interested in the popular white-faces. By the consolidation recently of his old Sunrise herd with that of Sunny Slope he finds that 400 head, with the prospective increase of the 240 breeding cows, is liable to overtax the present capacity of Sunny Slope farm, so he has decided to dispose of 100 choice Herefords, consisting of 68 females and 32 bulls. The younger animals are 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. In order to make room for the Hereford youngsters Mr. Stannard will give buyers who now visit Sunny Slope such bargains as never before have been offered at this celebrated breeding establishment.

The attention of breeders interested in modern beef cattle is called to the public sale announcement elsewhere in this issue wherein one finds that the well-known and successful breeder, Mr. John Morris, will hold his fifth annual sale at Chillicothe, Mo., on Wednesday, May 24, 1899. The offerings will consist of fifteen serviceable bulls ranging from 12 to 24 months of age, all sons of the Scotch-bred bull, Red Cup 121760, considered the best son of Imp. Cup Bearer 91223, and out of Imp. Fox Glove, by Perfection 61408, and bred by Amos Cruickshank. These youngsters are mainly out of dams, daughters of Imp. Chief Steward 96703, the predecessor of Red Cup 121760, in the Morris herd. Among the young fellows is Red Cup 2d, out of Caroline 2d, the prize-winning cow that came to the Morris farm at the dispersion of the Bellows herd at Maryville, Mo. Her breeding is very strongly backed, she being by Imp. Scotchman, and out of Caroline, by Bampton Royal. This cow, Caroline 2d, will be in the sale with a heifer calf at foot by Red Cup. This son and the daughter with dam among the offerings ought to be and is an attractive feature of the sale. Among the sixteen bulls one can surely select a herd bull to suit the future ambition of any progressive breeder that is desirous of introducing the best of Scotch blood into his herd. All the female offerings under 2 years of age are daughters of Red Cup 121750, and a right promising lot they are. The females, in common with the bulls aforementioned, have good heads, deep, furry Scotch coats and present all the desirable characteristics found in the Scotch cattle. The bulls average larger and are a more even lot than heretofore offered by Mr. Morris at his annual sales. The heifers, too, are a better lot individually. This latter fact as to both bulls and heifers doubtless arises from the fact that they were sired by Red Cup 121750 and mainly out of daughters of Imp. Chief Steward. Several of the older females will have calves at foot and again bred to Red Cup. There are far more strong features concerning the offering than can be brought out in a stock gossip reader. The sale catalogue, a copy of which will be sent to all requesting it, gives details concerning the breeding of the cattle and such other points as may be desired by the prospective buyer.

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

Automatic Cream Separator.

The latest thing in cream separators is the Rector Improved Automatic Cream Separator. It is a late invention and was patented in 1898. With this separator any one can thoroughly separate the butter fat or cream from the milk as soon as it is milked. It is easy to operate, requiring neither power, chemicals, nor labor, and will bear the most careful investigation. Mr. Wm. C. Martin, tester for the Missouri Dairy Co., of Kansas City, gave one of these separators a trial and certifies to its value, as follows: "This is to certify that I have this day taken milk that has been separated by the Rector Automatic Cream Separator and given it a thorough Babcock test and I find that it shows less than one-tenth of 1 per cent of butter fat."

This separator will certainly prove quite popular with the dairy farmers of the West. It only costs \$7 and is guaranteed to do the work as represented and is a great labor-saver. For further information consult advertisement hereafter in the Farmer, or address Rector Automatic Cream Separator Co., Kansas City, Mo.



The artist who is in search of attitudes descriptive of torture, and poses depicting suffering, need not go to the Christian martyrs of old. If he could only see through the walls into tens of thousands of homes all over this land, he would see women undergoing tortures in silence without complaining, before which the brief ordeals of the martyrs pale into nothingness.

No one but a woman can tell the story of the suffering, the despair, and the despondency endured by women who carry a daily burden of ill-health and pain because of disorders and derangement of the delicate and important organs that are distinctly feminine. One of the worst effects of troubles of this kind is upon the nervous system. The tortures so bravely endured completely and effectually shatter the nerves. Dr. Pierce's Favorite Prescription is an unfailing cure for all weakness and disease of the feminine organism. It makes it strong and healthy. It allays inflammation, heals ulceration and soothes pain. It checks exhausting drains and tones and builds up the nerves. It fits for wifehood and motherhood. Good medicine dealers sell it, and have nothing "just as good."

"Since my last child was born, thirteen years ago, I have suffered from uterine trouble," writes Mrs. Paul Devraime, of Jellico, Campbell Co., Tenn. "I consulted several doctors and took much medicine, but found no relief. I had very bad health for twelve years. Every month I was in bed a week before the monthly period and a week after. I was obliged to keep in bed for four months last summer. I was just like a corpse. I lost twenty-six pounds in four months. I was coughing so much I was considered in consumption. I suffered severely from pains in my back, bearing down pains in the womb, chills and cold sweats. After taking four bottles of Dr. Pierce's Golden Medical Discovery my coughing stopped, and after six bottles of Dr. Pierce's Favorite Prescription my periods became regular and were passed without pain. Now I am fleshy, more so than ever before. My neighbors are surprised to see me in such good health after having seen me so low."

Constipation causes and aggravates many serious diseases. It is speedily cured by Dr. Pierce's Pleasant Pellets.

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.

AGENTS WANTED.—To sell Schnebly's Poultry Powder. Sure cure for cholera and other diseases. Big money! Salary or commission. Write for particulars. Dr. J. F. Schnebly, Baldwin, Kans.

AGENTS WANTED.—In your county, for the only pump governor on the market. Every user of windmill or hard-working pump buys the "Yankee" at sight. Six dollars a day, steady work, exclusive territory guaranteed, experience unnecessary. None but hustlers need apply. Address H. Fleming, Lawrence, 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.

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.

THOROUGHbred SHETLAND STALLION GYP for sale—Splendidly proportioned; handsome. A. Docking, Manhattan, Kans.

CHOICE EGGS FOR HATCHING FROM HIGH-scoring birds, Buff Cochins, Buff Leghorns and B. P. Rocks. Eggs \$1 per 15, \$4 per 100. Give them a trial, they are sure to please. Mrs. E. E. Bernard & Son, Dunlap, Kans.

FOR SALE.—Planet Jr. Fire Fly Horse Hoe, \$3.00; Planet Jr. Fire Fly Horse Hoe, with wheel, \$3.50. Also, Nos. 4, 7, 8 and 9 Horse Hoes, 12-tooth Harrows, Hand Cultivators, and other Planet Jr. tools. Order or write for catalogue. Trumbull & Co., 1426-1428 St. Louis avenue, Kansas City, Mo.

SHEEP.—Six hundred stock sheep and lambs for sale. H. W. Otken, Grinnell, Gove County, Kans.

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

BERKSHIRE SOWS BRED.—To farrow in May. Choice of individuality and breeding, eligible to registry, at \$20. Also two fine boars ready for service. Rutger Farms, Russell, Kans.

FOR SALE.—Fine eastern Kansas farm of 560 acres. Good substantial buildings and improvements. For full particulars, write J. C. Greenawalt, Arrington Springs, Atchison county, Kans.

HEREFORD BULLS FOR SALE.—Four pure-bred and five high-grades; well marked. W. E. Spears, Richmond, Kans.

FOR SALE.—Hereford bulls—three registered yearlings—Anxiety strain. Prices reasonable. Address John R. Francis, Chanute, Kans.

FOR EXCHANGE.—A. J. C. C. Jerseys and registered Poland-China pigs, for well-bred trotting, saddle or coach horses. Address W. T. Ballagh, Nevada, Mo.

A LARGE BLACK KENTUCKY JACK will make the season of 1899 at my farm five miles south of Topeka on the Burlingame road; mares kept until bred. W. W. Clark, Topeka, Kans.

HEREFORD BULLS FOR SALE.—One carload of very high-grades, some unregistered, from 10 to 14 months old; also 12 head of registered bulls, same age as above, all in good condition or fat. John Drennan, Blue Rapids, Kans.

WANTED.—A Jersey cow that will be fresh this month; either a registered or half-blood and must be a guaranteed extra milker and butter-maker. J. W. Higgins, Jr., Hope, Kans.

BLACK LANGSHANS EXCLUSIVELY.—Eggs for hatching \$1 per 15. Mrs. T. E. Whitlow, Morantown, Kans.

POLAND-CHINAS.—No better anywhere. Five dollars each. Write for breeding. Hemenway, Hope, Kans.

THOUSANDS of fine greenhouse plants now ready. Samples by mail, 20 for 50 cents. Lists free. Mrs. T. Montgomery, Larned, Kans.

MAGNOLIA POULTRY YARDS.—B. P. Rocks exclusively. Four pens this season. Eggs \$1.50 per 15; \$2.50 per 30; \$4 per 60. David Enoch, Salina, Kans.

FOR SALE.—Pure-bred Polands and Berkshires from weanlings up, at very low prices. O. P. Updegraff, North Topeka, Kas.

FOR SALE.—Russian artichokes for hogs. Yield enormously. Fifty cents per bushel, sacked and put on cars here. Order at once. F. W. Truesdell, Lyons, Rice County, Kans.

LIGHT BRAHMA COCKERELS FOR SALE.—GOOD birds, nearly solid black wings. Mrs. Emma Brosius, Quinton Heights, Kans.

EGGS FOR HATCHING.—White Leghorns exclusively. One dollar per fifteen. E. F. Ney, Bonner Springs, Kans.

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

FOR SALE.—Hereford bulls. Two full-blood yearlings and 15 high-grade yearlings; also 10 high-grade Shorthorn yearling bulls. Address Hugh A. Hodgins, Topeka, Kans.

FOR SALE.—Four large black jacks. Address, J. P. Wilson, Wellsville, Mo.

FOR SALE.—Poland-Chinas and Duroc-Jerseys, all sizes. Barred Plymouth Rocks and Single Comb Brown Leghorns. Eggs \$1 per 15. Write D. Trot, Abilene, Kans.

FOR SALE.—Good hedge posts, in car lots. E. W. Melville, Eudora, Kans.

2,000 BUSHELS SEED SWEET POTATOES FOR SALE.—Nine best kinds. Write N. H. Fixley, Wamego, Kans.

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

FOR SALE.—\$3.00 per acre for improved 160-acre farm 1½ miles north of Bushong Station, Lyon Co., Kans. Address, J. B. McAfee, Topeka, Kans.

WANTED TO EXCHANGE.—The pure-bred Cruickshank bull, My Lord 115563, bred by Col. Harris; sire Imp. Spartan Hero 77852; dam Imp. Lady of the Meadow (Vol. 30, p. 616), for a pure-bred Cruickshank bull—can't use him any longer in my herd. H. W. McAfee, Topeka, Kas.

EGGS FROM PURE-BRED WHITE AND BARRED Plymouth Rocks, \$1 per 15. S. F. Glass, Marion, Kans.

FOR SALE.—100 cars cottonseed meal. Also corn and feed. Address Western Grain and Storage Co., Wichita, Kas.

WANTED.—To lease or buy a cattle ranch, from 1,000 to 1,500 acres; southern Kansas preferred. Must have living water. Address, J. H. Wallace, 2408 E. Eleventh Street, Kansas City, Mo.

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.

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

TO EXCHANGE.—A daughter of Hadley Jr., dam by Klevor's Model, for ten bushels of alfalfa seed on track. F. W. Baker, Council Grove, Kans.

WRITE TO ALEX RICHTER.—Hollyrood, Kas how to sub-irrigate a garden, etc., and cost of same. Send him the size or dimensions of your garden, and he will give full information.

SHORT-HORNS FOR SALE.—Forty-six cows and 8 heifers, Cruickshank, Young Marys, Rose of Sharon and others; an extra lot. Nearly all were sired by that grand Cruickshank, Royal Prince 100646. Six bulls ready for service, sired by Young Mary bull, Glendon 119371. Theodore Saxon, 223 West Eighth St., Topeka, Kas.

BINDER TWINE. Farmers wanted as agents. AUGUST POST, Moulton, Iowa.

STARK have a 74-YR. Record. Fruit Book Free. STARK BROS., Stark, Mo. We PAY FREIGHT.

EVERGREENS FOR SALE CHEAP. A. W. THEMANNSON, Wathena, Kansas

Best Corn for Kansas. One Kansas customer says: "Your C. Y. Dent Corn is two weeks earlier than, and will make ten bushels per acre more than our native corn alongside." Twenty-six best kinds. Catalogue, two samples and proof free. J. C. SUFFERN, Seed Grower, Voorhies, Ill.

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.

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.

P. & B. Ruberoid Roofing.

Universally used and recommended by architects for general use because of its Toughness, Strength, Flexibility, and Durability under all exposures of heat, cold, acid, alkali, coal smoke, rain, etc.; also, the celebrated P. & B. Sheathing Papers and P. & B. Paint, both superior in their lines to other kinds; now sold by us as Southwestern agents, at lowest market rates. Send for circular and prices on anything in the roofing line. The Kansas City Roofing and Curing Co., Kansas City, Missouri.

The Coming of Gomez to Havana.

"Gomez is coming to-day," said everyone in Havana.

"Sure?"

"Yes—this time—sure."

He had been coming for a week—had been coming for three years, in fact; but he had often disappointed every one. Now I believed what was talked on the street. Taking a cab, I was rolled out to a suburb—name forgotten. We stopped where long lines of Cuban infantry stood on each side of the street. Behind these ranged the populace—men in black broadcloth, women white with face powder and brilliant with jewelry, and niggers like flies. Everything was ready for the show.

Presently came a platoon of the Seventh United States cavalry, and before I realized, in all the confusion, the Conqueror had come and had gone. He sat very stiff in his saddle, with his feet thrust out and his hand to his hat in acknowledgement of the cheers. His face was quite brown, his mustache white, and he was dressed in plain clothes of chocolate-colored cloth. The staff clattered behind, followed by a mounted band of "ours;" then interminable lines of Cuban infantry in columns of twos—mostly negroes—but gotten up more smartly than General Garcia's people down Santiago way.

It was all over for me in a few seconds, so far as the Conqueror was concerned. I noticed that his horse was small, because General Ludlow rode on his left, and he was on a big horse. Also Ludlow did not look like a conqueror. His bearing was modest to a noticeable extent.

The troops were passing for an hour, and I tried to break back into the city. Negro officers waved their machetes at my cabby and shouted fiercely. He was intimidated, and when I also d—him properly in my native tongue for not getting me on my way, he was very miserable, but as I had no machete, he wisely abided by the fear of those who had. Thus I was left thinking. I was no longer a Cuban sympathizer—that was clear. Things had come into my mind as they are.

First: Gomez has a curious head—a very interesting head. It is fierce and warlike, and brown and mustached and goateed, and altogether Spanish-American, which does not mean "white man." His profile is a triangle with the jaw as the base. From his looks I should say his was not a great brain. Still that may not be so, in reality. So far as we know, he is a man of one idea—which happens in his case to be a very good one; and there is the force in the base of that triangle which has carried that one idea as far as the blood and iron and horse-flesh of Cuba could carry it.

Still, for all that, he would not have had the satisfaction of that morning's ride through the streets of Havana in a thousand years, except for what was represented by the platoon of cavalry in his front and the quiet man on his left. As I sat in my cab, gazing malevolently at my "cabby," I wondered if Gomez realized this in its fullness. Time will tell this, and that only. So far he has been consistent. He wants us to "get out," "all the same" as the Spaniards, and I cannot see how we can help doing it. The old conqueror is not a patient man, but he had best study the story of Job very carefully, because those attributes are his only salvation. General Gomez has up until now done all that a man can do, and he makes his people do the same; and he must realize his hopes or we must lose our honor. If his aspirations fall withered to the ground, when the ballot shall have superseded the machete, it will be the regret of all the world.

Still, if all fails, the man who rode at his left hand when Gomez was a Conqueror comes of a race which has governed itself for over six hundred years—of a race which lived under a real democracy when it emerged from the northern forests of Europe, clad in skins, before Christianity or tempered steel was even known by them, and they will finally see that a Cuban man can till a field without fear of a dragoonade. They have never had any other idea concerning Cuba since they began to think about it long years ago. Spanish kings and Cuban bandits all look alike to the people of the United States, and they will handle one as they did the other if it becomes necessary. Patience is the watchword for Cubans.

"Rome was not built in a day."—Frederic Remington, in Collier's Weekly.

First of the Season.

Excursion to Buffalo via the Nickel Plate Road at one fare for the round trip. Do not miss this opportunity of visiting Buffalo and Niagara Falls at a very reasonable expense. City ticket office, 111 Adams St., depot Van Buren Street Passenger Station, Chicago, on the Loop.

PEACE VERSUS PAIN

We have peace, and those who are sorely afflicted with **NEURALGIA** will have peace from pain and a perfect cure by using **ST. JACOBS OIL.**

Australian Manners.

Every Australian colony, however strong its aspirations to political independence, is influenced in what may be called its manners by the mother country. Australia began its political life with as close an approach to an aristocracy as a new country can make, in the shape of the "squatters," most of them capitalists or scions of good families from England. These men obtained very large grants of land from the government for sheep-farming, which they managed in the beginning with convicts whom they hired from the state, and whom they were permitted to flog in case of misbehavior. Their life, in short, was very nearly that of the old cotton-planter in the South, with the "patriarchal" element wanting. The first work of the new democracy was to overthrow them, and take their tracts of land from them. But it did not succeed, and has not succeeded, in preventing the formation of an upper class of the "English gentleman" type. This is what the successful Australian still strives to be. He does not become "a man of the people" in our sense, and does not boast of his humble origin and early struggles as much as our millionaire is apt to do.—E. L. Godkin, in Atlantic.

Mrs. Watts—The doctor says a good cry is healthful.

Mrs. Potts—I know it is. A good cry gained me a trip to the seashore last year, and I came back feeling better than I had for oh, ever so long.—Indianapolis Journal.

\$28.85. \$28.85.

The Union Pacific has made the greatly reduced rate of \$28.85 to Portland and other Puget Sound points; also to Helena and Montana points, Salt Lake City and Utah points.

For tickets and full information call on F. A. Lewis, City Ticket Agent, or J. C. Fulton, Depot Agent, Topeka.

LIVE STOCK AUCTIONEERS.

GEORGE W. BARNES, Auctioneer, Valencio, Kas. Lowest terms. Extensive experience both as breeder and salesman. All correspondence given prompt attention.

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.

S. A. SAWYER, FINE STOCK AUCTIONEER—St. Manhattan, Riley Co., Kas. Have thirteen different sets of stud books and herd books of cattle and hogs. Complete catalogues. Retained by the City Stock Yards, Denver, Col., to make all their large combination sales of horses and cattle. Have sold for nearly every importer and noted breeder of cattle in America. Auction sales of fine horses a specialty. Large acquaintance in California, New Mexico, Texas and Wyoming Territory, where I have made numerous public sales.

ROOFING IS GOING UP.

Buy your Corrugated iron roofing, steel roofing, metal shingles, etc., before the advance in price. **CHEAPER THAN SHINGLES**, easier put on, last longer. How to order and how to use, estimates of cost, etc., contained in our catalogue No. 8 to all who enclose 2c for postage. Tells all about **DONKEY PAINT**, rust proof, for metal, wood or felt. Mention this paper.

THE KANSAS CITY ROOFING & CORRUGATING CO.,
KANSAS CITY, MO.

Excursion Rates to Western Canada

And particulars how to secure 160 acres of the best wheat-growing land on the continent, can be secured on application to the Superintendent of Immigration, Ottawa, Canada, or to the undersigned.

Specially conducted excursions will leave St. Paul, Minn., on the first and third Wednesdays in each month, and specially low rates on all lines of railway are being quoted for excursion leaving St. Paul on April 5 for Manitoba, Assiniboia, Alberta and Saskatchewan.

J. S. CRAWFORD,

214 West Ninth St., Kansas City, Mo.,
Government Agent.

ON AGAIN—APRIL 30TH.
THE "KATY" FLYER.

WE PAY YOU

children to the busy business man.

sent on receipt of 5 cents (stamps).

DOUGHERTY'S SCHOOL OF SHORTHAND AND TYPEWRITING, 725-27 Kansas Avenue, Topeka, Kans.

50 cents a Hundred for NAMES, on certain conditions, on our special blanks. We want Boys and Girls everywhere to help advertise our unique **SHORTHAND** self-instructor—just the thing for everybody—from the first grade school, Blanks and particulars, with a first book in **SHORTHAND**, We will not notice postal card requests.

THE SHAWNEE FIRE INSURANCE COMPANY,

TOPEKA, KANSAS.

Insures Against Fire, Lightning, Windstorms, Cyclones and Tornadoes.

The only company in Kansas with a paid-up capital of \$100,000. It writes more business in Kansas than any other company. It has paid losses amounting to \$493,266.63. Call on your home agent or write the company.

