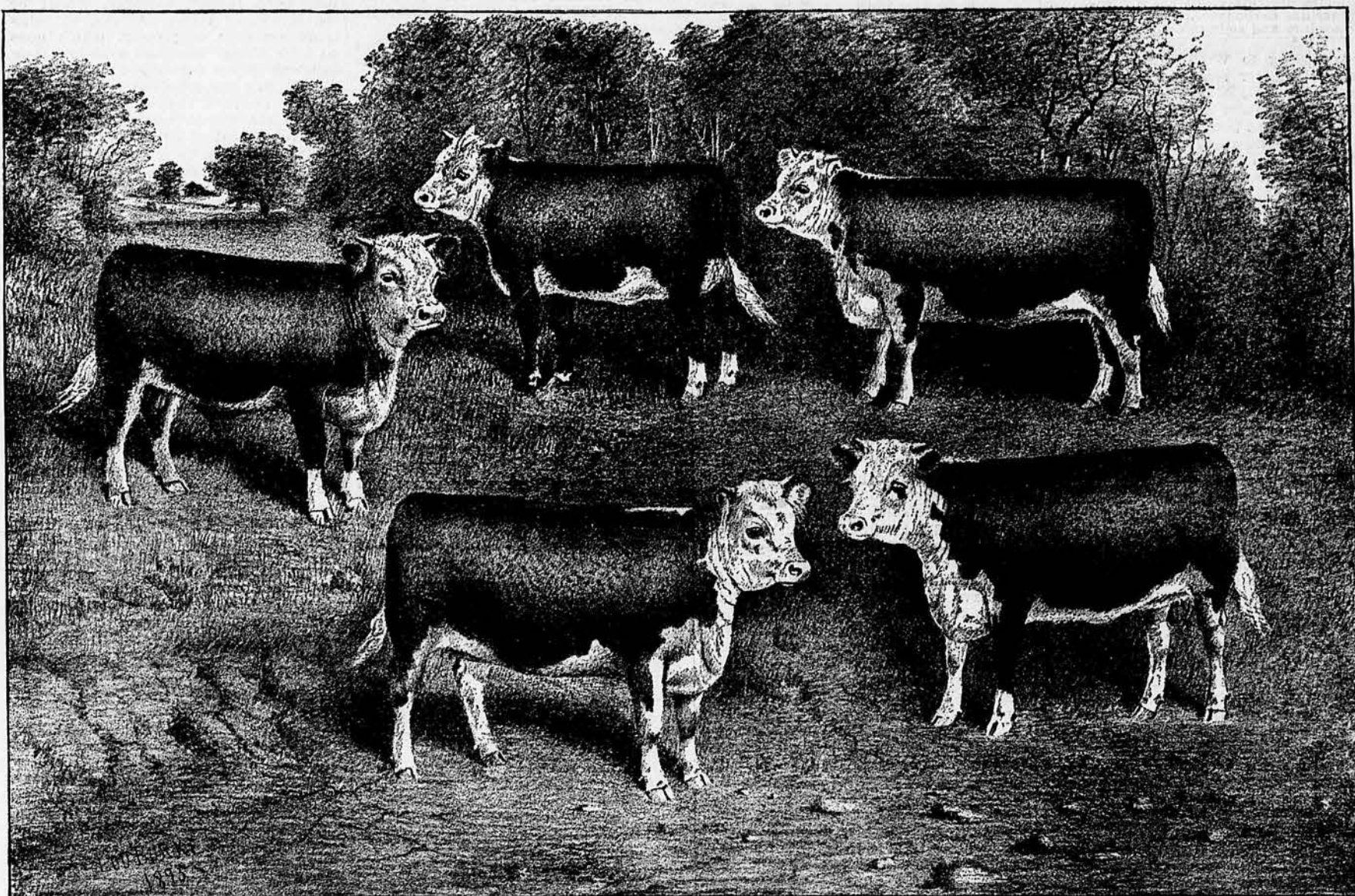


# KANSAS FARMER

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TOPEKA, KANSAS, WEDNESDAY, OCTOBER 2, 1895.

SIXTEEN TO TWENTY  
PAGES—\$1.00 A YEAR.