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 percent interest. **LIBERAL DISCOUNT FOR CASH.** Please refer to this paper when answering advt. **B. A. McALLISTER, Land Commissioner, U. P. R. R. CO., Omaha, Neb.**

OUR YOKES SAVE LAWSUITS

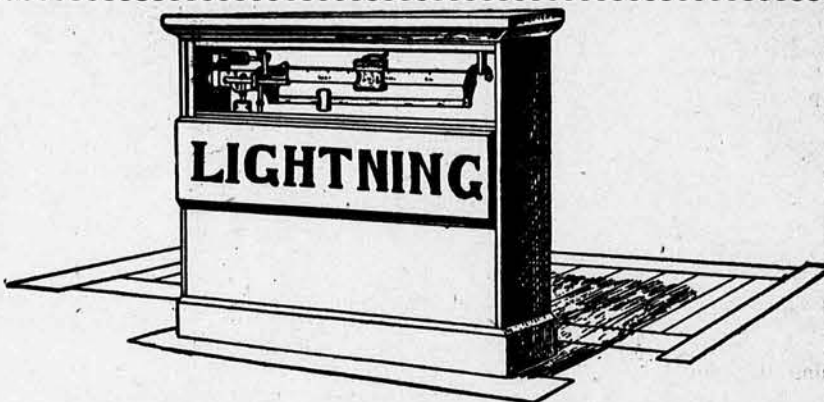
BRUISED HEADS AND FAMILY FEUDS,

Because

they keep cattle in a wire enclosure where they belong. Price, 75c each; or \$4.50 per dozen. Our Wire Hal- ters only 20c, and the best appli- cation for the money that can be pur- chased anywhere; \$1.20 per dozen. Satisfaction guaranteed.

Drop us a postal card for full particulars.

Address **ROGERS MANUFACTURING CO., Harper, Kans.**



U. S. STANDARD SCALES.

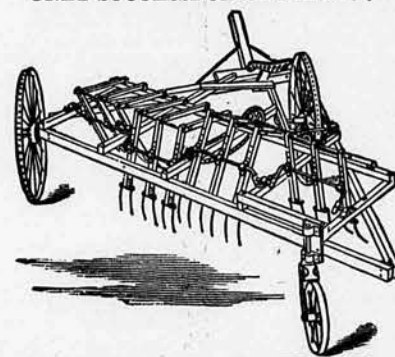
GUARANTEED ACCURACY, STRENGTH AND DURABILITY.

Compound Beam Furnished on all Scales. No Extra Charge.

Kansas City Hay Press Co., 129 Mill St., Kansas City, Mo.

Nine Years in the Field.

ONLY SUCCESSFUL ONE MADE.



C. B. & Q. Side Delivery Hay Rake

throws the hay in a loose continuous windrow, so that the sun and wind can penetrate, and thus obviate the necessity of a hay tedder. The team goes around the field the same as the mower, taking up the dried hay, leaving it shaken loosely in the windrows so that the sun and wind will dry it out if not quite dry when raked.

CHAMBERS, BEERING, QUINLAN CO.,
Manufacturers, Decatur, Illinois.

THE STRAY LIST.

FOR WEEK ENDING APRIL 27, 1899.

Lincoln County—J. S. Stover, Clerk.

MARE—Taken up by George Keizer, on the 8th day of March, 1899, in Highland tp. (P. O. Wilson), one black pony, about 8 years old, weight about 800 pounds; three white feet, star on forehead, white on nose; valued at \$12.

Montgomery County—D. S. James, Clerk.

MARE—Taken up by Fred Klinglisen, in Rutland tp. (P. O. Havana), April 5, 1899, one gray mare, weight 900 pounds, 15 hands high, about 14 years old, roached mane; valued at \$15.

FOR WEEK ENDING MAY 4, 1899.

Pratt County—John Mawdsley, Clerk.

HORSE—Taken up by L. D. Humble, in Paxon tp., March 14, 1899, one black horse, about 4 years old, small star in forehead and small white spot on left side; valued at \$20.

Montgomery County—D. S. James, Clerk.

COW—Taken up by W. I. Long, in Fawn Creek tp. (P. O. Tyro), April 8, 1899, one red cow, 4 or 5 years old, small brand "Y" on right side, crop off each ear.

STEER—By same, one red steer, 1 year old, small.

CALF—By same, one red steer calf; total value, \$15.

BICYCLE FREE OR CASH TO ANY ONE distributing my soaps, etc. I trust you. F. Parker, 277 E. Madison St., Chicago, Ill.

LIGHTNING WELL MACHY

IS THE STANDARD

STEAM PUMPS, AIR LIFTS,

GASOLINE ENGINES

WRITE FOR CIRCULAR

THE AMERICAN WELL WORKS

AURORA, ILL. - CHICAGO - DALLAS, TEX.



BINDER TWINE.

New, guaranteed. At

prices that will tickle you.

Send for prices delivered at

your town. Riding Gang

Plows, \$35. Sulky Plows, \$25.

64-T. Lever Harrow, \$7.50.

12-16 Disc Harrow, \$16.00. 16-

in. S. B. Plow and Rolling

Coulters, \$10.50. Mowers,

\$23.40. Wagons, Buggies,

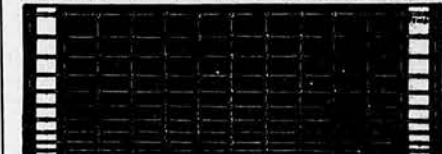
at one-half dealer's prices. Catalogue free.

Hapgood Plow Co., Box 262 Alton, Ill.

P. S.—Only Plow Factory in the United States sell-

ing direct to the farmer.

DON'T EXPERIMENT



Buy the **Pittsburg Woven Wire Fence** and avoid all mistakes. It's a good long-lived fence at a reasonable price. Takes up all expansion and contraction and never sags. It's close enough and strong enough to turn all livestock. Keeps your in and your neighbor's out. We want good agents in every locality. First order secures township agency. Circulars free. **Pittsburg Woven Wire Fence Co. Penn. Av., Pittsburg, Pa.**

Price Is our Argument.

There is not a manufacturer in America who can compete with us, quality considered.

We manufacture and sell you

The Best \$26.

Buggy on the Market.

You have only to pay the manufacturer's

profit, the rest goes into the buggy. Do you

want a Sewing Machine, Harness or Saddle?

Send for our handsomely

illustrated catalogue—free.

Crawfordsville Carriage and

Harness Co.,

14 Main St.

Crawfordsville,

Indiana.

The Home Circle.

THE LARGEST LIFE.

I lie upon my bed and hear and see.
The moon is rising through the glistening trees;
And momentarily a great and somber breeze,
With a vast voice returning fitfully,
Comes like a deep-toned grief, and stirs in me,
Somehow, by some inexplicable art,
A sense of my soul's strangeness, and its part
In the dark march of human destiny.
What am I, then, and what are they that pass
Yonder, and love and laugh, and mourn and weep?
What shall they know of me, or I, alas!
Of them? Little. At times, as if from sleep,
We waken to this yearning passionate mood,
And tremble at our spiritual solitude.

Nay, never once to feel we are alone,
While the great human heart around us lies;
To make the smile on other lips our own,
To live upon the light in other's eyes;
To breathe without a doubt the limpid air
Of that most perfect love that knows no pain;
To say, I love you, only, and not care
Whether the love come back to us again—
Divinest self-forgetfulness, at first
A task, and then a tonic, then a need;
To greet with open hands the best and worst,
And only for another's wound to bleed;
This is to see the beauty that God meant,
Wrapped round with life, ineffably content.

There is a beauty at the goal of life,
A beauty growing since the world began,
Through every age and race, through lapse and strife,
Till the great human soul complete her span.
Beneath the waves of storm that lash and burn,
The currents of blind passion that appall,
To listen and keep watch till we discern
The tide of sovereign truth that guides it all;
So to address our spirits to the height
And so attune them to the vallant whole,
That the great light be clearer for our light,
And the great soul the stronger for our soul;
To have done this is to have lived, though fame
Remember us with no familiar name.
—Archibald Lampman, in Atlantic Monthly.

SWELLING IT IN NEW YORK.

"I got the man I was looking for," said a detective from a small city near New York, "but the way he was done up was a surprise to me. I have since learned that there are any number of young and middle-aged men who are straight and orderly at home, and who, when they get to New York, go on a sort of masquerade. I was told to-day of one young business man. He dresses very plainly at home. As soon as he strikes the city he goes to a barber shop and has his hair parted in the middle and his mustache waxed. Then he puts on half a dozen showy rings and a showy necktie, and the plain, every-day country business man becomes a sort of city swell. Now, the man I arrested was just that pattern. He told me, after I had jollied him on his changed appearance, that he always made a parade like that every time he came to New York on business or pleasure. He said it was a good deal of sport to him to go into an up-town saloon, the higher up the better, and swell about for an afternoon or evening, to enjoy the sensation of being considered a high-flyer by the waiters or others he might chance to meet. Of course, he knew no one. He liked to go into a cafe, sparkling with his gems, barbered and polished and perfumed, and order a 5-cent beer and tip the waiter with a quarter.

"I asked him where the sport of it came in. He told me that he had a quarter's worth of fun in watching the waiter carry the news to the other waiters and the manager, until finally he was an object of curiosity and was passing current as a high roller blowing in a fortune. Then he'd order another beer, and once more tip the waiter with a quarter. He'd drop the remark that malt liquor best suited his stomach; that cocktails irritated or upset his digestion. He'd dazzle the surroundings with his sparklers and have a glorious time in noting the effect. He could easily pick up acquaintances, but this was not desired. He had the most fun in going about alone from cafe to cafe, especially at night. He told me that there were hundreds of such cases. I again asked my man to tell me what pleasure was in it. He told me it was better than a circus to be cautiously gazed at by strangers, who thought him a millionaire or one who had just come into the possession of a fortune.

"During my visit to New York," continued the country detective, "I asked the proprietor of a cafe whether he had ever run up against any young masqueraders of that class. He told me of two recent visitors to his place who strolled in and asked whether they could have venison steaks with currant jelly. The manager told them venison was not then in season. The two bloods just had a taste for venison. The manager thought he might find a saddle of

deer in some cold storage plant. He telephoned to a number, and finally found what he wanted. The two high rollers were told to come in two hours, but that the price would be rather high. That didn't matter, of course. They came, dined on venison they themselves prepared on a chafing dish in the dining room, spread on the currant jelly thick, and had a good time. Their bill was \$18, which they paid cheerfully, and adjourned to the smoking room, where they ordered their coffee. Of course it was soon noised around that the house was entertaining two young millionaires from the Colorado silver mines. The two strangers enjoyed the curiosity they had awakened. The manager afterward learned that they were not rich at all, but had come to New York from a Pennsylvania coal city, where they had made money, and were willing to give up some of it for just such a time as they were having.

"Not long ago I ran across a young fellow from my city. His father is rich. At home the young man is in a bank and does well. He was having a quiet time in New York and was so glad to meet some one he knew from home that he asked me to a swell restaurant for dinner. He ordered dinner for two. I did not hear his order. We were to come in at 6 p. m. We strolled around until that time, then went to dine, and, you may believe me or not, when that dinner was served, a ten-pound turkey hen, steaming hot, brown as a chestnut, was brought in for us two. Of course I was amazed. I told him two portions of turkey could just as well have been ordered. He smiled good-naturedly and simply answered that he liked his meals fresh made, and that he wanted practice at carving, because he expected to be married shortly. Well, I then gave him all the points I knew about carving, and we had a jolly time. He tipped the waiter with a \$5 note and paid the dinner bill very cheerfully. I think it was \$20, because we had a variety of other things, all of the best. I was told before we left that we were the first pair that ever dined on a whole turkey in the history of the house, which information amply rewarded my friend for all his outlay of money.

"In a large city like New York you can make up your mind that very many of the men you see strolling around alone, dazzling with gems and made up in the latest style, are fellows who are out for a quiet lark, who are weary of home restraint, who read a great deal of swell men and who have a desire to live in that atmosphere if for only a little while, and to gratify their desire in that line they come to New York, where they are not likely to run up against anyone they know, and then they indulge in high rolling to their heart's content, no matter what it costs. For a few hundred dollars they can carry on for a week. Then they put away their diamonds, comb their hair with a part low on the left side, and comb out their mustache and let it droop naturally, and as they reach their train to depart for home they once more become the plain Jones, Brown, Smith or Johnson as they are at home, and return to their native heath, satisfied and pleased that they have at least been a millionaire for a week."—New York Sun.

Cirelets.

In a pleasant letter from "Martha," of Kentucky, we can almost fancy ourselves with Miss Alcott's delightful "Little Women" where they divided up gloves, painted shoes, and made use of old things in general.

If it is necessary to save expense one very useful habit is to take care of all half-worn trimmings. When a hat or bonnet is too shabby to wear, every scrap of trimming should be carefully unpicked and then brushed, smoothly folded, and tied in neat little packets and stored out of the way of dust, moths, etc.

White and cream lace will generally wash nicely in soap-suds. Black lace can be treated the same way unless "rusty," when it should be dipped in black dye after washing. In either case, the lace will require several rinsings with a little, a very little, fine starch or gum arabic in the last water. If it then be pressed between cloths and pulled out very carefully several times before getting quite dry, it can be made to look nearly like new.

Good silk ribbon, not much soiled, can be successfully renovated by the use of gasoline (the usual amount of care being taken in its use). Good satin ribbon can be home dyed to look as good as at first if all the directions that come with the dye are carefully and minutely followed.

Ostrich feathers can be restored over and over again by soaking in warm soap-suds for fifteen minutes, then drawing carefully between the fingers, and rinsing many times. They must be shaken carefully and and continuously near a hot stove, and then curled by drawing all the little sprigs of feather between the thumb and back of

WASHING DISHES



A mountain of dishes confronts the average housewife after all the family have dined. They are greasy dishes, too, and hard to get clean with soap and water. The best, easiest, quickest and cheapest way to wash dishes is to use a little

GOLD DUST

WASHING POWDER

in the dish-water. It acts like magic, cuts the grease and makes the dishes perfectly clean. In fact all cleaning is made easier by this great cleanser, and at half the cost of soap.

For greatest economy buy our large package.

THE N. K. FAIRBANK COMPANY

Chicago St. Louis New York Boston

scissors. If faded they can be dyed before the last two or three rinsings.

Martha tells us that even artificial flowers, drooping and crushed, may be renovated and freshened by shaking for ten minutes in the steam of boiling water.

Straw hats can often be made presentable again with a little trouble. White straw can be dyed any color after thoroughly cleansing. The shaping is always the difficult part, but we are told even this can be overcome by laying the brim flat on a table while pressing, finding some suitable pan, etc., to fit the crown. An easier way is to paint the straw with dye of desired color and then apply white shellac varnish. It is often advisable to wire the edge of the brim and put on a fancy braid or binding.

Paxico, Kans.

For Making the Hair Grow.

A simple lotion for making the hair grow is made of two drachms tincture of cantharides, six drachms essence of rosemary, and two grains of elder flower water. No tonic is of much value, however, unless the scalp is kept healthy and the hair follicles well nourished. Too frequent washing is as unwise as too infrequent. Once in two weeks in summer is often enough to shampoo the hair unless your occupation is such as to get it very dirty. Use warm water in which a little borax has been added. After washing, thoroughly rinse with clear warm water and wipe as dry as possible.

If your scalp is devoid of natural oils and seems dry and feverish, put a vaseline upon it and manipulate it with your fingers. If your hair falls out or you are troubled with dandruff, mix two ounces of castor-oil, one ounce of spirits of rosemary, and one ounce of bay rum; add a few drops of essence of bergamot to perfume the oil. This makes it grow fast and will prevent its falling out, and it is also good for the dandruff.

For dandruff mix two ounces of pulverized borax, two ounces of gum of camphor (broken in small pieces), one quart of boiling water. Bottle and cork tightly. Before each time of using strain a small quantity and dilute with an equal portion of water. Apply to the head with the fingers. Wash the head afterwards with soft water. Let the hair down at night and rub your fingers through it. Brush it regularly at night and plait and let it hang down when you retire.

KENTUCKIENNE.

Georgetown, Ky.

The Odor of the Opera.

The confirmed opera goer drew a long breath. "That would make me happy if it blew over my grave," he murmured blissfully. The woman with him looked at him doubtfully. "What's blowing?" she asked, unsympathetically. "It's the perfume," he explained. "One always gets it when the curtain rises on the second act. The house is full by that time and the odors of the flowers and perfumes have grown heavy. The air is close and oppressive during the entracte; but when the curtain goes up the draught sweeps out and catches that indescribable odor and whirls it up here to the dress circle. It's not like anything else. No theatre has it. It's the essence of opera flowers and laces and jewels and beauty and music. I'd recognize a whiff of it in Paradise. Just ask any old chap who has been coming here for years about it. He'll know what I mean."—New York Sun.

Johnnie—Papa, see what I've found—a bicycle cap.

Papa—What are you going to do with it, Johnnie?

"Well, ain't you going to buy me a bicycle to fit it?"—New York World.

Looking Up the Tower of London.

The main guard-house at the Tower, which has just been pulled down, is hard by the Bloody Tower. It is at this spot that the quaint and ancient ceremony of locking up the Tower is nightly performed, as it has been for centuries. A few minutes before 11 o'clock the head warder, or yeoman porter, as he is properly styled, clothed in a red cloak, carrying a portentous bunch of keys, and accompanied by another warder carrying a lantern, appears in front of the main guard-house, and roars out, "Escort, Keys!" The sergeant of the guard turns out with some of the men, and follows the yeoman to the outer gate, the whole party being challenged by all the sentries with "Who goes there?" and the answer is simply "Keys." The gates being locked, the keys are brought back to the main guard. Here the sentry stamps and roars out, "Who goes there?"

"Keys," is the reply.
"Whose keys?"
"Queen Victoria's keys."
"Advance, Queen Victoria's keys. And all's well."
"God bless Queen Victoria!" cries the yeoman porter.
"Amen!" responds the main guard.

"Present arms!" cries the officer on duty, and amid the rattle of the salute he kisses the hilt of his sword. The yeoman porter marches off with the keys and deposits them in the lieutenant's lodgings, and from that time throughout the livelong night you can only circulate within the Tower precincts if you know the countersign.—London Graphic.

Mrs. Higbee—I feel so miserable.
Higbee—What is the matter?
"Mrs. Shaw told me a secret and I've forgotten what it was."—Buffalo Commercial.

\$32.50.

\$32.50.

The above greatly reduced rate has been made by the Union Pacific to California points. Through tourist sleepers, quicker time than any other line.

For tickets and full information call on F. A. Lewis, City Ticket Agent, or J. C. Fulton, Depot Agent, Topeka.

A Cool Ride in Summer.

The Pullman tourist sleepers in daily service on the Santa Fe Route are of the new pattern, with seats of rattan. There's nothing so hot, stuffy and disagreeable in summer as fabric cushions and backs. This is one reason of many why the Santa Fe is the best line to New Mexico, Arizona and California during warm weather.
T. L. KING, Agent, Topeka.

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.

A SPLENDID JOURNEY FREE!

You may visit the Paris Exposition in 1900 without expense. Particulars, and other valuable information, sent on receipt of four cents in stamps for postage by
T. L. KING, Agent, Topeka.

Free Samples of

WRIGHT'S CONDENSED SMOKE,

Send us 10 cents in stamps (to pay postage) and the names of ten or twenty of your neighbors that cure their own meats and we will send you a sample of WRIGHT'S CONDENSED SMOKE, the great meat preservative, the great time, money and labor saver. Address, E. H. Wright & Co., 915 Mulberry street, Kansas City, Mo. In writing, mention KANSAS FARMER.

The Young Folks.

THE GOLDEN SIDE.

There's many a rest on the road of life,
If we only would stop to take it;
And many a tone from the better land,
If the querulous heart would wake it.
To the sunny soul that is full of hope,
And whose beautiful trust ne'er falleth,
The grass is green and the flowers are bright
Though the wintry storm prevaileth.

Better to hope, though the clouds hang low,
And to keep the eyes still lifted,
For the sweet blue sky will soon peep
Through
When the ominous clouds are rifted.
There was never a night without a day,
Nor an evening without a morning,
And the darkest hour, the proverb goes,
Is the hour before the dawning.

There is many a gem in the path of life,
Which we pass in our idle pleasure,
That is richer far than the jeweled crown
Or the miser's hoarded treasure;
It may be the love of a little child,
Or the mother's prayer to heaven,
Or only a beggar's grateful thanks
For a cup of water given.

Better to weave in the web of life
A bright and golden filling,
And to do God's will with a steady heart,
And hands that are swift and willing,
Than to snap the delicate silver threads
Of our curious lives asunder,
And then heaven blame for the tangled
ends,
And sit and grieve and wander.

Written for Kansas Farmer.

YOUNG FOLKS IN THE OLD COUNTRY.

BY ANNA MARIE NELLIS.

NUMBER 59.

KOENIGLICHES ZEUGHAUS.

Leaving the palace of the old Emperor, one passing eastward on the Linden will find himself in front of the "Koenig's Wache," or royal guard house, before going a hundred steps. It is on the opposite side of the street from the starting point, and though a very fine building, it need not detain us in description, for a dozen paces farther will bring one near the "Koenigliches Zeughaus," or royal arsenal, which is worthy of very long examination. This is located at the very end of the Linden, on the north side of the street, no other building between it and the river, across which is the Lustgarten and grand Schloss.

Directly opposite the arsenal is the handsome palace of Dowager Empress Frederick, the oldest daughter of Queen Victoria. It is well known and commented upon in Germany that she is the most clever and least loved member of the royal families of England and Germany. Her Majesty does not permit this, her principal castle, to be inspected by the "common herd," and from nine to eleven months in the year it is closed, as her Royal Highness has no superfluous love for Berlin, as the Berliners have none for her. She remains away as much as possible, coming here only for a few days at a time, as on the 27th of January, when she must be present to wish her imperial son a happy birthday.

Although she is not loved by the Germans, she does very much for charity and charitable institutions. It is said that the Dowager Empress Frederick once, in speaking of her daughter-in-law, the Empress Augusta, remarked: "The young goose! she doesn't know in her whole brain as much as I do in my little finger, and doesn't do a tenth part as much as I for the people, and yet they love her and hate me." Even royal families have their little family jealousies just like other folks. But Augusta is of good German stock, a fine Holstein (Schleswig-Holstein), while Empress Frederick is only English as to birth; and Germany doesn't like the English anyway. But, my sakes! the dowager is "Deutsch" enough—her pa was entirely so, and her ma was between seven-eighths and a full-blood German.

But this has nothing to do with the arsenal, except that the palace named is on the opposite side of the street from it.

The arsenal is considered by art critics the handsomest edifice in the city, unless the more recent Reichstagsgebäude be entitled to that honor. The original plan was made by a Dutch architect named Nerung, but was somewhat modified by the one who completed it, De Boldt, a German. The principal entrance is flanked by four allegorical figures by Hulot, and above the entrance is a gilt bronze medallion of Frederick II. by the same sculptor, with a Latin inscription telling one that "Frederick, the terror of his enemies and protector of his subjects and allies, built the present armory and stored it with ammunition, war trophies and booty of all kinds, in the year 1706."

Ornamenting the exterior portion of the building, are groups sculptured by Schlueter, representing in various allegorical forms, the "glories of war," while inside are twenty-one bas-reliefs, or masks as they are called, consisting of the heads of dying

warriors, youthful and aged, in the various phases of agony, convulsions, fainting and death; aptly depicting the horrors of strife and affording the antidote to the "glory" groups outside.

The arsenal is a very large building of dark stone, being 295 feet in length and enclosing an open quadrangle in the center, which is 125 feet square. I call it open, though it is covered with glass as to the roof, which permits light to shine brightly inside, wherefore the Germans call it the "Licht Hof" (light court). This court is practically unoccupied except for a few cannon in the corners, and the walls are decorated with French flags captured in the war of 1870-1.

Just as our party were about to enter the Zeughaus, the Kaiser and Kaiserin passed by in an open carriage, going for their daily drive in the Thiergarten. We are on "nodding terms" with these people, as are all the people of Germany, so we gave them our very best American bow, while the German women near us "courtesied" and the German men raised their hats. William seems to be well and favorably known in this locality.

Not far from these came the two youngest Princes in another carriage, accompanied by General Von—somebody; I do not remember his name, but I have seen him often with the younger Princes driving on the Linden. These Princes were not dressed in silks, velvets, laces and such things, as we might suppose royal ones wear; they were clothed in dark blue suits—long trousers and double-breasted coats, small blue caps with shade visors; they raised their caps as they passed by.

Just as the small royal procession arrived in front of the royal guard house there was a terrific commotion in that locality. The only occupation of the guards on duty, it seems, is to watch for any stray royalty, nobility or high military officer in full uniform who may pass by at any time. When such an occasion demands, the outside guard shrieks, like an Apache, some warning, and immediately the twenty-five soldiers inside rush out, take their places in a straight line, hold their guns against their noses, thus saluting, while the kettledrums make a frightful noise. As soon as the illustrious ones have passed by, the guard are "at rest" again, and adjourn to the inside of the guard house, possibly to be called out again in a minute or so, when some other notable appears in view.

Coming from the University one day, while waiting for my car, I saw the guard called out four times in the seven minutes I stood near the street corner. An officer once told me that when the royal family are in Berlin the guards are called out never less than twenty-five times daily; but that is what they are there for, and the work is light and pleasant, besides the guard is changed at noon each day, as related in my last letter; so they seldom get very tired.

Having paid our respects to Mr. and Mrs. Hohenzollern and the boys, we entered the arsenal for a complete inspection of the same.

In addition to the arms, ammunition, etc., which the arsenal contains, it is a complete military museum. The guns and cannon of all ages, including the two leather cannon used by Gustavus Adolphus, the "Lion of the North," in the "Thirty Years' War," may be seen; and, among others, a very curious twelve-pounder, founded at Freiburg in 1546, bearing on it the head of the Pope, vomiting forth toads and serpents. The famous bronze lion which the Prussians carried off from the cemetery of Plensburg after the capture of Schleswig-Holstein, is also there. But the most important collection, to the Germans especially, is that of the trophies gained from France in the war of 1870 and known as the Franco-Prussian war. There are French flags, French swords, keys of French fortresses captured by the Germans, chandeliers which once decorated the salon of the "Metz Cercle des Officiers," and many miscellaneous objects, which would be apt to give French people sore eyes if they were obliged to view them in their present location.

My education in cannon construction and operation has been exceedingly limited, so I could not fully appreciate all of those I saw there. In the "Waffenhalle" (hall of weapons) we saw small arms and weapons of various construction and of many ages; coats of mail and armor of ancient manufacture; flags of many nations, captured by the victorious Germans during the past forty years, all of which would require many pages to be listed and properly described.

To our left we found the wing of the arsenal devoted to the collection of engineering apparatus and models of old French fortresses brought from Paris in 1814, after the battle of Waterloo. These I found exceedingly interesting. Each model or plan had a separate table upon which it was displayed. The fortifications, the trenches and miniature soldiers about an inch high, some with guns and some with

spades in the act of digging, were curiosities which we all lingered long to examine.

I noticed that the greater number of visitors in this section were soldiers and officers in uniform. I heard a half dozen discussing the construction of one plan they were carefully studying. One said: "What dumb geese (the most common epithet for scorn that a German can use), those Frenchmen will always be geese, to build a fortress like that! Why, we (plenty of emphasis on that last word) Germans, 200 strong, could take that without half trying." One would judge from the manner of German speech that they are just a little conceited since having been victorious in all their late wars. But we (referring to the United States, with heavy emphasis) and the Twentieth Kansas will be just so, too, I suppose.

In an adjoining room is what I was the most anxious to behold, the "Prunk Saerge" (show, or state coffins), and I was determined to inspect them if they were visible to anybody. These belonged to a very eccentric, cross, warrior King, Frederick William I. of Prussia, father of Frederick the Great. He evidently used them only "for company," as they are scarcely worn a bit. He was a stingy old King, and while he had plenty and plenty of money—to throw at the birds if he wanted to—yet he didn't want to have Mrs. Frederick William I. spend a pfennig if it could be avoided.

His wife, however, was inclined to be allured by the vain things of this world, and liked to "put on style" occasionally; so to reprove her for such vanity, he had these coffins made and brought home to the palace at Potsdam, and whenever she "got gay" he would compel her to lie down in one and he would sleep in the other.

The first time the coffins were put to such use, the King led Sophia Dorothea, his wife, to a brilliantly lighted salon, in the center of which the coffins had that day been placed. A long train of lords and ladies had been ordered to follow, to witness the operation. He led the Queen up to the smaller coffin and in a loud voice he told her he wanted her to always remember that all are only mortal and "sterblich," that the pomp and vanities of life are only as soap-bubbles, of which nothing can be taken into the next world. The coffins were on a raised platform and the King told his wife to step up on the stool and lie down in hers to see if it were comfortable and a correct fit. The Queen was frightened, of course, and looked appealingly to the company for help; but they were powerless; the King was practically an absolute monarch and they dared not expostulate with him. The King roared out: "Dorothea!" She knew that meant "business," and in she went.

However, when Frederick William and Dorothea really needed coffins, others were provided, and these have been kept as a memento of a cross old King. They have been deposited for the last century in the "Dom," the Kaiser's church; but just at present the Dom is being repaired and the coffins have been brought to the arsenal.

To my sorrow, when I entered the room I found the two immense objects covered completely with heavy dark cloth and not to be seen by anybody. But I had come to see them, and remembering how effectual a fee often is, even in high places, I concluded to use that kind of argument with the guard on duty. He appeared exceedingly good natured, so I carelessly held a 3-mark piece between my fingers and the side of my guide book towards him, just where he could not fail to see it. I asked him a few preliminary questions about other objects, and then just happening apparently to see the dark-covered articles, I asked that our party be permitted to see the inside. He said it would be impossible, for they were not on exhibition; however, he "eyed" the 3-mark piece, and after carefully looking around to see if any other guard were near, and satisfying himself that only our party were in the room, he said: "Fraulein, come this way and perhaps I can show you one corner of the 'saerge.'" He not only showed us the corner, but took off the whole cover, and we inspected them within and without. They are of copper, but gilded brightly, giving them the appearance of solid gold. Inside is an oak lining or inner coffin of oak, and this is lined with satin which sadly shows its great age.

The King's coffin is an immense affair, about eleven feet long and three feet wide. He was a very large man physically, but the measurements given are of the outside, of course; the inner portion would accommodate a tall man of large frame. The head and foot of the Queen's coffin are adorned with beautiful gold figures, giving it a pleasing effect, if anything about such gruesome objects can be so considered.

Having gained our point, I accidentally dropped the money into the guard's hand, not as a bribe, only as a little keepsake for his attention to us.

I would like to tell of the "Feldherrn-

MR. IRA D. SANKEY always uses Style 431 Mason & Hamlin Organ.



THE SANKEY MODEL

Having no top, presents no obstruction between the player and his audience, while its wonderful range, the great power and effects produced by its 14 stops, make it a most valuable instrument, and to-day it is sold by dealers (or delivered by us, freight prepaid) for \$180.

Our ORGAN CATALOGUE gives full particulars about "THE SANKEY" and a score of other models, from \$27 up.

Mason & Hamlin Co.

BOSTON, NEW YORK, AND CHICAGO.

Intending purchasers should send for our Piano Catalogue describing our New Scale Pianos.

halle" (field marshal's hall) on the second floor, but lack of space forbids. The "Hall of the Rulers" contains bronze figures, heroic size, of all the sovereigns of Prussia from the Great Elector to Emperor William I., and these make a royal collection surely.

Success comes to those who persevere. If you take Hood's Sarsaparilla faithfully and persistently, according to directions, you may depend upon a cure when a cure is possible.

Hood's Pills are easy to take, easy to operate. Cure indigestion, sick headache.

Discharged for Cause.

There are many stories told about the manner in which secretaries in the different departments are hampered by what is known as regulations, law, and general red tape. An instance of this occurred the other day in the Navy Department. A case had been presented to Secretary Long concerning an enlisted man, who went into the navy as a sailor at the beginning of the war, but as there did not seem to be any near prospect of any further fighting the man wanted to return to his family and his old occupation. To the Secretary it was a meritorious case, and he decided to issue a discharge for the man. He called in an officer from the Navigation Bureau and made known his wishes. "It can't be done, Mr. Secretary," said the officer. "A sailor can not be discharged except for cause." The Secretary sent for the chief of the Navigation Bureau. "I want to have this man discharged from the navy," he announced. The chief knit his brows and replied: "Mr. Secretary, the law and regulations are very strict; a man can not be discharged from the navy except for cause." The Secretary was not yet satisfied, and requested the attendance of the Judge Advocate General, the law officer of the department. "Is there any way in which a man may be discharged from the navy?" asked the Secretary. "Oh, yes," answered the lawyer, "any man can be discharged for cause." "Not otherwise?" asked the Secretary. "I am anxious to have this man discharged." "Well," answered the Judge Advocate, "the law says a man can not be discharged from the navy except for cause, and the reason stated in his discharge." The Secretary looked at the officer for a moment and then said, with a twinkle in his eye: "Make out this man's discharge," and added, after a slight hesitation, "because it rained yesterday morning." The man has received his discharge.—Washington Star.

Big Reductions in Brass Band Instruments.

Drums and Uniforms. Write for catalog, 445 illustrations, FREE; it gives Band Music & Instructions for Amateur Bands. LYON & HEALY 26 Adams St., Chicago.

No Money in Advance!

High Grade Bicycles. Shipped anywhere C.O.D., with privilege to examine. Latest styles for Men, Women, Boys and Girls, well made and durable. \$50 "Oakwood" \$24.50 \$50 "Arlington" \$22.00 No better wheels made. Buy direct from manufacturers, thus saving dealers' large profits. Write today for special offer. Illustrated Catalogue Free. CASH BUYERS' UNION, 162 W. Van Buren St., B-64, Chicago, Ill.

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 \$16.00 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.

THE EDUCATED FARMER.

Bishop Vincent, of the Methodist Episcopal Church, delivered a sermon before the graduating class of the Topeka High School on Sunday evening, May 7, in which the broad common sense which characterizes this great man, was conspicuous. In the course of his discourse Bishop Vincent said:

"Some think that only professional persons need a college education. If you are going to be a blacksmith or a farmer, go to college. I find that none in the class intend to be farmers, but I should be glad if I found fifty were going to be. If I had six boys who were going to be farmers I should want all to go through college. If ten boys here get farms and work them the example will be a Godsend to the public schools. The salvation of the coming generation is faith in the respect for manual labor, the farm and its development, and the mechanical pursuits."

The learned bishop might have gone further and reminded his hearers that farming is now becoming an application of many sciences and as such presents most desirable opportunities for educated men. He might have recalled the fact that the purity of life on the farm produces the men, strong of mind, morals and muscles, on whom the world depends in its crises, as well as in times of peace and untroubled prosperity, to do and to dare in the promotion of the progress of the race.

PAID FOR THE PHILIPPINES.

One of the interesting feats of modern finance was the payment of the \$20,000,000 by the United States to Spain on account of the purchase of the Philippines, and this without the transfer of a dollar in cash from this country to that, or from the shores of America to those of Europe. For the last two years this country has been selling far more to Europe than it has been buying from that source. Interest rates were lower here than in Europe and the balances due this country have, to a considerable extent, been allowed to remain unpaid and to draw interest. This balance of trade has been especially heavy against Germany.

Now, the Treasury of the United States keeps on deposit with the great banks considerable sums of money. When the Treasury wanted money with which to pay the debt to Spain it was an easy matter for these banks to furnish drafts against German banks for the amount. So, too, it was desirable to furnish these drafts, even at the sacrifice of the interest which the balances were drawing rather than demoralize the home money market by withdrawing the \$20,000,000 from the cash vaults to repay the Treasury deposit. The other operations of the Treasury have called for disbursements far in excess of receipts, so that while the Government deposits in the banks are diminished, the money in the country outside of the Treasury is increasing rather than diminishing. It thus happens that by reason of the immense exports from this country—chiefly products of the farms—the Treasury is able to pay the sum of \$20,000,000 to Spain by drafts upon Germany, and, on account of the heavy domestic expenditures of the Government, still go on increasing the number of dollars in circulation.

After an extensive trip among the orchardists of Kansas, Judge Wellhouse reports prospects good for a generous crop of

every kind of fruit except peaches and apricots. Apples promise an unusually large crop. Since these predictions come from the most extensive grower of apples in the country, a man whose habits of observation are close and whose judgment is good, Kansas may look forward to plenty of apple pies in the near future and a good round sum of money from fruit sales beyond the borders of the State.

GOVERNMENT CROP REPORT. WINTER WHEAT.

The average condition of winter wheat on April 1 was 77.9 against 86.7 on April 1, 1898; 81.4 on April 1, 1897, and a ten-year average of 84.4. The averages for the principal winter wheat States are as follows: Pennsylvania, 89; Texas, 71; Tennessee, 71; Ohio, 86; Michigan, 75; Indiana, 72; Illinois, 74; Missouri, 73; Kansas, 66; California, 93. Of the thirty States producing winter wheat, twenty, containing over 69 per cent of the total winter wheat acreage, report a condition below their respective ten-year averages.

While the average in Pennsylvania is 1.2 points below the average for the last ten years, reports are, in the main, encouraging. The plant is not as tall as it usually is at this season, but it is well set, strong, and healthy. Reports from Texas are almost uniformly unfavorable, and the crop is evidently in a precarious condition from want of rain. Only twice in the last fifteen years has the April condition been so low in Tennessee as at the present time. The sowing was later than usual, and wet weather set in before it was completed; continued rain, with extreme cold at intervals, has injured all the late-sown wheat and considerably retarded the growth of the early-sown. In Ohio, during the coldest weather, the crop was well protected by snow, and while there are many brown and spotted fields, the complaints of general condition are not serious, reports indicating that the roots are well set and possessed of a normal vitality. Fall sowing was attended by favorable weather conditions throughout. Michigan is another State in which the April condition has been lower than at present only twice in fifteen years. The wheat fields presented an exceedingly discouraging appearance when the present covering of snow came, but farmers cling to the hope that there is enough vitality left in the roots to make a fair crop. In Indiana there is a remarkable nonuniformity of condition. In about one-half of the counties, cold of extraordinary severity found the crop entirely unprotected by snow. In other parts of the State, however, there was more than the usual amount of cover, both as to depth and duration. The present condition is more or less problematical, but the probabilities are distinctly unfavorable. In Illinois the early-sown wheat promises to make a fair average crop, but much of the late-sown is believed to have been winter-killed. The condition in Missouri, while exceedingly discouraging, is not easy to determine on a dhul emfwyps shrdlu emfwyp vbqkjvbs percentage basis, but it can not be placed at more than 73 on the testimony of either the State, county, or township correspondents. Considering the conflicting reports that have appeared in the public press with regard to the condition in Kansas, the close agreement of the Department's three independent crop-reporting agencies in this State is more than was to have been expected, and renders it a matter of no doubt that the condition is only about two-thirds of the normal. This low average is due to alternate thawing and freezing, and to extreme cold with lack of covering. With an average of 93, or 10.3 points above the mean of the last ten years, California constitutes the only notable exception to that unfavorable condition of winter wheat which is reported from almost every part of the country.

WINTER RYE.

The average condition of winter rye is 84.9, against 92.1 on April 1, 1898; 88.9 on April 1, 1897; and a ten-year average of 90. In New York and Pennsylvania, which together contain 41.5 per cent of the entire acreage, the conditions are 87 and 89, respectively, the former being 7.3 points and the latter 1.9 points below the ten-year average.

BERMUDA GRASS.

Editor Kansas Farmer:—What do you know about Bermuda grass as a grazing grass? Do you know of any grass that overflow will not kill out when it is under water four or five days? O. MILES.
Burden, Kans.

In Bulletin 87, Kansas Experiment Station, descriptions may be found of the many agricultural grasses of Kansas. Bermuda grass is mentioned as follows: "This very valuable grass should scarcely be included among Kansas grasses, as we have specimens from only one county, Sumner. It would be well worth trying to introduce it in some of our southern counties,

as it is well adapted to sandy soil. It is propagated by cutting up the roots or sod into small pieces and sowing broadcast, with shallow plowing, or planted a foot or two apart in shallow furrows and then covered. A severe freeze kills it, hence it will not thrive except in the southern counties. It is said to barely thrive in the vicinity of St. Louis."

It will be well for our correspondent—and for every other farmer who is interested in grass (and what farmer is not?)—to send to the Kansas Experiment Station for a copy of the grass bulletin which is just from the press. It is an exceptionally valuable publication and is free to all farmers in Kansas.

BREEDERS' ANNUAL REPORT.

The Kansas Improved Stock Breeders' Association has just issued from the press of the Kansas Farmer its first published Annual Report in book form. It contains an introduction by Secretary Coburn, a history of the live stock organizations in Kansas by Secretary H. A. Heath, the full proceedings of the ninth annual meeting of the Kansas Improved Stock Breeders' Association, and the consolidation of the other live stock organizations of the State with it, together with the addresses, papers, and discussions as to the various branches of the animal industry of Kansas and live stock husbandry in general.

It is the first distinctive live stock report ever issued for Kansas and is a veritable live stock manual for the State. The Report also contains the Association's Kansas Breeders' Directory for 1899. As the association receives no State aid, but is supported entirely by its membership fee of \$1 per year, it has been decided to charge a nominal price for the annual report, as follows: Single copy, 25 cents; 10 copies, \$1.50; or 100 copies, \$10. Address all orders, or applications for membership, to H. A. Heath, Secretary Kansas Improved Stock Breeders' Association, Topeka, Kans.

Trusts.

Editor Kansas Farmer:—Ex-Governor Crawford takes too gloomy a view of expansion and of the power and effect of trusts. Expansion, being a political rather than an economic question, may be relegated to the political papers and to public opinion for settlement. But the mania for trusts has now become a very serious and far-reaching question. It comes home to farmers in a very vital way. In July, 1898, barbed wire and wire nails could be bought in Cheney for \$2.50 per hundred pounds; now they are \$4 per hundred pounds, and may go even higher. About a month ago raw wire was advanced from \$30 per ton to \$43 per ton, or an advance of \$13 per ton, and the barbed wire and wire nails immediately followed suit. The Sherman law, as interpreted by Attorney-General Griggs, is entirely powerless to deal with these great octopi. Is there, then, no help? Must we silently and hopelessly submit? As a partial curb, I suggest the following plan: Let the legislature of each State pass a law requiring the assessor to assess the capital stock of each company or corporation at the same rate that notes or other personal property is assessed. These corporations or companies could not complain of this, as they would only be assessed according to the valuation they have put on these stocks. The point is this: The barbed wire trust has put its capital stock at thirty millions, and it now charges a price on its output sufficiently high to pay from 6 to 10 per cent on same, while in fact the real valuation of all their plants is less than one-third this capital stock; or, in other words, the farmers and all other persons using their goods are paying on twenty millions of watered stock. (I am not certain that I have the figures exactly right as to the real and watered stock, as I quote from memory, but the principle is the same.) It is true that only the States in which these trusts and companies do business and have their headquarters would be able to reach them; but if they had to pay taxes on their capital stock it would speedily result in their cutting down their two-thirds inflations.