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## Agricultural Matters.

### ALFALFA, OR LUERN.

(*Medicago sativa* L.)

[From Farmers' Bulletin No. 31, United States Department of Agriculture.]

#### CHEMICAL COMPOSITION.

The chemical composition of alfalfa varies widely, according to the character of the soil upon which it is grown. This is true both in regard to mineral constituents and organic compounds. Analyses of the ashes of alfalfa grown on granitic soil, on chalky soil with flints, on clayey soil with chalk, and on very chalky soils, show the following variation in the percentages of mineral compounds:

	Granitic soil.	Chalky soil with flints.	Clayey soil with chalk.	Very chalky soil.
Silicic acid.....	0.99	0.41	0.47	0.58
Ferric oxide.....	.76	1.05	.29	.60
Magnesium carbonate.....	9.89	7.15	10.11	9.05
Calcium sulphate.....	4.50	3.04	7.51	6.80
Calcium phosphate.....	14.94	8.11	10.66	19.71
Calcium carbonate.....	13.42	48.15	49.68	30.19
Potassium carbonate.....	48.42	29.19	20.60	26.09
Potassium and sodium chlorides.....	6.67	2.90	.68	6.98

According to Wolff, the quantity of mineral matter removed from the soil by 1,000 pounds of alfalfa hay, containing 14 per cent. of water, is as follows:

Nitrogen 23.6 pounds, and mineral ash 87 pounds—the latter composed of phosphoric acid 7.3 pounds, potash 21.9 pounds, soda 1.5 pounds, lime 34.9 pounds, magnesia 4.2 pounds, sulphuric acid 4.9 pounds, silica 8.2 pounds, oxide of iron 1.6 pounds, and chlorine 2.5 pounds.

#### ALFALFA AS A SOIL RENOVATOR.

Alfalfa belongs to that class of plants which are known as nitrogen collectors. The legumes, to which family alfalfa and all the clovers and their relatives belong, are able to draw nitrogen directly from the air. The roots of the plant, if examined, will be found to be covered with a great many small swellings or tubercles, and if sections of these tubercles are examined under a very high-power microscope the tissues will be found to contain great numbers of bacteria. It is through the action of these minute organisms that the plant is enabled to take nitrogen directly from the air. Other families of plants, for instance the true grasses, which do not have these tubercles on the roots, are unable to take up any nitrogen, except such as may be in soluble form in the soil. Hence, alfalfa and its relatives are the best plants that can be grown by the farmer, for they manufacture large quantities of this most valuable and expensive fertilizing element.

By raising alfalfa the farmer not only provides an excellent quality, as well as a large quantity of forage for his domestic stock, but he is at the same time enriching his fields, and doing it with a fertilizer which if purchased in the market would cost a great deal of money. When this crop is plowed under or is fed to stock and the manure returned to the ground, it supplies a large quantity of nitrogen, which is especially valuable for small grains, grasses, and root crops, and which the latter are unable to acquire for themselves.

The percentage of nitrogenous compounds found in the plant varies considerably, the maximum being in the early stages of its growth and the minimum about the time the seed commences to ripen. Hence, hay cut early, especially before the plant begins to bloom, is more nutritious, though much smaller in quantity, than that cut after the plant has begun to bloom.

Below are given the analyses of alfalfa hay grown at the Colorado station in 1888, made at four different periods in the growth of the plant:

	Cut June 4; beginning to bud; 77.65 per cent. of water.	Cut June 20; full bloom; 69.71 per cent. of water.	Cut July 13; bloom half turned; 60.89 per cent. of water.	Cut Sept. 11; fully ripened seed; 49.30 per cent. of water.
Water.....	8.11	9.37	9.59	8.56
Ash.....	11.62	11.68	11.90	8.43
Fat.....	3.61	3.34	3.85	3.92
Albuminoid nitrogen.....	18.19	15.22	12.87	11.67
Crude fiber.....	12.88	14.65	18.01	20.23
Nitrogen-free extract.....	45.59	45.74	43.78	47.18
	100	100	100	99.99