Then there is another way in which these great trusts can be reached for the benefit of the United States Government—make them pay an income tax. Judge Field's place is now filled by ex-Attorney General McKenna, and it is probable that before a new case can be gotten into the United States Supreme Court there may be other new judges appointed. Of course the Supreme Court might again decide against an income tax law, but not as likely as before. If this should not win, an amendment to the constitution of the United States would have to be carried through. This would take time; but the people are now ready and the amendment could be carried through as fast as the forms of law would admit. As it now is, the Rockefeller, Vanderbilts, Morgans, and all the other millionaires pay no more for

the support of the United States Government than any other man who may buy the same amount of dutiable goods, for these great magnates pay for the support of the government that protects them only what they pay on dutiable goods which they may buy.

A. E. HARMON.
Cheney, Kans.

Publishers' Paragraphs.

Rupture can be cured, says our new advertiser, Dr. Henderson, of Kansas City, Mo., and you pay nothing until cured. Dr. Henderson is a rupture specialist of many years' standing, who claims to positively and permanently cure without cutting or pain and with no detention from business.

The city of Malden, Mass., about to celebrate its 250th anniversary, is made the subject of an admirable historical and descriptive sketch in the May issue of the *New England Magazine*. The author of the article, Mr. Deloraine P. Corey, is a well-known resident of Malden and author of the excellent history of that city recently published. He entitles his paper, "Two Centuries and a Half in Malden."

The American Scale Co., of Kansas City, Mo., is advertising in the *Farmers* a scale for \$35. It claims that this scale is in all respects equal to those sold for \$65 to \$100, but as this company deals directly with the user, it claims its scale can be made and sold for the low price asked. It agrees to ship scales on trial for thirty days, and if the purchasers are dissatisfied the scales can be returned and all freight charges will be refunded.

The "Out-o-Sight" mole trap advertised by the Animal Trap Co., Abingdon, Ill., whose advertisement appears elsewhere in this issue, is but one of the many traps which these people make for capturing rodents and small animals. Our readers will notice that every trap is "guaranteed to catch." Surely this mole trap will be a welcome boon to those who have suffered from the night maraudings of the mole. Many a thrifty garden and beautiful lawn, to say nothing of flower beds, have been destroyed or irreparably damaged in a single night. Watch for first mole indications, set the "Out-o-Sight" mole trap, and you have him. Write for circular and descriptive matter, and kindly mention that you saw the advertisement in this paper.

The "wonderful one horse shay that run a hundred years to a day" was evidently substantially built, and though it may have needed an occasional coat of paint, yet it was unquestionably a credit to its manufacturer. We never saw this wonderful vehicle, but indications are that it was hand-made and was rather a cumbersome affair. The old parson who navigated the craft probably was never in a hurry in his life, and if he ever had a "best girl" to take riding she had doubtless long since entered the false-teeth period of her existence. That old "shay" had only one good point—its lasting quality—and it would not have been in it with one of the Crawfordville Carriage Company \$26 buggies of the present age. The boy with the Crawfordville buggy would have unquestionably captured the "best girl" from the parson long before she reached advanced years. These modern buggies are machine-made, graceful in outline, easy-pulling, and easy riding. If you want one of them, send to the Crawfordville Carriage & Harness Co., of Crawfordville, Ind., for one of their illustrated catalogues.

Kaw Valley potato-growers are keeping very quiet these days. They are too busy working to talk, but will make themselves heard later on.

At Independence, Kans., the machinery is being put in place for a new cotton mill. The cotton will come from the fields of southern Kansas and Oklahoma.

Is the day coming when we shall cook our own food at our own tables; when all we shall have to do is to attach a wire to the electric fixture overhead, and on a neat slab, heated by electricity, cook eggs, steaks, and cakes exactly to suit our own tastes, to say nothing of the enjoyment of having everything fresh and steaming hot? Miss Anna Leach's article in the *May Cosmopolitan* on "Science in the Model Kitchen" is interesting to housekeepers from a hundred points of view, as well as in its suggestion of the electric cooking of the future. Photographs of the present-day development in electric cooking are given with the article, besides the interiors of the kitchens of many noted houses.

Excursion to Buffalo

leaving Chicago via Nickel Plate Road June 12 and 13. Tickets good to return to and including June 17, 1899, at one fare for the round trip. The dining car service is unsurpassed. City ticket office, 111 Adams St., Chicago. (4)

WEEKLY WEATHER-CROP BULLETIN.

Weekly Weather-Crop Bulletin of the Kansas Weather Service, for week ending May 8, 1899, prepared by T. B. Jennings, Section Director:

GENERAL CONDITIONS.

Strong winds on the 30th, high winds on the 1st and 2d, followed by three cool days on the mornings of which ice formed in the northwestern counties. A general frost on the 4th. Heavy rains occurred in the southern counties east of Kiowa; in Saline and the counties northeastward to and through Marshall and Nemaha and in Hamilton, Greeley, and Wichita, and the contiguous portions of surrounding counties. Lighter showers occurred over the rest of the State, followed by warmer weather. The week in general has been quite favorable for work except in the extreme south-eastern counties, where it was too wet.

RESULTS.

EASTERN DIVISION.

Wheat has grown rapidly and is much improved in color. Corn-planting is general and the early-planted is coming up, even in Marshall and Nemaha, and is being cultivated as far north as Bourbon. In the southern counties some corn was washed out. Oats are growing well. Flax is coming up, showing a good stand. Apple trees have blossomed full and the fruit is setting well, other fruits nearly as good. Forest and shade trees are in full foliage. Pastures and meadows have made good growth. No damage from frost.

Anderson County.—Cool last of week, with a frost, otherwise favorable; corn being planted rapidly, earliest planting not a good stand; pastures, though backward, affording feed.

Atchison.—Good week; plowing and corn-planting being hurried; apple trees in full bloom; flax coming up nicely; oats small but good stand and looking well.

Bourbon.—All vegetation making rapid growth; oats a fine stand; corn germinating better than usual, some being cultivated; fruit of all kind very promising, except peaches; chinch bugs numerous in wheat.

Brown.—A good week for work; corn-planting progressing; apples blossoming; a few peaches in bloom; pastures good.

Chase.—Crops all looking well, except

Pottawatomie.—Corn-planting about two-thirds done; potatoes are up; the dust storm of the 30th was injurious to vegetation and has lowered wheat prospects.

Riley.—Corn mostly planted, much of it up; grass very slow; many grape vines killed; apple trees in fine condition; wheat damaged some by high wind on 30th.

Shawnee.—Corn being planted rapidly; ground in fine condition; cherries and apples in bloom; shade trees in full leaf; gardens look well; pastures fine; cattle in good condition.

Wilson.—Estimates give wheat a half crop; many fields being planted to corn; early-planted corn a poor stand, later planted coming up nicely; apples promise a bountiful crop.

Woodson.—Too wet and cold; what corn is up looks yellow; stock on pasture.

MIDDLE DIVISION.

Wheat in general is in good condition; in the northern counties it is not, owing to cool dry weather, while in many of the west-central counties much of it was injured by the high winds the first of the week. Corn-planting is general, and the corn is coming up as far north as in Osborne and Ottawa, and is being cultivated in Butler and Sedgwick. Rye, oats, alfalfa, and barley are growing well. Trees in full foliage. Apples promise a full crop; cherries and plums nearly so. Grass is growing well.

Barton.—Corn coming up slowly, too dry; rain also needed for pasture.

Butler.—A growing week; much of the corn is up and shows a good stand; some corn being cultivated; oats and wheat doing finely; grass supporting cattle; frost on 4th.

Cloud.—Corn-planting about done, early-planted coming up, stand uneven; oats, wheat, and grass growing very slowly, too dry; apple trees full of bloom.

Cowley.—A wet growing week; corn coming up finely; all crops doing well except wheat, which shows the poorest crop since 1895.

Dickinson.—Wheat and oats growing slowly; heavy rain on 3d, growing weather since.

Edwards.—Light showers keep crops growing, but a good rain is needed; the sand storm destroyed many fields of wheat, oats, and barley, and stripped fruit trees; pastures improving; stock on range; corn-

short for time of year; oats and barley good; corn cultivation begun.

WESTERN DIVISION.

The range grass is growing rapidly and supporting stock. Alfalfa has made a good growth and appears fine. Apple trees are in full bloom. Wheat, rye, oats, and barley were severely treated during the week, but with the more favorable weather at the close are recuperating. Corn-planting and listing are nearly completed, and in Thomas the corn is beginning to come up. A large acreage of forage crops is being put in. Gray County reports the loco weed on the range.

Clark.—Continued dry weather. Decatur.—Corn mostly planted, and ground in fine condition; everything but winter wheat (which may be damaged one-third) is in good condition.

Finney.—A dry, cool week; grass growing slowly; cattle doing well; alfalfa growing nicely; farmers planting forage crops. Ford.—Alfalfa looks fine; prairie grass growing rapidly; will be a good fruit crop; all crops suffering for rain.

Grant.—Ground too dry to plow; oats and barley damaged by high wind; grass growing nicely and stock doing well.

Gray.—Vegetation growing slowly; loco on range reported rank.

Hamilton.—Crops have greatly improved since the fine rain; the heavy winds first of week did some damage to growing crops.

Haskell.—A poor week for growing crops; barley and oats are looking very well, but are beginning to need rain; farmers are busy planting.

Kearney.—Severe winds first of week, followed by rain; pastures are improving and cattle are doing well; apple trees full of bloom; a soaking rain and warm growing weather are needed.

Logan.—A dust storm on 30th, good rains since; prospects now good for crops.

Morton.—Dry and windy; farm work delayed; cattle business prospering; more broomcorn than for years past will be planted.

Ness.—Light frost; the high winds injured the growing crops, wheat and rye especially; light showers have revived crops some; trees are leafing and grass growing slowly.

Norton.—A dry, windy week; ground still in good condition for corn-planting; alfalfa two weeks late; pastures short; small grain in fair condition.

Rawlins.—Three mornings with ice, shower on 5th; everything growing slowly; farmers are listing corn, but rain will be needed soon to keep the ground in good condition.

Scott.—Vegetation has made but little progress; wheat, both spring and fall, is holding up in fair condition; barley is starting slowly.

Sheridan.—Severe winds and light frost first of week; crops have not done well since; apples and cherries in bloom; wild fruits promising; stock being turned on range in good condition.

Sherman.—Windy first of week, fine rain on 5th; fall wheat damaged some by the heavy winds, but spring wheat in fine growing condition; corn-planting and listing in progress; grass starting well; cattle fine.

Thomas.—Heavy wind on 30th, blowing much grain bare and doing other damage; three mornings with ice; small grains not doing well on account of cold; spring grain is looking well; corn nearly all planted or listed; some early corn up.

Trego.—Early gardens frosted; still plowing but ground getting dry; wheat is drying up; conditions more favorable as week closes.

Wallace.—Very high wind on 30th, destroyed early gardens, beating the plants to death; corn-planting nearly finished; oats and barley up; potatoes up; conditions improved at close of week.

Experiments With Swine Plague or Hog Cholera.

Press Bulletin Kansas Experiment Station.

The Jensen Creamery Company, Beloit, Kans., makes the following report in the May number of Jensen's Dairyman:

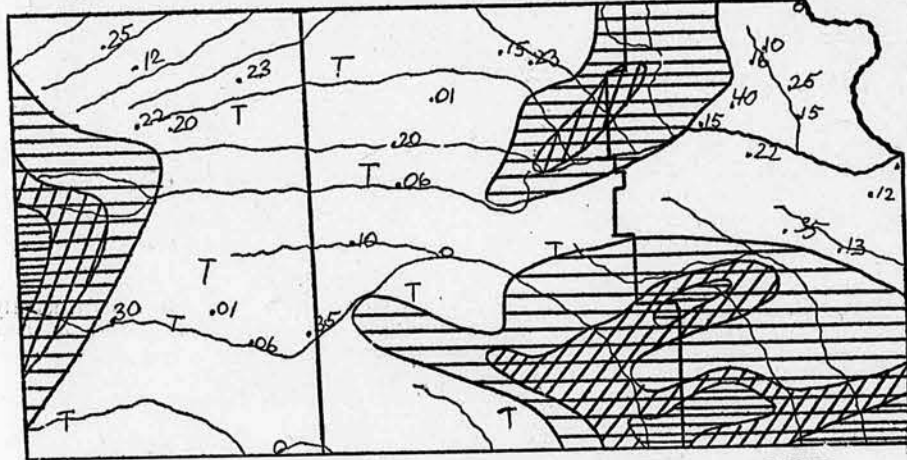
"The Jensen Creamery Company, having for over a year continually lost hogs from hog cholera, decided to investigate the new preventive experimented on by the Kansas State Agricultural College veterinary department. This preventive consists in inoculation or so-called vaccination of the hog cholera germ into the blood of the hogs. It is on exactly the same principle as vaccination against smallpox in human beings or blackleg in cattle.

"On the 21st of January the Jensen Creamery Company received twelve shoats that had been inoculated by Prof. Paul Fischer, at Manhattan. They were subjected to the most trying exposure. A hog that died from cholera was left in the pen with them. No attempt at disinfection or cleaning was carried on. These twelve shoats, aside from not being in the least touched by cholera or any other disease, showed extraordinary vitality and rapid gain. They were fed three months and three days during the most severe of last winter's weather.

"The record is as follows: The twelve shoats when put in the pen weighed 1,400 pounds; at 3 cents per pound equals \$42. They were fed wheat shorts, 5,800 pounds, at \$12 per ton, equals \$34.80; buttermilk, 5,320 gallons, at 12½ cents per barrel, equals \$13. Total, \$89.80.

"When sold these hogs weighed 3,750 pounds and brought \$125.02, a net gain of \$35.82. The total gain in ninety-three days, 2,350 pounds, or 196 pounds per head."

The experiment above referred to is only one of a number that have been planned by the veterinary department. While this experiment is in every respect a success, a large number of similar experiments on a larger scale must be made before the real value of the method fol-



ACTUAL RAINFALL FOR WEEK ENDING MAY 6, 1899.

that young alfalfa in southern part was hurt by the wind and heavy rain.

Chautauqua.—Wheat and oats doing well; corn-planting not finished.

Cherokee.—A wet week, but little farm work could be done; corn rotting in the ground; flax about half sown; oats looking fairly well; wheat improving, will make one-third to one-half crop on total acreage.

Coffey.—Good weather for work and crops, except cool for growing corn; one light frost; corn-planting nearly done, corn a good stand; flax up and a good stand.

Doniphan.—Oats coming up; apple trees in bloom; corn-planting general; but little wheat left standing.

Douglas.—Fine week for work; planting corn rapidly; wheat and grass growing finely; oats not doing so well; fruit prospects fair.

Elk.—Light frost on 4th; ground too wet to work all week.

Franklin.—Corn-planting progressing rapidly; early-planted corn coming up; all growing nicely, yet a good rain would be beneficial.

Greenwood.—Grass good; cattle on pasture; planting well along; corn well up; ground in fine condition and plenty of moisture; alfalfa was hurt some by the winter.

Jackson.—Corn-planting progressing, nearly one-half planted; oats and grass looking well; early-planted corn coming up, a good stand; ground in good condition.

Jefferson.—Corn-planting nearly one-half done; fruit prospect good, except peaches; fine growing and working week.

Johnson.—A large amount of plowing and corn-planting have been done; wheat, oats, flax, grass, and fruit doing well.

Labette.—Very wet; corn-planting not finished; oats and grass doing finely; fruit prospect good.

Lyon.—Apple crop promises an abundance; wheat doing well; corn growing rapidly.

Marshall.—Corn-planting well advanced and some coming up; oats up and a good stand; the few wheat fields left standing are doing well.

Montgomery.—Poor week for work, but fairly good for growth; much of the early-planted corn is being replanted where dry enough; apples very full; cherries and plums failed to set well and those crops will be light; light frost in low places on 4th.

Morris.—Wheat looking well; early corn and potatoes up and good stands; Kaffir corn, millet, and cane about all sown.

Nemaha.—Frost on 4th, but little damage; planting corn rapidly, some up; vegetation a little backward but healthy; soil in fine condition; shrubbery looks well; occasionally a peach tree in bloom.

Osage.—Corn coming up, making fair stand; more rain needed in northern part; pastures good; fruit crop promising except peaches and apricots.

planting about done; Kaffir corn and cane being sown; alfalfa growing slowly.

Harper.—A growing week for all crops; corn-planting still in progress; some early-planted corn up; oats fine; pasture good; fruit promising.

Harvey.—High wind on 30th, injurious to all crops; everything growing finely since the rain; trees full of foliage; fruit prospects promising.

Kingman.—Corn-planting well advanced; corn coming up nicely, some places washed out on 2d will be replanted; wheat growing slowly, but needs rain in western part; much wheat was blown out by high winds on 30th, 1st and 2d, and the ground will be planted to corn.

Osborne.—Hard week on grain, too much drying wind; corn-planting and listing nearly done, early corn up; apple, plum, and cherry trees full of blossom; cattle on pasture; many trees in full foliage; rye, oats, and alfalfa doing fairly well.

Ottawa.—High wind and dust storm on 30th, injurious to wheat; rain on 2d did much good, but more is needed for wheat; corn-planting general, early-planted coming up; prospect fair for apples, cherries, plums, and gooseberries.

Phillips.—A dry, dusty, cold, windy week; corn-planting well begun; fruit in fine condition except peaches; alfalfa looks well; rain badly needed.

Pratt.—Heavy rain and hail damaged fruit, washed out corn and damaged small grain; wind has been bad for crops of all kinds; cold retards growth; week has not been favorable.

Reno.—Wind and sand storm on 30th damaged oats and wheat that was too thin to keep the ground from blowing away; wheat generally looks fair; rain of 2d improved everything; corn-listing nearly finished, early listing coming up well; alfalfa growing nicely; good prospect for apples, cherries, plums, and strawberries.

Rush.—High winds injurious to crops, followed by good local rains; a general rain is needed; conditions have not materially improved during the week.

Russell.—Wheat badly hurt by wind on 30th; everything suffering for rain; some fields too dry to list in corn; early potatoes coming up; corn will hardly come up without rain.

Saline.—Severe dust storm on 30th, good rain on 2d, fine growing weather since; corn-planting about done, early-planted coming up; fruit appears to be setting well; cankerworms damaging some orchards.

Sedgwick.—Corn nearly all planted and is coming up, some being cultivated, a good stand; ground in good condition; oats good stand and vigorous growth; apple crop looks promising; alfalfa fine; all crops are backward but are doing well.

Stafford.—Some early corn is up; rain is needed; grass growing very slowly.

Sumner.—Wheat growing, though very

Waltham Watches

are always guaranteed to be free from any defect in material or construction. The makers particularly recommend the movement engraved with the trade mark "RIVERSIDE" Made in various sizes for ladies and gentlemen, and for sale by all retail jewelers.

"The Perfected American Watch," an illustrated book of interesting information about watches, sent free on request.

AMERICAN WALTHAM WATCH CO., WALTHAM, MASS.

lowed can be ascertained. To aid in this work the Agricultural College invites the co-operation of swine-breeders all over the State. Correspondence should be addressed to Dr. Paul Fischer, Experiment Station, Manhattan, Kans.

It is said that if the "voice" of an elephant were as loud in proportion as that of a nightingale, his trumpeting could be heard round the world.

National Baptist Societies Anniversaries, Portland, Ore., June 2-5, 1899.

One fare plus \$2.00 for round trip via Union Pacific. For dates on which tickets will be sold, limits, and full information, call on F. A. Lewis, City Ticket Agent, or J. C. Fulton, Depot Agent.

Buffalo and Return at One Fare for the Round Trip

Via the Nickel Plate Road, June 12 and 13. Tickets good to return to and including June 17, 1899. City ticket office, 111 Adams St., Chicago. Depot (on the Loop), Van Buren St. and Pacific Ave., near Clark. (5)

Nobles of the Mystic Shrine.

Excursion Chicago to Buffalo via the Nickel Plate Road, on occasion of the annual meeting of the above order, June 14 and 15.

Tickets on sale June 12 and 13, at one first-class limited fare for the round trip. Tickets will be available leaving Buffalo, to and including June 17, 1899. Passengers may, if desired, have the privilege of either rail or water trip between Cleveland and Buffalo. The Nickel Plate Road has three first-class trains daily from Chicago to Buffalo, New York and Boston.

For sleeping car reservation, address General Agent, 111 Adams St., Chicago. (3)

The Pope's Pleasant Diversions.

It may not generally be known that the Pope has a collection of birds, of which he is very fond, especially of his gaudy-colored parrots; and a collection of animals—pelicans, ostriches and fawns. He has a vineyard which is so much the object of his care that he may almost be called its cultivator. Such, with a supervision of the direction in every respect, are his diversions in the gardens, where there are many things of beauty, though it is not "gay and prim," after the fashion of English gardens, but abounding in wild naturalness of a half-rustic park. Indeed, it is for the greater part a park and not a garden, but it has large tracts laid out with care, for the continuance of which the Pope is largely responsible, the care of his gardens forming his chief diversion.—St. James Gazette.

CANDY CATHARTIC
Cascarets
REGULATE THE LIVER

Horticulture.

ORCHARD TREATMENT.

Discussion by the Kansas State Horticultural Society at last annual meeting, from the stenographic report.

Mr. A. L. Brooke—There is one point that I wish to suggest in regard to the raising of peaches. I think the owners of peach orchards in this State should devote some time at the proper season, perhaps the latter part of May or the middle of May, in thinning out the peaches where they are too thick on the tree. I know of peach-growers who have followed this and who would not be successful at all without it. I am satisfied from my little experience in this line of its success. When I did not do it, I had small peaches, but, where they were properly thinned, there were very few peaches that were not fit for the market. So far as orchard treatment is concerned, I can do nothing more than suggest a method of the first-class nurseryman, and that is thorough cultivation. I would commence earlier in the spring, and keep it up until the latter part of September; but don't cultivate too late in the fall. If we happen to have a storm as we did this year, it will be injurious to the trees. I think that what is true in regard to the nursery trees is also true with the trees in the orchard. I don't know whether the old trees would be so likely to be hurt by a hard winter or the early frosts or not. It is the hard and early frosts that do the damage to the nursery trees. The hard freeze late in the winter don't do so much damage.

Mr. Geo. M. Munger—I have had a little experience in caring for orchards that I will give you. In 1893, on leaving home to attend the exposition at Chicago, I left instructions in regard to a certain orchard that had to be kept clean to the 1st day of July. I returned home the 1st day of September, and found that my fellows had been taking it easy during the early part of my absence, but just a short time previous to my return, had gone to work and cultivated that orchard and destroyed all the vegetable growth there was in it excepting the trees. It was absolutely clean. We had a dry fall and a dry winter, and the soil was absolutely dry until the rains came in the spring. The winds blew nearly all of the soil off the orchard and up along the fence rows, and since that time I have been trying to get it seeded down to weeds in order to keep the soil in the orchard. I am going to keep the soil there if I can. I didn't want all of it to be blown over to the neighbors, but circumstances alter cases. Our soil, under certain conditions, will blow, and it is not safe after the first of July in our country to leave the ground bare because, when the weather is dry, it soon blows off.

Mr. Baker—I have lived in Kansas for thirty-one years, and have been interested to some extent in horticulture. In regard to the caring for the orchard I have tried various plans. I have tried the plan of keeping it thoroughly clean, and turning it over with a disk cultivator or something else in order to form a mulch out of the soil; but I am sorry to say that I never have found this satisfactory. We have a good deal of wind in this country, and, if the soil is loose on top, it soon gets blown away. I have seen it blow in our country until it almost covered the hedges. Nearly all the soil would be blown off the field. It leaves the soil in such a shape that it can not be utilized, and I have reached the conclusion that that would not do; that as dry as the weather is, and as hard as the wind blows, that is not a good plan. It gets dry and the ground cracks open out in our part of the country, until it is almost dangerous to walk upon. So I concluded I would raise clover in the orchard and did so one or two times upon that orchard. But I have too much shade on account of my trees being planted so close, and the clover didn't do well in the orchard. I concluded that something had to be done in order to form a mulch of the soil, so I followed Mr. Munger's plan and let the natural growth come up. It is mostly this crab-grass, and it has formed a pretty good mulch. But that didn't quite suit, so I hauled manure and put in on top of the ground around the trees, and I had a fine crop the first year. They were the finest apples that I had had for years, so I concluded that I had found a remedy in that way. I believe that some kind of a mulch is a great benefit to the trees in this country, especially in a dry or a wet season. I have experimented this season upon some peach, cherry, and apple trees. I have set out some peach and cherry trees, and I went to work and took some small rocks and piled them up around them. I piled them up for a space of three feet around the trees, leaving them so that none of the rocks touched the trees. Then I set some of them out and mulched them with trash and one thing and another—just anything

that I could get hold of handily. Some of them I didn't do anything to. I don't think the trees were in just as good shape as they should have been when I got them. I think they had been kept in cold storage a good while. But the trees that I didn't mulch at all are all dead; some of those I mulched with trash are dead, but the majority of them are alive, but they didn't make very much growth; those trees that I piled rocks around—I never saw trees grow like they did. I had to cut them back in order to save them. They were actually breaking down with the weight of the foliage. Now the cause of this I don't quite understand any more than that the rocks pack the soil and keep it moist. I don't know how it would be for a rainy season.

Query—What kind of rock did you use?
Mr. Baker—Limestone rock. That has been my experience in the orchard. I set out my orchard in 1870, and some of the trees are quite large now. There is one thing with reference to raising an orchard or any kind of fruit, apple trees especially, and that is training them up so that the limbs will be as nearly in line with the body of the tree as possible. A great many of the trees in my orchard have been destroyed by the limbs springing down and breaking. I find that it is much better to train the limbs up with the body of the tree.

Query—At what age did you put the rock around them?

Mr. Baker—Just as soon as I set them out.

Query—Do you know whether or not it was the use of the quality of rock, that is, the limestone rock, that did the good?

Mr. Baker—I do not know.

Query—Was the soil solid?

Mr. Baker—It is very productive but not very solid. I have at my place a Duchess pear tree that I set out four or five years ago. It grew nicely the first season, the next season it had five pears on it; they matured and ripened; but the next season the tree began to blight. I kept cutting it back and it kept blighting. I cut it back almost to the ground and it stopped blighting just in time to put out a new shoot in the fall. The next season it made a good growth early in the season, and then commenced to blight again. I cut it nearly all away and it stopped blighting. The next season I had a notion to cut it up, but concluded to try it once more. I had some meat brine and took that and threw it all over that pear tree. I think that was about the 10th of March. I thought that would kill it sure. I never had experimented with salt brine before. I went on about my work and about a month afterwards I had more brine and threw that on it. I thought I would give it one more dose of medicine. That season when it came proper time, that tree put out as nice as any tree you ever saw. I never saw a prettier tree in my life, and there was not a particle of blight on it. That was last year. This spring I took the very same plan and gave it another dose. It took a good deal more brine, but I poured it on until it was thoroughly saturated and let it go. There is not a nicer pear tree than that one in Kansas. If there is, I would like to see it. I am going to keep that up until I find out whether it is good for the blight or not.

Query—Did you get any more fruit off of it?

Mr. Baker—No, sir; it seems as though the growth was so strong that it didn't bring buds until this year. I expect some fruit from it this year.

Dr. G. Bohrer—I find that in different parts of the State different fruit trees require different methods of cultivation. I commenced to put out orchards in Rice County, where I live, some twenty-three or

The End of the Century

approaches and brings with it the celebration of the greatest array of triumphs

ever credited to one manufacturing firm. The unparalleled McCormick machines will reach their three score and ten years of manufacture from 1831, the year in which Cyrus H. McCormick invented the reaper.

From the one machine of that date to the 189,670 machines built and sold last season, is a gigantic growth of output absolutely unchallenged. The McCormick Binders, the McCormick Mowers, the McCormick Reapers, the McCormick Corn Harvesters, the McCormick Hay Rakes, the McCormick Corn Huskers and Fodder Shredders are "The Best in The World."

McCormick
Harvesting Machine
Company,
Chicago.



twenty-four years ago, and I was satisfied that a good many of our Eastern ideas had to be abandoned. Where I planted the trees I put the plow down as deep as two horses could pull it. I put my row of trees in that soil, and as I cultivated the trees I worked the soil up to them. It was probably 12 or 13 inches in depth. I wrapped bunches of slough-grass around the trees from the ground up to the limbs as I set them out, in the month of April. After two months the trees began to grow and I was afraid that the wrapping would injure the trees so I untied it and pushed it back at the top. It remained there five or six years, keeping the rabbits off in the winter, and keeping the sun off in the summer. The crop that I cultivated in the orchard was such as kept the winds from blowing the limbs of the trees. I cultivated corn each year until the orchard was six or seven years old. It is impossible to cultivate the ground under my trees now, as you could not drive a team of rabbits under some of them. I have to get down on my knees to get the apples out from under the trees—I did that this fall. I have pruned very little. I can not raise a crop of any kind in my orchard. Some five or six years ago, I had a crop of sand-burs in it, and my wife and niece got in the orchard and it was a question as to how to get out. The sand-burs were deep enough to swim in. There is one thing about sand-burs—they keep the boys out. The sand-burs didn't grow well in the apple orchard. They died out on account of too much shade, but in the peach orchard I had a good crop of sand-burs. I think the matter of cultivation depends on the locality. In our part of the country, while the trees are small I think it is a good idea to plant some crop to shade them and protect them from the wind. But when they are large you can't get near enough to them to cultivate the soil.

Query—Are your trees so close together that you can't drive between them?

Dr. G. Bohrer—Some of them are. They were planted 25 feet apart, too. Some of them are Ben Davis, and they are the hardest trees.

J. W. Robison—I would like to caution the people not to put salt on the trees in too great quantities. The only use that I make of salt on my farm in connection with trees is to kill them. If I grub up a hedge I put salt on the roots to kill the roots.

T. W. Harrison—My experience is that you can not give the same kind of treatment to apples and pears that you can to cherries and other fruits. The best way, according to my experience, is to cultivate the ground until the trees are three or four years old, then sow it down to clover and stop the cultivation. Peach trees ought to have clean cultivation—no crops at all until they begin to bear, then seed them down to red clover. Pear trees will bear and grow almost any way. Alfalfa would be good in an orchard except that it takes too much moisture out of the ground and is apt to destroy the trees. I don't know anything about the experience in Rice County, and I judge that Dr. Bohrer's experience there is worth more than any one else's. But in this part of the country, the pear orchard will bear seeding down soon after the trees are planted. Blue-grass is good; the trees will not blight so much. A too rapid growth will induce blighting and destroy the fruit.

Edwin Taylor—We tried to seed the orchard down two years ago with clover, and have been trying to get clover on it ever since. Sometimes after we have cut the clover we haul it off and sometimes we don't. We get an astonishing growth of all kinds of weeds in our orchard. We plow our orchard, and I believe that plowing leaves it in the best condition that we can get it in. Where corn is planted in an

orchard, I believe in getting it out early, for, if it is left shocked in the orchard, it will make a good harbor for rabbits.

H. E. Van Deman—I have seen a great many orchards in Kansas, and many of us know about Dr. Bohrer's place, and I know that the orchards in the western part of the State are different from those in the eastern part. What might do in Rice County might not do in Leavenworth County. The seasons vary so much that it is a matter of much difficulty to know just what to do. You can not always tell. If I were asked to give my methods of orchard treatment, I would say that I would try to cultivate peach orchards and apple orchards. I do not know about pear orchards. Sometimes pears seem to do better on sod treatment. But, as a rule, no crops should be taken out of the orchard. The crop that we should get from the orchard is the fruit crop. That is what we want, and any method that we can use to cause it to yield us a greater quantity of fruit is the proper thing to do. That is where skill comes in. And, in my judgment, wisdom must be exercised in the selection of the crops. I don't believe in growing anything in the orchard, that is, don't grow anything that you expect to take out of it. It may be detrimental to the orchard if the clover is cut and carried away, unless it is fed to stock and the stock allowed to run in the orchard. Stock only take out about 20 per cent of the nutriment. Cultivation of the orchard, in my judgment, must be in the manner that will give the best results from the orchard itself.

Mr. McClure—My father came to Kansas and put out an orchard in 1865 in Leavenworth County. He was particular about setting the trees out. He plowed the ground both ways, and laid it out both ways. He would not let us boys put out a tree. After setting these trees out, he cultivated them as long as he could cultivate without the limbs interfering. He used the diamond plow in cultivating the orchard—a one-horse plow. He threw first to the tree and then away from it. When the dirt was too close to the tree he took the rake and raked it away from the tree. When I became of age I went to Washington County and took 160 acres of Government land. I tried father's plan of planting the trees. It was very hard to get the orchard started. The nearer you are to the Rocky Mountains the harder it is to get the trees to grow. I didn't mulch the trees, but I think if you have trees in that part of the country you have to protect them in some way to keep the heat from blighting them. I went from there to Jefferson County, set out an orchard there, and had good success with it. Then I moved to Johnson County and set out a young orchard there. In the western part of the State of Kansas you will find that it takes a different treatment for the orchard than it does in the eastern part.

Dr. G. Bohrer—I never mulch a tree; it will retard evaporation and it will not make it rain. You have to have rainfall if you have an orchard in good condition and get good results from it.

A Delegate—I have had some little experience in this matter. I live in Cloud County. Two years ago I set out 1,000 peach trees. I have always thought we had rain enough if we could save the water until we need it each year. I went to work on that theory and have worked on it for sixteen years more or less. We kept the ground cultivated well, and tried to cultivate it after every rain. We tried to cultivate as near as possible after the rain. We cultivated up to about the first of August and then sowed the orchard in rye and let it alone. The trees kept right on growing because it was a rainy season. A good many of the limbs were killed back when

Make Cows Pay.



If every cow would give half as much more milk as at present without increasing feed or expense, dairymen would pay well.

A LITTLE GIANT SEPARATOR

could earn such an increase in product almost every time, and will change a losing business into a paying one. It is so simple that a boy or girl can easily manage it.

Send for Illustrated Catalogue No. 19.

BRANCHES: **P. M. SHARPLES,**
Toledo, O. Omaha, Neb. West Chester, Pa.
Dubuque, Ia. St. Paul, Minn.
San Francisco, Cal.

it became cold weather. The further west you go, the scarcer the rainfall, especially in the fall of the year. Our best mulching is weedy ground. Some years ago I mulched grape vines with rubbish in order to keep the weeds down and that made a harbor for insects, and was not a success.

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.

To Creamery Patrons, Creamery Managers, and Private Dairymen.

Following this article will be found "Suggestions for Records of Dairy Herds" to which we wish to call the attention of all persons engaged in the dairy business. Last year the Farmer published a number of records from herds in various parts of the State. This was the means of creating considerable interest in the different methods and different results of dairy management. Comparing notes in this way is a good education and it is to be hoped that the good work will be continued. Let those who have not yet sent in any records of their herds send reports as soon as possible and let those who sent in reports last year send in others this year so that we can compare results and note improvements.

Interest in this matter should not be confined to creamery patrons and private dairymen but should be taken up by the creamery manager, butter-maker, and skinning-station man. The Meriden Creamery Company, realizing the benefit to be derived from close contact between creamery and patron, expects to have its skinning-station men visit each patron with a set of questions similar to those suggested in this issue of the Farmer. Why should not other creameries do likewise and collect information and give suggestions that will make them educational centers in their various communities? As the creamery should be the educational center of the community it is the desire of the dairy editor of the Farmer to make the dairy page the educational center of the dairy interests of the State. When herd records are secured by creamery patrons, creameries, or private dairymen, send a copy to the Farmer. Address such communications to D. H. Otis, Manhattan, Kans. Creamery patrons who do not keep memoranda of their creamery accounts can doubtless get the table filled out by months from the creamery books. The questions need not be rewritten, but simply answered by numbers. D. H. O.

SUGGESTIONS FOR RECORDS OF DAIRY HERDS.

Month—1898.	Milk from herd.	Test.	Lbs. Butter Fat.	Price of Butter Fat.	Cash Receipts.
January	2064	3.9	80.5	17½c.	\$14.08
.....					
December	1547	3.8	58.7	22c.	\$12.93
Total for year..	14041		547.8		\$99.96
Average per cow	4980		182.6		\$3.32

1. Number of cows kept in 1898?
2. Number of calves raised in 1898? If sold, at what age and price?
3. Value of calves at weaning time?
4. Amount of skim-milk fed to pigs?
5. Value of skim-milk per 100 pounds for pig feed?
6. How do you feed skim-milk to calves? (Time of day and amount?)
7. What kind and how much grain do you feed calves on skim-milk?
8. What kind and how much hay do you feed calves on skim-milk?

9. What breed or breeds of cows did you have in 1898?
10. When were your cows fresh?
11. Kind of pasture?
12. How long were they kept on pasture?
13. Kind and amount of grain or roughness fed while on pasture?
14. Kind and amount of grain fed in winter?
15. Kind and amount of roughness fed in winter?
16. Water supply in summer?
17. Water supply in winter?
18. Do the cows get ice-water in winter?
19. Kind of shelter?
20. Breed of bull? Why?
21. Do you expect to increase dairy herd?
22. Can you keep milk sweet from Saturday night to Monday morning?
23. What dairy or farm paper do you take?
24. Problems confronting patrons?
25. General remarks?

EXAMINATION OF PATRONS' GLASS

At Kansas State Dairy Association, November 17, 1898.

Examiner—W. H. Phipps.
Judge—Prof. H. M. Cottrell.

(Continued from last week.)

V.—Give best method of handling milk in winter.

G. W. Priest—We keep our milk as cool as we can so it won't freeze, treating our night's milk and our morning's milk in the same way. We always leave our cart on the outside of the cow shed.

D. P. Hollis—We use long cans to cool our milk in the winter; when it is cool we put it into the tank, pump water on it to keep it from freezing.

G. W. Stewart—You must have some place where you can keep it from freezing; it is not only the best plan, I think, but it keeps the creameryman from cussing you when you take it down there. I think it is better for the dairy anyway. My wife used to make butter, and we learned that. It is necessary to have it in a clean room where the air is pure. I keep it just above freezing.

J. B. Harmon—The same precautions in regard to cleanliness of the cow as in summer. Cool the milk, strain it well, and keep it from freezing.

C. W. Filkums—The same as in summer, and keep the milk from freezing.

T. A. Borman—It is as necessary in winter as in summer to cool or aerate the milk immediately after milking; when that is done set it in a cool place; there will be no trouble in keeping it if the cans are clean. Set it in some cool place free from everything which produces disagreeable odors which it might absorb. Keep it from freezing.

VI.—How do you get best results in raising hand-fed calves?

G. W. Priest—I let the calf have the milk from the cow for about three days, and then tie it up, away from the cow, until we teach it to drink. I put up stanchions to hold five calves. We feed our calves in these stanchions as soon as they learn to drink. I feed each calf out of a pail, so that it gets exactly its own share of milk. I never feed calves out of a trough. We fill five pails of milk, or put milk in for five calves, let five calves into the stanchions and set in our five pails of milk for them to drink. When they are through, we let them out and let in five other calves. These stanchions are far enough apart so that we can keep one calf from getting another's pail. If we have one calf that sucks another's ear, we always let him eat at the last table, and when we are through we generally let him stand in the stanchion until his mouth gets dry and he forgets all about it.

Q.—What if the whole ten did that?

A.—I think that I would make ten different stanchions and leave them all in until their mouths were dry. I consider getting a calf from whole-milk to skim-milk a very critical time in its life. The way we do this is to give the calf whole-milk until he is about ten or twelve days old; we then commence to mix a little sweet skim-milk with the whole-milk; in two or three days I take about a quart to a half gallon of oil meal—a quart is probably enough—and I put that in a pail and pour hot water over it, or fill the pail about full and stir it, let it stand, and at the next feeding of the calf I pour a little of that water off of that oil meal into my milk and try to make up for the cream that is taken off of the skim-milk, and keep taking off a little more whole-milk and adding a little more oil meal until I get the calf on skim-milk and oil meal; during this time I teach the calf to eat bran and corn meal by putting a little salt with it, making it palatable, and by the time I have my calf on oil meal and creamery milk I have also got him to eating bran and corn meal; then I gradually decrease the oil meal and

increase the corn meal until I get the calf on skim-milk and corn meal with a little bran.

D. P. Hollis—When I am raising calves by hand, I feed the calves on new milk until they are about three weeks old, and then mix in a little skim-milk from the skinning-station, and when I feed my calves this way for a while, I begin to put some shelled corn in with the milk, so that when the calf drinks all the milk he will come down to the corn and eat it.

G. W. Stewart—I generally aim to feed the calves new or whole-milk for two or three weeks. Then I branch off with partly whole-milk and partly skim-milk, which I aim to feed sweet. When it is warm weather and I am going to the creamery every day, I feed my calves after I come home from the creamery, and what is left I heat up hot enough so that it will keep sweet that day and feed it sweet in the evening. I find that the calves do better in that way, and after a month or six weeks old, I give them a little bran and a little corn meal mixed.

J. B. Harmon—After you have fed them whole-milk for about two weeks, it is probably better to begin to put in some of the separated milk with the whole-milk until three weeks old, then they can be fed on skim-milk. This should be supplemented with some more concentrated food and hay or pasture.

C. W. Filkums—I would rather take the calf away from the cow before it had a chance to suck. I feed it the new milk from the cow for the first two weeks, and then gradually taper off on the skim-milk.

T. A. Borman—Our calves at a year old, hand-raised and fed on such milk as we get from the creamery, will probably average 650 pounds. We fed last year about 450 pounds of whole-milk to the calf; that was an average of about 12½ pounds for 36 days, which is more than is necessary. After a calf is a month old you can begin to give it grain rations; corn, corn meal, or Kaffir corn is a very good thing; feed him the milk as it comes from the creamery and an abundance of rations, and you will have as good a calf as some of your neighbors have who let the calf run with and suck the Shorthorn cow all summer.

VII.—How can you get best returns from skim-milk fed to pigs?