This shows that there is a constant decrease of albuminoid nitrogen and a constant increase of crude fiber from the time the buds first form until the seed is ripe and all growth has ceased. The albuminoids are the most valuable part of the forage and the crude fiber the least. It is very easy to see why hay cut before the flowering is better than that cut when in full bloom, if in the meantime it loses nearly 3 per cent. of its valuable and commercially expensive albuminoids and gains 2 per cent. by

weight of indigestible fiber. Hay made from alfalfa cut about the time the first blossoms appear is sufficiently superior in quality to hay cut when the plant is in full bloom, or has begun to ripen its seed, to more than make up for the difference in bulk and weight. Analyses of alfalfa have been made at experiment stations and agricultural colleges in all parts of the country, and the chemical composition is found to vary according to the time at which the sample is cut. No two samples cut from different fields, or from different parts of the same field where the soils are different, or where the preparation of the ground has not been the same, will have exactly the same chemical composition, though the ratio of one constituent to another may be fairly constant over wide ranges of territory.

#### DESTROYING ALFALFA.

To rid land of alfalfa is sometimes difficult. As the result of poor cultivation, of the attacks of fungus or animal parasites, or of some other cause, the yield per acre may cease to reach a profitable amount. The best method is to plow the field in midsummer, turning the roots up to the hot sun. Then when the leaves begin to show above the sod cross plow. These two plowings will ordinarily be enough. Another method which is used in the West and Southwest, where irrigation is practiced, is to flood the fields and let the water stand on them for several days. Alfalfa is quickly killed by excess of water in the soil. If the water is allowed to stand on the field two days in midsummer, when it gets pretty hot during the day, every root will be killed, and when the water has been drained off, the land will be ready to be plowed and prepared for some other crop. A catch crop should be put in at once, so as not to allow the land to remain bare, and to prevent the leaching out of the most valuable fertilizing elements.

#### ENEMIES OF ALFALFA.

Weeds.—Mention has already been made of crab grass and foxtail. The worst weed which growers of alfalfa will have to conquer, and the one which causes the greatest damage, is dodder or love vine. This weed, or at least the species which does the greatest damage, is an importation from Europe. It was brought to this country in flax and alfalfa seed, and has spread throughout all sections of the United States where alfalfa is grown. Dodder belongs to the morning-glory family, but, unlike the common weedy morning-glories of the fields, it is parasitic. The stems are leafless, and look like orange or reddish-yellow threads. When the seed of the dodder germinates, the young plant is able to grow for a short time upon the supply of food which has been laid up for it in the seed, but unless its stem can come in contact with that of some plant upon which it can feed it will die. As soon as the young dodder plant touches a leaf, stem, or stalk of the alfalfa it twines around it and becomes closely fastened to the stalk by means of numerous suckers, which enter the tissues of the host plant. These suckers draw out from the alfalfa all the soluble food materials, such as the sugars and oils.

The dodder grows very rapidly, forming tangled masses with its yellow stems and the alfalfa soon becomes completely choked out. The only practicable remedy after this pest has become estab-

lished is to mow the alfalfa in early summer, before the dodder begins to bloom, and to burn it where it lies. This will completely kill the dodder without injuring the alfalfa. Dodder cannot be kept down by mowing, because it is usually attached to the alfalfa stalks just above the surface of the ground. The flowers of the dodder are produced very low down, and even if the upper portions of the parasite were cut off, they would ripen seed. Sheep are said to clean out dodder from the field, but

this statement is not very well substantiated. The best method of fighting dodder is the preventive one; that is, sowing nothing but pure seed. The seed of this parasite is only about one twenty-fifth of an inch long, or not over half as large as the alfalfa; so that if the seed is run through a screen, say with a mesh about as large as that used for an ordinary screen door, the minute dodder seed will be easily separated from that of the alfalfa.

Root rot.—In Texas and the Southern States alfalfa is attacked by a root rot which is believed to be identical with the root rot of cotton. A field which becomes infected with this disease had better be plowed under. The rot spreads in widening circles from the point of infection at a rate of from fifty to sixty feet per season, and if it is very bad it sometimes kills out an entire field in one season. A very free use of salt is said to kill out the disease, which is usually worst in dry seasons. Probably the best remedy is to plant for a number of years those crops which are not affected by this root rot, until the ground becomes entirely free from the spores of the fungus which causes the disease.

There is another disease which has

caused considerable damage in the Pecos valley, in Texas. It is not very well understood, and is at present under investigation by this department. It seems to follow the irrigation ditches and is very probably caused by excessive flooding of the fields. In its effects it somewhat resembles the damping off of young plants in the greenhouse. The crown of the root rots, and the plant dies. The remedy which at once suggests itself is to provide thorough drainage for the fields and to irrigate less frequently.

Spot disease.—In many portions of the Eastern and Southern States the fields become infected with a leaf-spot which sometimes causes considerable damage, and renders both the hay and forage of inferior quality. The best remedy for this disease is said to be frequent cutting. Whenever a field of alfalfa commences to get yellow, either all over or in spots, it should be cut, for the yellow color is a sure sign of disease.

Animal pests.—In the region west of the Missouri, alfalfa fields are often infested with gophers and striped ground squirrels. These eat both stems and roots, and cause great damage. The best way of getting rid of these pests is to drown them out, or, if the land cannot be irrigated, to poison them by dropping phosphorized grain in their burrows.

#### SUMMARY.

Alfalfa seed weighs sixty pounds to the bushel.

For a hay crop, sow twenty to thirty pounds of seed per acre.

For a crop of seed, sow fourteen to eighteen pounds per acre.

Sow clean seed.

North of the latitude of Washington, sow alfalfa in the spring, as soon as the ground is warm—from the middle of April to the middle of May. Sow in drills or broadcast.

In the South and Southeast and in California sow alfalfa in spring or autumn. Sow in drills. In the South sow in drills, sixteen to twenty inches apart, and cultivate the first season.

Do not cover the seed too deep.

Alfalfa does not attain maturity until the third or fourth year; therefore, do not sow expecting to get the best results in less than that time.

Alfalfa grows best on a deep, sandy loam, underlaid by a loose and permeable subsoil. It will not grow if there is an excess of water in the soil. The land must be well drained.

Alfalfa is a deep feeder. Plow the land thoroughly; the deeper the better.

Alfalfa thrives best in soils containing lime, potash and magnesium. It does not grow well in soils containing an excess of iron, or where lime is wholly absent.

Cut for hay when the first flowers appear. If cut in full bloom, the hay will be woody and less nutritious.

Cut for seed when the middle clusters of seed pods are dark brown.

To make alfalfa hay, cut in the forenoon and let it wilt; then rake into windrows. It should be cured in windrows and cocks, and stacked or put in barns with as little handling as possible. Great care is required in order to get it in stack before the leaves become dry and brittle. The leaves are the most palatable and nutritious part of the hay.

Cover the stacks with caps. This will prevent loss by molding when it rains.

In the arid regions, where irrigation is practiced, put water on the field before sowing the seed, and immediately after cutting each crop of hay.

It is not safe to pasture either cattle or sheep on alfalfa, as they are liable

## Long Life

to leather: Vacuum Leather Oil. Get a can at a harness- or shoe-store, 25c a half-pint to \$1.25 a gallon; book "How to Take Care of Leather," and swab, both free; use enough to find out; if you don't like it, take the can back and get the whole of your money.

Sold only in cans, to make sure of fair dealing everywhere—handy cans. Best oil for farm machinery also. If you can't find it, write to VACUUM OIL COMPANY, Rochester, N. Y.

to bloat when it is fed green. Feed them the hay, or practice soiling.

There is no better or cheaper way of growing hogs than to pasture them on alfalfa. One acre will furnish pasture for from ten to twenty hogs per season.

Horses can be pastured on alfalfa. There is no better hay for work animals, or for young, growing stock.

Alfalfa hay is not a complete ration. The best results are got by feeding it with corn fodder, ensilage, wheat or oat straw, or roots. Alfalfa contains large amounts of protein, which goes to form blood, bone and muscle. It is deficient in the carbohydrates, namely, starch, fats, and cellulose or fiber. These must be added to the ration or a part of the protein will be wasted.