G. W. Priest—By feeding it to pure-bred Poland-Chinas; that is what I raise. I know that a great many people empty their milk right into the hog troughs as soon as it comes. I empty mine into a barrel and mix it with shorts. I put in half as much bran as shorts in bulk, about one-third as much oil meal as bran in bulk, and then add enough water to make it thin enough for good swill. I then feed out of my barrel of swill. I put just as much in one barrel as I want to feed; I feed that all out; the next time I take out of another barrel and feed that all out. I don't leave any sour milk in the barrels.

D. P. Hollis—We grind our corn and mix it with the milk.

Q.—In what proportions?

A.—I would put in half a bushel of ground corn to a can of milk and feed it before souring.

G. W. Stewart—That is something that I can't say. I generally feed the pigs what is not needed for the calves.

J. B. Harmon—The best returns I have ever gotten is to feed it direct from the separator. I think where that is not done, it should be fed sweet and fed in connection with grain feed. I don't think that you should feed them enough to make them depend entirely on skim-milk for their only drink. I would have it so that they would drink some pure water.

C. W. Filkums—Mix it with shorts, or something of that sort, and feed it as a slop.

T. A. Borman—The skim-milk is a most valuable feed. Its greatest value is when fed with Kaffir corn meal or even with shorts. To a barrel of skim-milk we have added a half bushel of corn meal, which made not a very thick slop, but a slop which kept the pigs growing rapidly when running on alfalfa, and when the fattening period comes, if you will put a bushel of corn meal or Kaffir corn meal to

CREAM SEPARATORS.

Would you know
all about them?

The best, the
cheapest and the
reasons why?

Send for new
1899 catalogue.

THE DE LAVAL SEPARATOR CO.

Randolph and Canal Sts., No. 74 Cortlandt Street.
CHICAGO. NEW YORK.

a barrel of skim-milk, you will have something that is mighty fine hog feed, which will produce hogs very cheaply, and we think that skim-milk fed that way is worth at the least calculation 40 cents a barrel.

The Farmer's Dairy Cow.

Paper by C. Kiser, read before the Cawker City Farmers' Institute, December 5, 1898.

Until quite recently, very little attention has been given to the dairy interests of this locality. A great many farmers would allow the calf to run with the cow until weaning time, and, as the old way of milking, churning, and selling the butter to the merchant in the nearest town gave but little returns for the labor performed, it is little wonder that farmers cared little and did less for the dairy interests of this country.

With the advent of the creamery in our midst, conditions have totally changed, and, however some of the farmers may decry against selling milk, yet the cold but cheerful fact remains that since creameries have been established in our midst the value of the cow has been doubled. This is easily demonstrated by figures, for five or six years ago cows sold for from \$9 to \$14, whereas, the same cows would bring from \$30 to \$40 to-day. Now, I do not set up the claim that the rapid development of the dairy interest is alone responsible for this favorable turn in cow culture, but after due allowance for the opening of Oklahoma and the Strip and limiting the pastures in the Southwest, the fact still remains that the entrance of the creamery in our midst was the main factor in enhancing the value of the cow, and this fact is fortified and established. I shall now speak more particularly of the treatment of the cow kept for the milk to be sold. I am not going to run the cross-fire of this audience by advocating any special kind of cows to be kept. I leave that point for the owner to decide. We all have our prejudice, our likes and dislikes, in cows as well as everything else. For my part I am in favor of the all-around-purpose cow for the farmer, because, as farmers, we do not only consider the quantity and quality of the milk, but also the calf destined to grow into a steer or cow. For one living in town or city, or one whose only object is to sell milk, the case would be wholly different.

Now as to the treatment of the cow, I have often read that when the cow has calved, the calf be allowed several days to remain with the cow, but as yet never saw a good reason advanced why this should be done. If the calf is allowed to be with the cow even one day and then taken away it makes her restless and disposed to break for the calf whenever the opportunity is offered, and it often occurs that in the attempt to get to her calf she will severely injure her udder and give trouble ever

**WHAT THE PRESIDENT SAYS
ABOUT
THE IMPROVED U. S. SEPARATOR.**

BRATTLEBORO, VT., Feb. 27th, 1899.

It gives me pleasure to say that the dairy machinery bought of your company two years ago, including a No. 5 Improved U. S. Separator and a Pony Power, is working well and giving entire satisfaction.

The Improved U. S. Separator is doing all and even more than was claimed by your agent. The separation is perfect, it runs easily, without noise or friction, and it is easy to manage and care for. Of all the separators placed upon the market, there is none that excels the Improved U. S. in my opinion.

G. W. PIERCE, President Vt. Dairymen's Ass'n.

Write for our latest Illustrated Catalogues.
VERMONT FARM MACHINE COMPANY,
• Bellows Falls, Vt.

after. If possible, stable the cow a few days before calving and if the udder be hard draw the milk, as it will obviate the caked condition which will otherwise occur. We are responsible to a very great extent for our success or failure in making dairying profitable and the following hints may help some to a more profitable way of keeping cows:

First—The cow ought to bring her calf in the latter part of the fall; this will insure the best price for milk, when she gives the largest quantity.

Second—At nights and every day during stormy weather keep the cow in a warm stable and do not expose her to the inclemency of the weather. Any farmer can put up a warm place for his cows with little or no outlay of money. A cow well knows her place in the stable, shed, or barn just as well as we do our houses, and I know they appreciate their warm quarters.

Third—Feed well, and in this connection I desire to state that I have found alfalfa and sorghum fodder sown for the purpose of hay make the best rough feeds for cows. They do not relish millet as well as the above-named fodder. In addition to this, good milkers ought to have a ration of meal every morning and night.

Fourth—It is essential to the well-being of a cow that she has plenty of straw or other material for bedding. Besides keeping her comfortable it will make a large amount of manure which will help to keep the farm in good shape.

Fifth—Very cold water or ice-water in the winter time is an abomination to the cow, and a loss of dollars to the owner. If possible, avoid it. Much more might be said on the subject, but as this paper has grown lengthier than at first intended, I will merely state that a fairly good milker, treated as above stated, will yield an income anywhere between \$25 to \$35 per head, calf not included. Of fifteen cows we milked, the average was \$31 per head, and the calves raised on creamery milk would have sold in the fall very readily for \$10 per head, bringing the total to \$41 for each cow.

POLAND BREEDERS
can secure a sample pair of our
Famous O.L.C. Hogs
ON TIME, and agency if they will
write at once. 2 weighed 280 lbs.
L. B. SILVER CO.
179 Summit Street, Cleveland, Ohio.

RAPE IS THE BEST FORAGE PLANT.
It furnishes succulent food from
May to December. No equal for
summer and autumn **SHEEP**
FOOD. Equally good for cattle, calves and
pigs. Beats clover and alfalfa by scientific test.
Grows 20 to 40 Tons Green Feed to Acre
—no green food approaches it for fattening. Sauer's
Dwarf Essex, best, 100 lbs. \$7.00; 10 lbs. \$1; 15 to 20 lbs.
8 cents per lb.; for less than 100 lbs. add 20 cts. cartage if
sent by freight. Send 5 cents for pamphlet on Rape.
Seed Dep. Amer'n Sheep Breeder, 124 Michigan St. Chicago.

AMERICAN SCALE CO.
OFFICE 1109
KANSAS CITY,
MISSOURI,
EAST 12th ST.

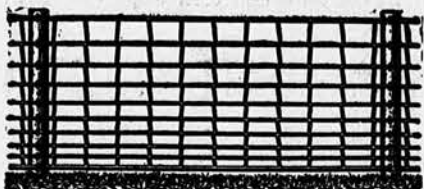
5 TON WAGON SCALE
\$3500

SCALES SENT ON TRIAL TO RESPONSIBLE PARTIES
CATALOGUES FREE; DROP US A POSTAL.

FROM MAKER TO USER AT WHOLESALE PRICES

BUGGIES AT WHOLESALE.
We manufacture a full line of Buggies, Phaetons, Surries, Spring Wagons and Road Wagons and sell them to you direct.
From our Factory at Wholesale Prices.
This saves you all the extra expense of double shipment, traveling men's expense, middle men's profits, &c.
We make all the Vehicles we Advertise.
Each is the best of its kind. Best seasoned stock, best workmanship, best finish and best styles.
Our line of Single and Double Harness embraces everything you could wish in style finish and variety of mountings. Handsome illustrated catalogue FREE. Prices of everything in plain figures.
EDWARD W. WALKER CARRIAGE CO.
85 Eighth St. Goshen, Indiana.

A Farm Fence of Special Merit.



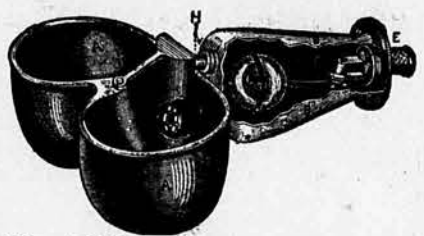
The cut shown herewith is that of the Advance Woven Wire Fence, manufactured by the Company of the same name, at Peoria, Ill. It combines in a high degree all the qualities of a good farm fence. It is strong, handsome, harmless and the way in which it is sold makes it reasonable in price. These people sell direct from the factory to the farmer at practically wholesale prices. They do not allow the dealer to handle it at all, but give you all the profit he would make on its sale. If you need fencing, write them for prices, circulars, etc. Address as follows: Advance Fence Co., 4105 Old St., Peoria, Illinois.



Raise Hogs?

Then use our Automatic Waterer to keep them Healthy. It waters them when you are away from home, pays itself in a week's use, frost proof, and warranted to please. Reimers' pig forceps save sows and pigs at farrowing. Write for circulars. We want agents. **J. N. REIMERS & CO.,** Box 1, Davenport, Ia.

The "Dewey" Double Automatic Stock Waterer.



Valve eight inches in water; governed by water closet brass float which cannot rust, freeze nor allow mud to collect under it. Attachable to tank, barrel or pipe instantly by the most inexperienced. Waters 150 to 300 hogs a day, also sheep, calves, chickens and ducks. **Stock Fountain Co., Lake City, Ia.**

Summer Trip to California.

A delightful experience by the Santa Fe Route.

Do not fear discomfort; it will be hotter at home.

Ask about this and we will make it perfectly clear. We will also send particulars of low rates to be made by the Santa Fe Route this summer at the time of the N. E. A. Convention in Los Angeles. Many hours shorter than any other route.

T. L. KING, Agent, Topeka.

Publication Notice.

(No. 20013.)

In the District Court of Shawnee County, State of Kansas.

Clayton M. Parke, Plaintiff,

vs.

A. F. Hilton, Emma M. Hilton,

I. B. Mason, et al., Defendants.

The above-named defendants, I. B. Mason and Emma M. Hilton, will take notice that the plaintiff, the said Clayton M. Parke, did on the second day of May, 1899, file his petition in said District Court within and for Shawnee County, Kansas, against you as co-defendants with A. F. Hilton, that you and each of you must answer said petition, filed as aforesaid, on or before the 25th day of June, 1899, or said petition will be taken as true and a judgment rendered against the defendant A. F. Hilton in said action, for \$3,625.00, together with interest at 10 per cent per annum from the 17th day of April, 1899, and for costs of suit, and also a decree of foreclosure against all of the above-named defendants of mortgage dated May 26, 1891, given by the defendant A. F. Hilton, on the following described real estate, situate in Shawnee County, Kansas, to wit: A part of the southwest quarter of section number thirty (30), township number eleven (11), south of range number sixteen (16), east of the sixth principal meridian in Kansas, adjacent to the city of Topeka. Commencing at a point thirty-two and one-half (32½) feet southerly from the intersection of the center of First Avenue in the city of Topeka extended upon the said quarter section and the east line of the alley between Fillmore street and Western Avenue in said city of Topeka extended as aforesaid, said point being in the east line of said alley; thence southerly along said east line of said alley extended eighty-two and one-half (82½) feet; thence at right angles easterly one hundred and eighty-five (185) feet; thence northerly at right angles eighty-two and one-half (82½) feet; thence westerly at right angles one hundred and eighty-five (185) feet to place of beginning, and you will be forever enjoined from claiming any right, title or interest to and in the said described real estate.

(SEAL)
NELLIS & NELLIS, Attorneys for Plaintiff.

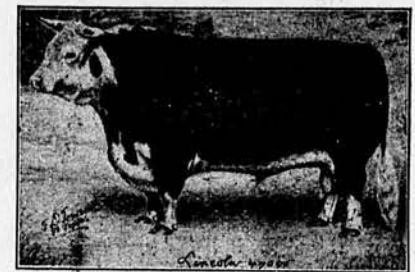
ON AGAIN—APRIL 30TH.
THE "KATY" FLYER.

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.**

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., Kas.**



SPRING VALLEY HEREFORDS.

Lincoln 47095 by Beau Real, and Klondike 42001, at the head of the herd. Young stock of fine quality and extra breeding for sale. Personal inspection invited. **ALBERT DILLON, HOPE, KANS.**



CEDAR HILL FARM.

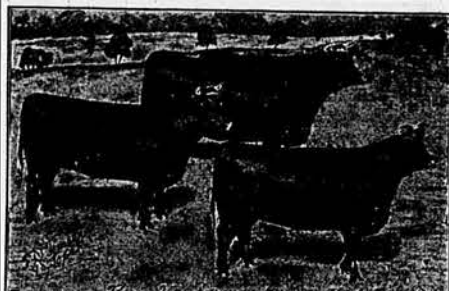
Golden Knight 108086 by Craven Knight, out of Norton's Gold Drop, and Baron Ury 2d by Godoy, out of Mysie 50th, head the herd, which is composed of the leading families. Young bulls of fine quality for sale; also offer a choice lot of grade bull and heifer Shorthorn spring calves. **C. W. TAYLOR, PEARL, DICKINSON CO., KANS.**



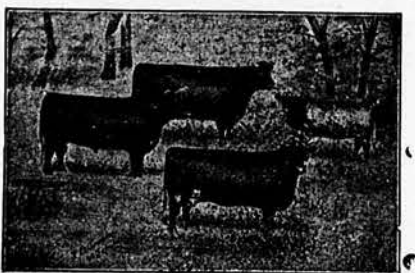
GLENDAL SHORTHORNS, Ottawa, Kans.

Leading Scotch and Scotch-topped American families compose the herd, headed by the Cruickshank bulls, Glendon 118370, by Ambassador, dam Galanthus, and Scotland's Charm 127264, by Imp. Lavender Lad, dam by Imp. Baron Cruickshank. Young bulls for sale. **C. F. WOLF & SON, Proprietors.**

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 Cruickshank bulls, Imp. Thistle Top 88876, Earl of Gloste 14523, 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.**



SHORTHORN CATTLE.

I have combined with my herd the Chambers Shorthorns and have the very best blood lines of the Bates and Cruickshank families. Herd headed by Baron Flower 114352 and Kirklevington Duke of Shannon Hill 126104. The Cruickshank Ambassador 110811 lately in service.

Best of shipping facilities on the A. T. & S. F. and two branches of the Missouri Pacific Railways. Parties met by appointment. **B. W. GOWDY, GARNETT, KANS.**

PERSONALLY CONDUCTED TOURIST EXCURSIONS

WEEKLY TO

CALIFORNIA

WEEKLY TO

Great Rock Island Route

WEEKLY TO

CHICAGO AND EASTERN POINTS

Accompany these Excursions and SAVE MONEY, for the lowest rate tickets are available in these

Popular Pullman Tourist Cars

For full description of this service and the benefits given its patrons, also dates of excursions and rates, see your local ticket agent or address

John Sebastian, G. P. A., E. W. Thompson, A. G. P. A.,
CHICAGO, ILL. TOPEKA, KANS.

DENVER, SALT LAKE, SAN FRANCISCO, PORTLAND



...AND...

ALL POINTS WEST

Are more quickly reached via the UNION PACIFIC than via any other line.

The Only Direct Route,
The Best Equipped Route,
The Fastest Route,
The Safest Route.

The only Dining Car Route Kansas City to Pacific Coast.

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.



..THE GREAT.. SOUTHWEST SYSTEM

...Traversing the States of...

KANSAS, MISSOURI, NEBRASKA,
ARKANSAS, COLORADO,
AND THE INDIAN TERRITORY.

Five (5) Daily passenger trains are run on the main line in each direction between Kansas City and St. Louis. The famous Hot Springs of Arkansas is reached only by this line.

H. C. TOWNSEND,
G. P. & T. A., St. Louis, Mo.
F. E. NIPPS, Agent, Topeka, Kans.

MARKET REPORTS.

Kansas City Live Stock.

Kansas City, May 8.—Cattle—Receipts since Saturday, 2,838; calves, 39; shipped Saturday, 553 cattle; no calves. The market was 5 to 100 higher. The following are representative sales:

DRESSED BEEF AND SHIPPING STEERS.	
No.	Ave. Price.
15.....	1.53 86.00
16.....	1.28 4.80
17.....	1.13 4.70
18.....	1.07 4.60
19.....	1.07 4.60

WESTERN STEERS.	
No.	Ave. Price.
62 Ind.....	1.12 84.50
30 Ind.....	1.09 4.30
1.....	1.12 4.40
25.....	952 4.25

NATIVE HEIFERS.	
No.	Ave. Price.
27.....	709 84.80
1.....	800 4.75
2.....	605 4.50
3.....	760 4.25

NATIVE COWS.	
No.	Ave. Price.
4 mix.....	1.19 84.40
1.....	1.22 8.80
4.....	1.09 3.25
2.....	690 2.55

NATIVE FEEDERS.	
No.	Ave. Price.
2.....	1.18 84.70
6.....	613 85.00
1.....	460 4.75
1.....	710 4.40

NATIVE STOCKERS.	
No.	Ave. Price.
6.....	613 85.00
1.....	460 4.75
1.....	710 4.40

Hogs—Receipts since Saturday, 6,304; shipped Saturday, 372. The market was steady to 50 higher. The following are representative sales:

No.	Ave. Price.
60.....	358 83.85
49.....	270 3.80
69.....	261 3.80
73.....	263 3.75
83.....	226 3.72 1/2
78.....	245 3.72 1/2
84.....	241 3.70
113.....	191 3.67 1/2
77.....	177 3.65
20.....	182 3.64 1/2
87.....	178 3.60
87.....	178 3.57 1/2
113.....	162 3.55
4.....	142 3.50
13.....	122 3.45
8.....	190 3.35
47.....	123 3.30
3.....	110 3.25

Sheep—Receipts since Saturday, 1,440; shipped Saturday, 1,320. The market was steady. The following are representative sales:

No.	Ave. Price.
966 f.d.u.c.w.	119 85.00
12 N.cip.	80 84.25

St. Louis Live Stock.

St. Louis, May 8.—Cattle—Receipts, 1,200; market steady; native shipping and export steers, \$4.50@5.50; light and dressed beef and butcher steers, \$4.00@4.80; stockers and feeders, \$3.10@4.70; cows and heifers, \$2.50@4.80; Texas and Indian steers, \$3.50@4.75; cows and heifers, \$2.25@4.40.

Hogs—Receipts, 3,000; market strong to 50 higher; pigs and lights, \$3.80@3.90; packers, \$3.85@3.95; butchers, \$3.95@4.00.

Sheep—Receipts, 2,000; market strong; native muttons, \$4.50@5.00; lambs, \$5.50@5.85; spring lambs, \$6.25@10.00.

Chicago Live Stock.

Chicago, May 8.—Cattle—Receipts, 16,000; market stronger; beefs, \$4.25@5.50; cows and heifers, \$3.00@4.90; Texas steers, \$4.00@4.85; stockers and feeders, \$3.25@5.00.

Hogs—Receipts, 26,000; market active to 50 higher; mixed and butchers, \$3.70@3.95; good heavy, \$3.80@4.00; rough heavy, 3.60@3.75; light, \$3.70@3.92 1/2.

Sheep—Receipts, 19,000; market steady; sheep, \$4.90@5.15; lambs, \$5.00@6.10.

Chicago Grain and Provisions.

	May 8.	Opened	High'st	Lowest	Closing
Wh't—May.....	71	71 1/4	70 3/4	70 3/4	70 3/4
July.....	72 1/2	72 1/2	71 1/2	71 1/2	71 1/2
Sept.....	71 1/2	71 1/2	71 1/2	71 1/2	71 1/2
Corn—May.....	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2
July.....	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2
Sept.....	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2
Oats—May.....	26 1/2	26 1/2	26 1/2	26 1/2	26 1/2
July.....	26 1/2	26 1/2	26 1/2	26 1/2	26 1/2
Sept.....	26 1/2	26 1/2	26 1/2	26 1/2	26 1/2
Pork—May.....	8 7/8	8 7/8	8 7/8	8 7/8	8 7/8
July.....	8 7/8	8 7/8	8 7/8	8 7/8	8 7/8
Sept.....	8 7/8	8 7/8	8 7/8	8 7/8	8 7/8
Lard—May.....	5 20	5 20	5 10	5 10	5 10
July.....	5 30	5 30	5 22 1/2	5 22 1/2	5 22 1/2
Sept.....	4 75	4 75	4 70	4 70	4 70
Ribs—May.....	4 85	4 85	4 82 1/2	4 82 1/2	4 82 1/2

Kansas City Grain.

Kansas City, May 8.—Wheat—Receipts here to-day were 60 cars; a week ago, 87 cars; a year ago, 98 cars. Sales by sample on track: Hard, No. 2, 67 1/4@70c; No. 3 hard, 64@67 1/4c; No. 4 hard, 59@64c; rejected hard, 59c. Soft, No. 2 red, nominally 78@80c; No. 3 red, 72@76c; No. 4 red, 74c; rejected red, 62c. Spring, No. 2, 66c; No. 3 spring, 63 1/4@64 1/4c; rejected spring, 63c.

Corn—Receipts here to-day were 67 cars; a week ago, 101 cars; a year ago, 108 cars. Sales by sample on track: Mixed, No. 3, 32@33 1/4c; No. 3 mixed, 31 1/4@33c; No. 4 mixed, nominally 31c; no grade, nominally 30@30 1/4c. White, No. 2, 33 1/2@34c; No. 3 white, nominally 33 1/4c; No. 4 white, nominally 33 1/4@33c.

Oats—Receipts here to-day were 4 cars; a week ago, 23 cars; a year ago, 23 cars. Sales by sample on track: Mixed, No. 2, nominally 27 1/2c; No. 3 mixed, nominally 27c; No. 4 mixed, nominally 26c. White, No. 2, 20@29 1/4c; No. 3 white, 28 1/4c; No. 4 white, nominally 27 1/4c.

Rye—No. 2, nominally 54c; No. 3, nominally 53c; No. 4, nominally 52c.

Hay—Receipts here to-day were 87 cars; a week ago, 70 cars; a year ago, 54 cars. Quotations are: Choice prairie, \$7.75@8.25; No. 1, \$7.00@7.50. Timothy, choice, \$9.00@9.50. Clover, pure, \$6.75@7.50. Alfalfa, \$7.00@8.00.

Chicago Cash Grain.

Chicago, May 8.—Wheat—Cash, No. 2 red, 74@76c; No. 3 red, 71 1/4@74c; No. 2 hard winter, 68c; No. 3 hard winter, 66@68c; No. 1 northern spring, 71 1/4@72 1/4c; No. 2 northern spring, 71@72 1/4c; No. 3 northern spring, 67@71c.

Corn—Cash, No. 2, 33@33 1/4c; No. 3, 32c. Oats—Cash, No. 2, 26 1/2@27c; No. 3, 26 1/2c.

St. Louis Cash Grain.

St. Louis, May 8.—Wheat—Cash, No. 2 red, elevator, 75c; track, 77@77 1/4c; No. 2 hard, 68c. Corn—Cash, No. 2, 33 1/2c; track, 33 1/2@34c.

Oats—Cash, No. 2, 28c; track, 28 1/4c; No. 2 white, 30 1/4@31c.

Kansas City Produce.

Kansas City, May 8.—Eggs—Strictly fresh, 10 1/2c per doz. Butter—Extra fancy separator, 15c; firsts, 14c; seconds, 12c; dairy fancy, 13c; country roll, 11@12c; store packed, 10@11c; packing stool, 9@10c.

Poultry—Hens, 8c; spring, 10c; old roosters, 15c each; young roosters, 20c; ducks, 7c; geese, 5c; turkeys, hens, 8c; young toms, 7c; old toms, 7c; pigeons, \$1.00 per doz.

Vegetables—Navy beans, \$1.35 per bu. Lima beans, 4 1/2c per lb. Onions, red globe, 50@75c per bu.; white globe, 50@75c per bu. Beets, northern, \$3.00 per bbl. Turnips, home grown, 15@25c per bu. Lettuce, home grown, 80c@1.00 per bu.

Pieplant, 10c per doz. bunches. Parsnips, 50@60c per bu. Spinach, home grown, 60@75c per bu.

Potatoes—Home grown, 60@65c per bu.

"Weaver Grace."
T. F. B. SOTHAM, Proprietor.
EDW. J. TAYLOR, Director.

W. H. SOTHAM, 1839.
T. F. B. SOTHAM, 1899.
CHILLICOTHE, MO.
"The Home of the Correctors."

Breeder, Commissioner, Exporter and Importer

HEREFORD CATTLE.

We feel our obligation to the entire Hereford fraternity for appreciation expressed March 1 for our work and herd which encourages and enables us to expend greater effort in behalf of the peerless Hereford. We are not pricing Weavergrace-bred Herefords, though we will try to meet the views of customers who cannot attend our annual auction, when they make acceptable offers. No Corrector females for sale at any price for two years.

COMMISSIONS.

Pure-bred Herefords. So many orders constantly being placed with us to purchase Herefords, we feel it would be wrong to have our own stock on price. Farmers and ranchmen requiring bulls will find it to their interest to entrust their orders to us. We give the benefit of our experience and will save buyers ten times what we charge in fees. We make a specialty of foundation stock for herds. Fees \$5 per head and railway fare.

Grade Herefords. No grade bulls handled on any terms. Grade Hereford steers and heifers bought on commission. Fees, \$1 per head and railway fare. Steers that can top the market our special pride. We will not touch inferior stock.

Buying orders wanted for the 8,000 top steer calves of America for delivery at Kansas City, October 25-28, during the Hereford show.

No Commissions Accepted From Sellers.

The buyer pays us. Sellers will confer a favor by listing saleable stock with us. We desire to locate all unsold Herefords and this does not prevent the seller from selling elsewhere.

Order blanks and blanks for listing sale stock. Colorotype of Corrector (16x22) suitable for framing. New General Weavergrace Catalogue and Star List (June 1). Hereford tract giving history and characteristics of the breed. Address

T. B. F. SOUTHAM, Chillicothe, Mo.

NO DRUGS. NO MEDICINE.

Cures every known disease, without Medicine or Knife. Hundreds willingly add their testimony

Prof. Axtell heals all manner of diseases, and teaches this art to others.

He grants to all men the power he claims for himself. The reason why he can heal without medicine is because he knows how; he not only cures all manner of diseases in his office but HE CURES AT A DISTANCE WITH EQUAL EFFICACY. Circulars of many prominent people—who sign their names and recommend his treatment—mailed on application.

Prof. Axtell is endorsed by the leading business men of this city. Address all communications to

PROF. S. W. AXTELL, 200 W. 3d St., Sedalia, Mo.

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.

VARICOCELE cured without knife, pain or danger. Illustrated booklet free.

Call or write. DR. H. J. WHITTIER, 10 W. 9th St., Kansas City, Mo.

ON AGAIN—APRIL 30TH.

THE "KATY" FLYER.

THE BEST WOOL HOUSE

for you or for anybody who has wool to consign, is the one which has the best facilities for handling wool. The best, largest and lightest lofts; the best light for properly displaying and showing wool; the largest stocks for attracting the biggest buyers and the best reputation for business ability and honesty. We are

The Largest Wool House in the West.

We handle 15,000,000 lbs. of wool annually. We always have enough wool of any grade to attract the manufacturer.

WE MAKE LIBERAL ADVANCES ON CONSIGNMENTS

and charge at the low rate of 5 per cent. per annum for the use of the money. We supply free sacks and sewing twine to all parties who ship to us. We mail our Circular Letter and Wool Quotations to all who ask for it. Tells all about the prices of wool and the market conditions. Address,

SILBERMAN BROTHERS, 123, 124, 126, 128 Michigan Street, Chicago, Ills.

WOOL WANTED!

500,000 Pounds of Wool,

For which we will pay the highest market price in cash. Send us sample, giving number of fleeces. Place your name on sample, and on receipt of same we will quote you prices. For small lots you can send sample by mail. Address Oakland, Kans.; or you may ship direct to us and we will allow you all it is worth. For large clips send three or four fleeces by freight or express. We will furnish sacks or wool twine if desired. Address TOPEKA WOOLEN MILL, Topeka, Kans.

THE AMERICAN GALLOWAY BREEDERS' ASSOCIATION

Has just issued an interesting pamphlet containing some well-written articles, which will be of interest to every stockman. They are for free distribution and you can get a copy by writing to

FRANK B. HEARNE, Secretary, Independence, Mo.

Higgins' Hope Herd Registered Poland-China Hogs.

I am now offering a Choice Lot of Gilts and Sows bred to my Herd Boar, Eberley's Model 20854. If you are looking for the right kind, drop me a line and get my list before buying.

J. W. Higgins, Jr., Hope, Kans.

VALLEY GROVE SHORT-HORNS.

THE SCOTCH BRED BULLS

Lord Mayor 112727 and Laird of Linwood 127149

HEAD OF THE HERD.

LORD MAJOR was by the Baron Victor bull Baron Lavender 24, 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 bred 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.

DON'T BE A—MIGHT HAVE BEEN,

But buy some Good Young Breeding Stock now—while prices are reasonable and opportunities great.

For 25 Years the Leading Western Breeder of Percheron and Coach Horses.

I have now the finest collection of young Home-Bred Stallions and Mares ever owned in the State. Correspondence solicited. Visitors welcome

HENRY AVERY, WAKEFIELD, KANSAS.

Nelson & Doyle

Room 220, Stock Yards Exchange Building, KANSAS CITY, MO.,

Have for sale at all times, singly or in car lots... Registered Herefords and Short-horns.

Stock on Sale at Stock Yards Sale Barn, Also at Farm Adjoining City.

N. B.—We have secured the services of John Gosling, well and favorably known as a practical and expert judge of beef cattle, who will in the future assist us in this branch of our business.

THE KANSAS CITY STOCK YARDS

Are the Finest Equipped, Most Modern in Construction and afford the Best Facilities for the handling of Live Stock of any in the World. The Kansas City Market, owing to its Central Location, its Immense Railroad System and its Financial Resources, offers greater advantages than any other. It is the Largest Stocker and Feeder Market in the World, while buyers for the great packing houses and export trade make Kansas City a market second to no other for every class of live stock.

	Cattle and Calves.	Hogs.	Sheep.
Official Receipts for 1898	1,846,233	3,672,909	980,303
Sold 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

The Poultry Yard

Conducted by C. B. TUTTLE, Excelstor Farm, Topeka, Kans., to whom all inquiries should be addressed. We cordially invite our readers to consult us on any point pertaining to the poultry industry on which they may desire fuller information, especially as to the diseases and their symptoms which poultry is heir to, and thus assist in making this one of the most interesting and beneficial departments of the KANSAS FARMER. All replies through this column are free. In writing be as explicit as possible, and if in regard to diseases, give symptoms in full, treatment, if any, to date, manner of caring for the flock, etc. Full name and postoffice address must be given in each instance to secure recognition.

JUDGMENT IN MARKETING POULTRY.

P. H. Jacobs, the veteran poultry man, and editor of The Poultry Keeper, contributes the following article to American Gardening, which Kansas Farmer readers will do well to read and heed, as, coming from such a source, it is eminently authoritative. He says:

"Farmers and poultry men lost a large share of their profits by lack of judgment in marketing. One of the causes of discontent is what the commission merchant reports as 'shrinkage,' which is that if one ships 100 pounds of live poultry to market the weight will shrink to 95 (or less) by the time the coop reaches its destination. If the coop contains chicks a loss of 4 or 5 per cent as shrinkage, when prices are high, amounts to \$2 or \$3, and it has caused many bones of contention to exist between the consignor and consignee. It is best to ship all fowls and chicks dressed, if it can be done, as the picking seldom costs more than the average shrinkage of live birds, which fall off in weight, owing to lack of food and water, though it may be partially avoided by shipping the fowls so as to have them arrive in the best condition. Over-crowding in the shipping coops causes more loss than anything else and even when the shipper is very careful he is compelled to rely upon the honesty of the merchant.

"Never ship so as to have the birds arrive in market on Saturdays, in order to prevent them from being on hand during Sundays. As the birds sent to market should be dry picked, if killed, and not scalded, it entails quite an item of labor and expense to prepare the carcasses so as to have them free of pin-feathers and make an attractive display. Unless practice enables the operator to perform the work quickly, the disgust of such jobs will remain. But it pays to dress the fowls, for when the price of live fowls is 20 cents per pound the dressed fowls usually bring about 25 cents, or 5 cents per pound more. This is a small difference, but when a fowl weighs three or four pounds it adds 15 or 20 cents to the price. Expert pickers will dress a fowl for 5 cents, but, admitting that it may cost 10 cents per fowl, it leaves a profit. Looking at it in another light, we may add that the item of picking becomes a large one, if there are a great many fowls, and it may be saved where there are a number of persons in the family.

SELECTING THE BEST HENS.

"There are always a few good hens in every flock, and when it is noticed that a particular hen during the season seems to excel the others in laying, do not sell her because she is moulting, or has stopped work for a while, but keep her for another year. You may not be able to breed as good pullets from her as she is herself, because something depends on the kind of rooster she may be mated with, but, leaving the value of her offspring out altogether, it is always safe to retain a hen that has shown herself profitable. Hens often last four or five years, and it is time to dispose of the good hen only when she begins to fail.

INJURIES FROM ROOSTS.

"When the roosts are high the fowls will crowd together, each endeavoring to get as high as possible, instinct prompting them to do so in order to avoid danger. If they have a long sweep to fly down they are seldom injured, but where they are compelled to jump down almost under the roost the result is a bruise, which becomes hard and callous, being known as bumblefoot. It is not easily cured, but frequent application of crude petroleum is the best remedy, though sometimes the knife must be used. A fowl that has once had bumblefoot is worth but very little afterward, as it will become lame again at times. Make the roosts low, and all of the same level, which is the surest preventive.

THE DROPPINGS IN SPRING.

"When spring opens it is not advisable to keep the droppings separate from other manures, as the warm weather is not favorable, but mix them with the barnyard manure. Winter is the time to save the droppings, as then they will be more valuable, coming from matured stock. The manure from growing animals or birds is not as valuable as that from those which are matured, and as labor must be bestowed

on the proper preservation of droppings now they can be made more serviceable in the general heap or by immediate use."

Disinfecting.

As the warm weather comes the tendency is to throw open the openings of the poultry department and let in the fresh air to disperse the impure air of the buildings which has accumulated during the time they have been kept closed. It is all right to let the pure air in and to rarify the impure air of the interior of the buildings, but this may not be all that is necessary. The warm weather may reveal odors which did not seem apparent when the weather was colder, and some of them may be intensified as the days become warmer.

The way to best get rid of all bad odors and impure air of the poultry department is to disinfect them, and no better substance can be employed in this than a generous supply of whitewash. It is not only the best way but it is the cheapest. To make it do its best it should be used without stint on the inside and on the ceiling, on the nest boxes and on the roosts, and the floor may have some of it without doing any injury to it. What would be better for the floor will be air-slacked lime.

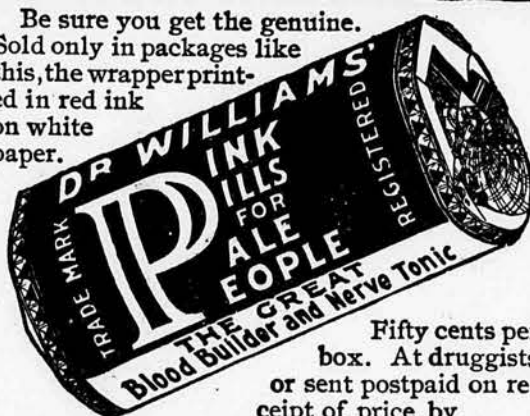
The roosting place and the yards may be sprinkled generously with a solution



Ladies Tell Each Other

of the comfort and security afforded to them by Dr. Williams' Pink Pills for Pale People. Headaches and backaches that come expectedly or unexpectedly are charmed away and the rich, red blood shows itself in the pink cheeks and bright eyes of those who use these pills. They are not a purgative; they give strength instead of taking it away. Wise mothers give them to growing girls.

Be sure you get the genuine. Sold only in packages like this, the wrapper printed in red ink on white paper.



Fifty cents per box. At druggists or sent postpaid on receipt of price by

THE DR. WILLIAMS MEDICINE CO., Schenectady, N.Y.

Mrs. Amanda Robinson, wife of Wm. Robinson, farmer and stockman, near Howesville, Clay County, Ind., has for several years been in declining health and despondent. For three months she was so much enfeebled as to be not only unable to attend to her domestic affairs but too sick and feeble to be up and about. To-day she is in good health and able to attend her household duties.

She relates her experience thus: "I was afflicted with troubles incident to my sex and was in a very delicate state of health. I lost my appetite, dwindled away in flesh, and was greatly depressed. After taking various remedies without being benefited, I was induced to try Dr. Williams' Pink Pills for Pale People.

"Early in the summer of 1897 I procured five boxes of them and began taking the pills as directed. Before consuming the second box I could very perceptibly feel their beneficial effects. My appetite returned, complexion improved, and I had renewed strength. After taking the five boxes I felt better in every way; I was able to do my usual daily work and I stopped taking the pills.—From the Democrat, Brazil, Ind.

INCUBATORS

and

BROODERS

at special low prices until June 1.



Free Catalogue.

Address...

Sure Hatch Incu-

bator Co.,

Clay Center, Neb.

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. ETEL CO., QUINCY, ILL.

"A MOLE on the Neck, Money by the Peck."
but there is no money in having a mole in your garden or on your lawn. Don't have them. Catch them with the
"OUT-O-SIGHT" Mole Trap.
Every trap has our guarantee to catch. Sample trap 85c. by mail or, have your dealer order for you.
ANIMAL TRAP CO.
13 Meek St., Abingdon, Ill.



HAVE YOU HEARD

a man ask for a 'better fence than the Page'? Universal Satisfaction is a good recommendation. Have you tested it?
PAGE WOVEN WIRE FENCE CO., ADRIAN, MICH.

BINDER TWINE

MONTGOMERY WARD & CO., CHICAGO

CATALOGUE SENT FREE
MERCHANDISE FOR THE HOME FARM AND FIELD
GALVANIZED WIRE
100-POUND-ROLLS-SHORT-LENGTHS.
WRITE FOR PRICES.
OUR PRICES ARE AS LOW AS ANY GAUGE. ANY GAUGE. FROM 8 TO 19.
CHICAGO HOUSEWRECKING CO. CHICAGO

composed of copperas. This drug is very cheap and it dissolves readily in water. A very good way to apply this is by the use of a sprinkling can. It will kill a bad odor at once, and is also fatal to disease germs. Do not be satisfied with plenty of pure air, but disinfect the premises. Pure air is good, but the bad air wants to be made good or made harmless.—Homestead.

Keeping Up the Quality.

These very sensible remarks from the Live Stock Indicator, should be carefully digested by all who are addicted to these reprehensible practices. Who is guilty?

"It is a very difficult matter to keep up the quality of the poultry when the policy is pursued of selling or killing and eating the best fowls and breeding from what is left. This is a sure way of degeneracy and yet it is one found on many farms. The desire grows for fried chicken as the day approaches and that desire is sometimes so intense that it calls for the largest and best chicks to fill the bill. The lot is looked over from time to time as the picnics and celebrations go by, and finally when the basket meeting comes along the last of the best chicks are fried and taken to the basket meeting. This is kept up in this manner until the time comes for selling what is not desired to be kept over, and the hen house is invaded in the night with lantern in hand to get some of the 'best early chickens' to take to town to sell. A coopful of the best are selected and sold. The culls are left on the farm and constitute the breeding stock for another year. This is practiced on some farms year in and year out, and the grading which is done is downward instead of upward.

"It is very plain to be seen what the ultimate result of such a practice must be. It is also quite apparent what the result would be if the number of breeding birds should be selected first of the best of the flock and the remaining ones sold for what they will bring. The best should be kept and bred, and if this practice be followed for years there will be a sure improvement in the quality. Just as sure as like begets like, just so sure will this be the result. If you are at the head of the procession that is going the wrong way, fall out by the wayside."

Poultry Notes.

It is said that calico print works consume 40,000,000 dozens of eggs a year and that wine clarifiers use about 10,000,000 dozens. Photographers and others also use large quantities and the wants of the commercial arts are said to be increasing rapidly. We do not know whether any specifications are made as to age or antecedents.

Chickens need no food for the first twenty-four hours. Then the best foods are hard-boiled eggs, and bread soaked lightly in milk; if fed too soft it will cause bowel trouble. For drink, use fresh milk in very small shallow dishes. After two or three days, dry oat meal and dry bread crumbs may be fed, and shortly after, cracked wheat and cracked corn.

There are three forcing feeds—meat, ordinarily in the form of ground green-bone, with a good deal of the meat on the bone, milk, and fish. Milk is expensive, and fish can not easily be obtained, except near the sea-coast, and too much raw fish will give an unpleasant taste to the egg. It is said that boiled fish will not do so. Ground green-bone is, therefore, the forcing food chiefly depended on. Sufficient quantity is a pound a week for every three hens.

At the Utah station, where some poultry experiments have been under way, a pen of Light Brahmas made a good record during the time they were in the business. During ten months they made a better egg record than cross-breeds during twelve months. The cross-breeds were broody longer than the pure-breed Brahmas, and this probably accounts for the smaller egg yield. The eggs produced by the Light Brahma pullets weighed $1\frac{1}{2}$ per cent more than those produced by the Leghorn pullets.

The other day while a train on the Rock Island was speeding toward Denver, the side door of a car was forced open in some way and out flew a whole car-load of bronze turkeys bled to an ostrich farm in California. The prairie for miles between Deer Trail and Byers was dotted with escaped turkeys and only a few of them were captured. It will be interesting to know how these birds survive on the great plains, and if they should revert to their wild state again, which is quite possible, the sheep-herders and cowboys will have good fowling for years to come.