To rid a field of alfalfa, plow in midsummer, turning up the roots to the hot sun. Or, if the field can be irrigated, let the water stand on it two or three days in midsummer. This will rot the roots, and after the water has been drained off the field can be plowed.

Do not cut alfalfa too late in the season.

Do not let water stand on a field more than forty-eight hours.

Alfalfa hay, properly cured, has about the same value as red clover hay. The

yield is much greater. It can be cut from three or four to seven or eight times in a season, and yields from a ton to a ton and a half or more at a cutting.

Six to ten bushels of seed is the usual yield per acre.

Keep the weeds mowed and raked off the first season, or they will choke out the young alfalfa.

Sow alone, without any nurse crop. The latter is often just as harmful as the weeds.

Screen alfalfa seed before sowing, to separate the dodder and other weed seeds. Dodder or love vine is the worst enemy of alfalfa. Prevention is better than cure.

#### Composition of Kaffir Corn.

Editor Kansas Farmer:—In reply to the letter of Mr. I. W. Stout, in the issue of the Farmer for September 11, asking for a published analysis of the grain of Kaffir corn, I may say that an analysis will be found in the Second Annual Report of the Kansas Experiment Station, 1889, page 116. In Bulletin 32, page 231, (of the Bulletins for 1891), a comparison of the composition of the grain at different stages of growth is exhibited, and also of the fodder at the same stages. I append hereto the analysis of mature grain, and include with them, for the value of the comparison, an analysis of milo maize, of Honey Dew sorghum (which is a saccharine, white-seeded sort,) and of corn-chop. It will be seen that they are very similar in composition throughout.

	Water.	Dry matter.				Total dry matter.
		Ash.	Fat.	Crude protein.	Crude fiber.	Nitrogen-free extract.
Kaffir corn..	8.58	1.63	2.69	11.29	1.54	74.27
Kaffir corn..	9.31	1.69	3.27	10.94	1.49	73.30
Milo maize..	10.05	1.29	2.90	12.11	1.49	72.16
Sorghum ...	11.61	1.49	2.59	10.63	1.25	72.43
Corn-chop ...	10.82	1.69	2.32	10.86	2.10	72.21

Of the value of Kaffir corn grain for food there can be no doubt, provided it is put in proper physical condition, the rather hard kernels being, to my mind, not well adapted to feeding whole. The analyses are of white Kaffir corn. We have not analyzed the red Kaffir corn, but there is no reason to suppose that it varies from the other materially.

J. T. WILLARD.

Assistant Chemist Kansas Agricultural College Experiment Station, September 16, 1895.

A person is prematurely old when baldness occurs before the forty-fifth year. Use Hall's Hair Renewer to keep the scalp healthy and prevent baldness.

Show me the man who would go to heaven alone, and I will show you one who will never be admitted there.—Feltbam.



## The Stock Interest.

### THOROUGH-BRED STOCK SALES.

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

OCTOBER 9—Geo. W. Null, Odessa, Mo., Poland-China swine.  
OCTOBER 10—M. Waltmire & Son, Fountain, Kas., Short-horn cattle and Poland-China swine.  
OCTOBER 10—J. R. Killough & Sons, Richmond, Kas., Poland-China swine.  
OCTOBER 22—J. H. Pogram, Virgil, Kas., Poland-China swine.  
OCTOBER 1—C. G. Sparks, Mt. Leonard, Mo., and G. L. Davis, Elmwood, Mo., Poland-China swine.  
OCTOBER 29—Kirkpatrick & Son, Connors, Kas., Aberdeen-Angus cattle and Poland-China swine.  
OCTOBER 29—Chas. Cannon, Harrisonville, Mo., Poland-China swine.  
OCTOBER 30—L. N. Kennedy, Nevada, Mo., Poland-China swine.

### Eye Disease in Cattle.

Editor Kansas Farmer:—Within the past three or four years there have been a number of reports from various portions of the State of a peculiar and apparently contagious disease affecting the eyes of cattle. As these reports have been more numerous than usual this year, and many inquiries regarding it, a brief description of the disease, as I have observed it, may not be amiss.