The contraction and dilation of the pupil of the eye is one of the most wonderful operations of nature. It is effected, automatically and unconsciously, by a series of muscles, which contract or expand the opening in the center of the iris.



It's easy to haul a big load up a big hill if you grease the wagon wheels with

MICA AXLE GREASE

Get a box and learn why it's the best grease ever put on an axle. Sold everywhere. Made by **STANDARD OIL CO.**

DON'T SET HENS The Same Old Way.

THE NAT'L HEN INCUBATOR beats the old plan 3 to 1. 100 Egg Hatcher \$2. Cheap in price but a mighty money maker. Send for cat's telling how to get one free. Agents wanted.

Natural Hen Incubator Co., B33, Columbus Neb

\$2.75 ON THIS HARNESS GUARANTEED \$19.75. This buggy is the amount saved by buying direct from us. First-class make.

Send for our Catalogue, it's FREE, will post you on prices and save you money.

CONSUMERS CARRIAGE & MFG. CO.
269-271 S. Dearborn St., CHICAGO, ILL.
Special Reference: The Chicago National Bank.

We Are Introducing OSCOOD SCALES

in every locality where we have no agent, at low prices. Don't wait.

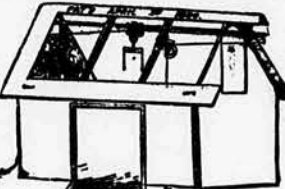
Osgood Scale Co., 53 Central St., Binghamton, N.Y.



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.

RONEY HAY FORK RETURNER.



It will return FORK, CARRIER AND ROPES back to starting point, saving all the hard work of pulling them back by trip rope.

Terms and prices on application.

Agents wanted

RONEY RETURNER CO., Box U., Independence, Ia.

YOUR LIFE

and that of your family may depend upon the quality of your buggy and harness. When you buy a buggy, buy one that won't break. This buggy is **Guaranteed for 5 Years.**

Every stick in the gear is hickory, tough as whale bone; every forging, best Norway iron. Handsome as it is strong. Trimming and painting, highest art known to buggy building. An agent or dealer would ask you \$2 for one not as good. **OUR PRICE, \$44.10.**

WE HAVE NO AGENTS but sell direct to you at lowest prices. Shipped subject to your approval without any money with order. Our line comprises: Buggies, Road Wagons, Phaetons, Surries, Runabouts, Stanhopes, Spring Wagons, Road, Speeding and Breakable Carts, Farm Wagons, all kinds of Harness and Saddles. We issue the largest vehicle catalogue ever printed. Write us for it now. **IT'S FREE.**

Marvin Smith Co., 55-57-59 N. Jefferson St., N35. Chicago

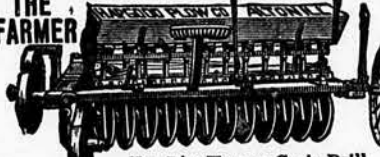
The greatest amount of power procurable from the least amount of fuel, with the least attention to details, result from using the

RUMELY ENGINES

This is true in each case, whether you are threshing, drilling wells, running a sawmill, grinding feed, cutting fodder or ensilage or anything else. They are Semi-Portable, Forcible and Traction, either simple or compound. They range from 8 to 20 horse-power. The traction engines are remarkable for large traction power, easy steaming, fast travel, great strength, simplicity and durability. Boilers made of plate of 60,000 lbs. tensile strength. Fire boxes surrounded with water. We make also Threshers, Horse Powers and Sawmills. Illustrated catalogue sent free—fully describes all.

M. RUMELY CO., La Porte, Ind.

WE SELL DIRECT TO THE FARMER AT ONE-HALF DEALERS' PRICES.



New Disc Harrow, Grain Drill and Broadcast Seeder.

Throwing the earth all one way. Revolutionizes the method of seeding, as the twin binder did the harvest. Discs 6 1/2 in. and 9 in. apart. Send for circular.

DEATH TO HIGH PRICES.

16-in. Bulky Plows, \$25. 16-in. S.B. Plows, \$20. Rolling Coulters, Extra \$1.50. 64-T. Lever Harrow, \$7.00. Mowers, \$29.50. Riding Gang Plows, \$45. 12-16 Disc Harrow, \$18. Hay Rakes, \$11.50. Wagons, Buggies, Harness, Sewing Machines, Cane and Old Mill, Hay Tools and 1000 other things at one-half dealers' prices. Catalogue free. Haggood Plow Co., Box 209, Alton, Ill.

HODGES HERCULES MOWER

This is the Best Representative of the Modern Mower,

embracing in its construction everything that is latest and best. It has our new broad faced close meshed concealed gear; direct right angle long stroke pitman; compound spring foot lever for lifting the cutter bar. This acts instantly and easily and does away entirely with the old hand lever. The only hand lever on this machine is used for tilting the cutter bar. Provided with serrated lodger plates—doubles the cutting capacity and the life of the guard. These are but a few of the many superior points of this mower. Above all it is lightest in draft and free from side draft. Made in four sizes, to cut 4 1/2, 5 and 6 feet.

We also manufacture the famous Hodges Headers, Hodges "Laddie" and "Lassie" Hand and Self Dump Rakes, Monarch and Acme Sweep Rakes and Acme Stackers. Don't buy until you get our new illustrated catalogue. Send for it, it's free.

Acme Harvester Co., Pekin, Ill.

PROFIT FOR MAKER ONLY.

We manufacture 170 styles of vehicles and 55 styles of harness and sell them to you direct from our factory at wholesale prices. In fact, we are the largest manufacturers of vehicles and harness in the world selling to the consumer exclusively. When you buy on this plan you pay only the profit of the manufacturer.

No traveling expenses, no losses, no agent's commission and no dealer's profits.

We Have No Agents, preferring to deal with you direct. No matter where you live, we can reach you and save you money. We ship our vehicles and harness anywhere for examination and guarantee safe arrival.

We Manufacture Everything we sell, and we can assure you of good quality from beginning to end: good wood work, good finish, good trimmings, fine style and the largest selection in the land. Large illustrated Catalogue FREE.

Elkhart Carriage & Harness Manfg. Co., Elkhart, Indiana.

HODGES NEW STEEL CHAIN DRIVE HEADER

Is the perfected result of 39 years of continuous header construction. In material, design, working ability, ease of draft, poise and balance this machine is without a peer.

Among leading points of excellence are: the highest and widest wheels commensurate with perfect traction, application of power and easy draft. Lightest, strongest re-inforced steel frame. Power applied by steel drive chain—perfectly adjusted to save lost motion, strong and durable. Adjustable reel—easy to handle. Elevator has wagon rollers—prevents wear and friction and adds to life of spout and barge. Trussed steel tilting lever—strongest and lightest.

THE ONLY PERFECT HEADER MADE.

We also make the Hodges Hercules Mowers, Hodges "Laddie" and "Lassie" Hand and Self Dump Rakes, Monarch and Acme Sweep Rakes and Stackers. Our new catalogue tells all about them. **IT IS FREE.** Write for it before you buy.

ACME HARVESTER COMPANY, PEKIN, ILL.

Don't Pay High Prices TO YOUR DEALER.

You can buy the **Advance Fence**

direct from us at wholesale prices. It's a first-class fence in every way. Write for circulars and prices.

ADVANCE FENCE CO. 4105 Old St., Peoria, Ill.

THE BEST HINGE

For Barn Doors, Any Doors, Gates, Etc., is the **STANLEY CORRUGATED STEEL HINGE.**

The corrugations add 50 per cent in strength, while the hinges cost no more than others. Can't bind on the pin even if it rusts.

Ask your dealer for Stanley Corrugated T Hinges and Strap Hinges; insist upon getting them and take no others. Send for circulars, etc. FREE.

THE STANLEY WORKS. Box 20, NEW BRITAIN, CONN.

STEEL PICKET LAWN FENCE,

Field and Hog Fence with or without bottom cable barbed. M. M. S. Poultry Fencing. Lawn and Farm Steel Gates and Posts.

UNION FENCE CO. DeKalb, Ill.

OUR 60c NERVE AND BRAIN PILLS. Guaranteed the highest Grade on the market. Six boxes positively guaranteed to cure any disease for which they are intended. **THIS WILL CURE:** You if you feel generally miserable or suffer with a thousand and one indescribable bad feelings, both mental and physical, among them low spirits, nervousness, weariness, listlessness, weakness, dizziness, feeling of fullness, like bloating after a meal, or sense of goneness or emptiness of stomach in morning, flesh soft and lacking in firmness, headache, blurring of eyesight, specks floating before the eyes, nervous irritability, poor memory, chilliness, alternating with hot flushes, lassitude, throbbing, gurgling, or rumbling sensations in bowels, with heat or nipping pains occasionally, palpitation of the heart, short breath on exertion, slow circulation of blood, cold feet, pain and oppression in chest and back, pain around the joints, a constant feeling of dread as if something awful was going to happen. If you have any of these symptoms **DR. CHASE'S NERVE AND BRAIN PILLS** will cure you. No matter what the cause may be or how severe your trouble is. These pills have a remarkable effect on both old and young. They cannot be equalled by any other medicine as a cure for impotence, spermatorrhoea, night sweats, emissions, varicocele (or swollen veins), weakness of both brain and body, arising from excesses and abuses of any kind. It will tone up the whole nervous system, and full and explicit directions, are enclosed with every box. All orders and inquiries concerning these pills will be treated confidentially, and all shipments made in plain sealed packages. **ONLY \$3.00 FOR SIX BOXES.** Enough to cure any case; no matter how long standing, whether young or old no matter from what cause. Send us \$3.00 and we will send you six boxes by return mail, postpaid, in plain sealed package, with full instructions, full directions. No delay, d15141. Price per box, 60c; 6 boxes (an amount to cure anyone), \$3.00. If you need these pills, don't delay, this is the first time they have been sold anywhere at anything like our price.

LARGE DRUG CATALOGUE FREE. Size 6 1/2 x 12 1/2. Be sure and send for it. We can save you money on Drugs. All orders filled by registered Pharmacists. There is no line of goods you pay so much for as Drugs when you buy them at retail.—**T. M. Robert's Supply House, Minneapolis, Minn.**

SISAL ROPE

BRAND NEW

3/4 inch diameter. Comes in bales of 300 lbs. each, and in lengths 20 to 40 feet. Price per Pound 4c. We buy our goods at Sheriffs' and Receivers' sales. Write for free catalogue of Hardware, Plumbing, Roofing, Wire, Dry Goods, Clothing, etc., etc. **"OUR PRICES ARE ONE-HALF OF OTHERS."**

Chicago House Wrecking Co., W. 35th & Iron Sts. CHICAGO.

CANCER CURED

WITH SOOTHING, BALMY OILS.

Cancer, Tumor, Catarrh, Piles, Fistula, Ulcers, Eczema and all Skin and Womb Diseases. Write for Illustrated Book. Sent free. Address **DR. BYE, Broadway, 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.

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

SEEDS

SUCCESS WITH ALFALFA

Is certain if you sow our Alfalfa Seed. We also sell choice qualities of Cane and Millet Seeds, Kamir and Jerusalem Corn, etc. All crop '98. Our book, "How to Sow Alfalfa," free. **MEBETH & KINNISON**, Garden City, Kas.

SWINE.

POLAND-CHINA SWINE.

Chief I Know and Hadley Jr. strains.

J. H. TAYLOR, Rhinehart, Kans.

Wamego Herd Imp. Chester Whites and Poland-Chinas.
Mated for best results. Also Barred Plymouth Rock chickens and eggs for sale. Correspondence or inspection invited. Mention FARMER. **C. J. HUGGINS**, Proprietor, Wamego, Kas.

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.

SUNNYSIDE HERD POLAND-CHINAS

BRED FROM LARGE-BONED, BROAD-BACKED, LOW-DOWN, MATURED STOCK.
Sanders, Short Stop, Corwin, Black Bess, Black U. S. and Tecumseh Blood.

Choice Young Stock for sale.
M. L. SOMERS, Altoona, Kans.

M. C. VANSSELL, Muscotah, Atchison, County, Kansas, Breeder of Pure-bred Poland-China Swine and Short-horn Cattle of the most desirable strains.
For Ready Sale Thirty Poland-China Bred Sows

One and two years old, bred for fall farrow; very choice; price low if ordered soon; must make room for 170 pigs now on hand. Come and see or write.

THE WILKES QUALITY HERD OF POLAND-CHINA SWINE.

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

F. L. and C. R. OARD, Proprietors,
HEDGEWOOD HERD OF POLAND-CHINAS VASSAR, KANSAS.

Popular Blood. Individual Merit.
Brood sows of the most popular strains and individual merit. The best that money can buy and experience can breed. Farm one and one-half miles south and half mile east of Vassar, Kas., on Missouri Pacific railroad.

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.

POULTRY.

FRENCH POULTRY YARDS—FLORENCE, KANS.
Houdans. \$1 per sitting of 13.
E. FIRMIN, Proprietor.

EGGS FOR HATCHING—From high-scoring breeding yards of B. P. Rocks, W. P. Rocks and E. C. Brown Leghorns at low prices. A few good cockerels for sale. P. C. Bowen & Son, Cherryvale, Kans.

BLACK LANGSHANS—PURE AND FINE.
Eggs, \$1.50 for 15, or \$2 for 26.
J. C. WITHAM, Cherryvale, Kans.

D. A. WISE, BREEDER OF BLACK LANGSHANS AND PEKIN DUCKS—
TOPEKA, KANSAS.
Eggs in season, \$1.50 per sitting. Residence and yards south of Highland Park.

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 Howes and others.
A. H. DUFF, Larned, Kans.

POULTRY.

Silver Wyandottes.
We are selling eggs from our prize-winners scored by Shellabarger & Savage, \$2 for 15; \$3.50 for 30. White P. Rock eggs, \$1 for 15.
R. F. MEEK, Hutchinson, Kans.

MAMMOTH BRONZE TURKEYS A ...SPECIALTY...
Eggs for sale at 25 cents each.
O. H. CLARK, Delphos, Kans.

Partridge Cochins and White Leghorns
at Hutchinson show took sweepstakes in Asiatic and Mediterranean classes (silver cup and silver teapot); Shellabarger judge. Eggs, after May 1, \$1 per 15. Write for descriptive circular. Address, J. W. Cook or Carrie A. Cook, Hutchinson, Kans.

BARRED PLYMOUTH ROCKS.
E. R. Lock's Barred Plymouth Rocks are still in it. Twice in succession my birds have won all of the prizes where shown. Write me for prices on stock. Eggs \$1 to \$2 per 15. Catalogue free for writing.
E. R. LOCK, Hutchinson, Kans.

GEO. W. COOPER, BREEDER OF THE LORDLY
Black Langshan, 323 Lake street, Topeka, Kans. I won at our last State poultry show, January 9-14, with 107 Langshan competition, first on cock, first on cockerel, first on pen, tied first for pullet, tied second for hen, third on pullet, third on hen, and had the highest-scoring pen of chickens in show room. I have without doubt the best Langshans in the West. Eggs \$2 per sitting. Write me for prices on stock. Correspondence a pleasure. (Mention Kansas Farmer when you write.)

BARRED PLYMOUTH ROCKS
From Prize-Winning Strains.

Eggs now for sale; sitting of 15, \$2. For further information address
J. P. JOHNSON, Junction City, Kans.

H. T. FORBES L. C. FORBES.
....Breeders of....

THOROUGHbred BUFF COCHINS

Eggs and stock from prize-winners at Kansas State Poultry Show, January, 1899. Write for description and prices. Address
H. T. & L. C. FORBES, Topeka, Kans.

WHITE WYANDOTTES EXCLUSIVELY.
Eggs, \$1.00 Per Fifteen.

Also, free with each sitting, a recipe for making a cheap Lice Killer Paint. Send for circular.
P. O. Box 60. White 'Dotte Poultry Farm, Mrs. V. Odell, Prop. Wetmore, Kans.

EGGS FOR HATCHING

Royal Blue Barred Plymouth Rocks, White Plymouth Rocks, Partridge Cochins, Buff Cochins, White Cochins, Light Brahmas, Black Langshans, Silver Wyandottes, White Wyandottes, Brown Leghorns, White Leghorns, Silver Spangled Hamburgs, Black Javas, White Guineas, Pearl Guineas and Pekin Ducks. Pairs, trios and breeding pens. Prices low, considering quality. Circular free.
A. H. DUFF, Larned, Kans.

EGGS FOR HATCHING. FOURTEEN YARDS.

Buff Cochins, B. P. Rocks, W. P. Rocks, Black Langshans, White Wyandottes, Rose and Single-Comb Brown Leghorns, Imperial Pekin Ducks and Mammouth Bronze Turkeys. Eggs \$2 to \$5 per sitting. Circular giving matings and prices for 2-cent stamp. Guide to Poultry Culture and Catalogue of Poultry Supplies, 10 cents.

EXCELSIOR FARM, C. B. Tuttle, Prop., Topeka, Kansas.

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.**

ROCKS WHITE and BLUE BARRED

Five Pens—Three Barred, Two White.
One pen headed by E. B. Thompson Ringlet cockerel; one by a grand Lash cockerel; one by a bird of the Conger strain. My White Rocks are from Madison Square Garden winners—large, pure white birds. Eggs, \$1 for 13, \$2 for 30, \$3 for 50, \$5 per 100. White Guinea eggs same. Write for descriptive circular and prices. Printed recipe for making and using Liquid Lice Killer, 25 cents. Address
T. E. LEFTWICH, Larned, Kans.

When writing our advertisers please mention Kansas Farmer.

TWO NEW MILLETS FROM AKOTA.

NEW SIBERIAN AND DAKOTA HOG MILLET.
Price per pound by mail, postpaid, 15 cents; price per peck at depot or express office. Lawrence, 50 cents; price per bushel at depot or express office, Lawrence, \$1.25. For description send to
KANSAS SEED HOUSE, F. Barteldes & Co., Lawrence, Kans.
Our New Catalogue for 1899 mailed free on application.

Use
Kansas Lump Rock Salt
For Stock.

Purest, Healthiest, Best. Highest Awards and Medals for Purity, World's Exposition, Chicago, 1893, Trans-Mississippi Exposition, Omaha, 1899.

WESTERN ROCK SALT CO., ST. LOUIS, MO.
Sole Agents for Bevis Rock Salt Co., and Royal Salt Co.

GROUND ROCK SALT FOR STOCK.

Use Rock Salt for Hides, Pickles, Meats, Ice Cream, Ice Making, Fertilizing, &c., &c.

Mines and Works, Lyons and Kanopolis, Kan.

PASTEUR VACCINE

IS THE ORIGINAL AND SUCCESSFUL PREVENTIVE REMEDY FOR

BLACK • LEG.

Write for particulars, official endorsements of our Vaccine and testimonials from thousands of stockmen who have used Pasteur Vaccine upon nearly one million head in the United States during the last three and a half years and prevented losses from Black Leg. "Single" Vaccine and "Double" Vaccine, as preferred.

PASTEUR VACCINE CO., 52 Fifth Ave., CHICAGO.

THE COAL BLACK STALLION Orphan Knight 18696.



Record: 2:19 1/4 Pacing, 2:26 3/4 Trotting.

The handsomest Stallion in Kansas. Winner of fourteen ribbons in the show ring.

Fastest Stallion in Kansas, with a record at both trotting and pacing.

Fee for this year only

◆\$10.00.◆

C. H. SAMPSON, Owner, 415 Jackson street.
CHAS. W. TANNER, Mgr., Fair Grounds, TOPEKA, - - - KANSAS.

SUNNY SLOPE HEREFORDS

ONE HUNDRED HEAD FOR SALE,

CONSISTING OF

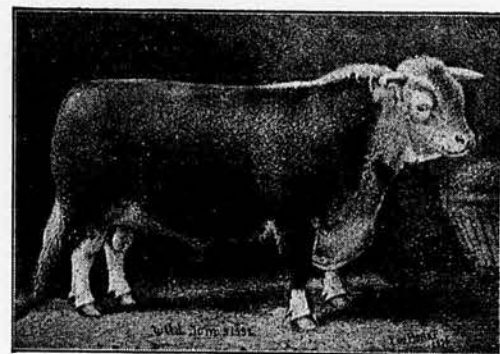
32 BULLS, FROM 12 TO 18 MONTHS OLD,

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.**

FIFTH ANNUAL PUBLIC SALE

Scotch and Scotch-Topped Registered Shorthorn Cattle

Chillicothe Fair Grounds, Chillicothe, Livingston County, Mo., Wednesday, May 24, 1899.

45 COWS, BULLS AND HEIFERS,

ANY FURTHER INFORMATION PROMPTLY GIVEN.
Col. Judy, Tallula, Ill., and Col. Sparks, Marshall, Mo., Auctioneers.

Sired mostly by Red Cup 121750 and Imp. Chief Steward 96703, both pure Cruickshank bulls that I have used on my herd with great success. The bulls and most of the younger females are sons of Red Cup and out of daughters of Imp. Chief Steward. The older females belong to such standard families as Young Mary, Rose of Sharon, Victoria, Lady Elizabeth, Beauty, Young Phyllis, Fashion and Princess. Cows with calf at foot and again bred. No shells or doubtful breeders. Everything guaranteed as represented.

For Catalogues address, **JOHN MORRIS, Chillicothe, Missouri.**