The disease is what is technically known as "keratitis contagiosa," or, in common language, it is contagious inflammation and ulceration of the cornea or front of the eyeball, of cattle. The disease usually makes its appearance during the summer months, attacking one or two animals in a bunch, and from these spreading quite rapidly through the whole herd, rarely missing a single animal.

The first symptom noticed is a discharge of tears from the affected eye, the tears running down over the face. The eyelids become swollen, there is a blinking of the eye, and often a twitching of the muscles around the eye. The affected eye is very sensitive to light, as shown by the blinking of the eye or a partial closure of the eyelids. The animal often shakes its head, indicating the painful condition of the eye. About the time that the discharge of tears is noticed, the eye becomes cloudy, and later assumes a coppery color, as if there was a growth over the front of the eyeball. There may be two spots on the eyeball that are especially bad. The eye is distended and protrudes more than normal. In some cases the pressure of the fluid within the eyeball is so great that the eye bursts, and the fluid escapes. Most of the cases, where the eyeball bursts, go totally blind, but if the rupture is not bad some recover. Many animals, while the eyes are at their worst, are blind, but recover the sight as soon as the inflammation subsides.

The disease seems to attack young cattle more readily than old. The disease usually runs its course in from four to six weeks. There often remain little spots on the eyeball, where the ulcerations were, for a long time.

The treatment of the disease is not very satisfactory, there being very little difference in the rapidity of recovery between those treated and those not. Puncturing the cornea in the early stages and drawing off the aqueous humor affords relief, but this should be done by a competent surgeon. Bathing the eyes twice daily with cold salt water gives some relief. The best method is to keep the animals from having the disease by not allowing healthy animals to come in contact with those having the disease. As soon as an animal is affected it should be separated until it has entirely recovered. I have known of no cases to result fatally, but a few go totally blind. I should estimate the number that go totally blind at about 5 per cent., and probably 1 per cent. blind in one eye. There are estimates only, and may not be correct.

N. S. MAYO,

Veterinary Department State Agricultural College.

### Unfair to Red Polled Cattle.

Editor Kansas Farmer:—In looking over the very attractive premium list of the Kansas State fair, I notice no class for Red Polled cattle, while Gallo-ways and Polled Angus are classed together. It seems to me that the useful and beautiful Red Polls, which are so fast coming to the front, are worthy recognition by the State Fair Association.

At the World's Fair, in Class XVI., sweepstakes by ages (open to all general-purpose breeds), a Red Polled cow, 4 years old, won. Also, in the same class, a heifer, 2 years old and under 3, won. In Class XVIII., grand sweepstakes herd, (open to all general-purpose breeds), in aged herd Red Polls won third and fourth, and in young herd they won second. In these classes there

were shown Red Polls, Brown Swiss, Polled Durhams, Holsteins and Dairy Short-horns.

If the State Fair Association does not feel able to make separate classes for the general-purpose breeds, could it not afford to double up and make a class for Red Polls, Polled Durhams and Devons, the same as it does for Gallo-ways and Polled Angus? The Red Polled breeders should, by a combined effort, urge the State Fair Association to give them recognition.

WILKIE BLAIR,  
Beulah Land Farm.

### Franklin County Fair.

Special Correspondence Kansas Farmer.

The Franklin County Agricultural Society held its twenty-ninth annual fair in Forest park, Ottawa, Kas., September 17 to 20, inclusive. The weather was all that one could desire; the grounds the finest in the State; the exhibits choice in every respect, and the attendance, surpassing that of any other season for years, was true cause for the management to rejoice over the finale of their efforts of 1895. Of the many fairs attended by the writer so far this season, none have been as successful as the Franklin county fair. The people of Ottawa are noted as a successful people, and whenever they undertake to do anything, especially for the public weal, their sole aim and desire is to come out victorious, hence the success of their fair. As a further encouragement, the County Commissioners assist the society to the amount of \$200 annually, which is duly appreciated.

Upon entering Forest park, the first exhibit to receive attention was that of the poultry department, which occupied space near the entrance. There were 210 specimens, and all neat and comfortably arranged. This splendid display comes from having an organization in the county devoted to the development and growth of poultry and pet stock, by the instrumentality of which

The motto of our great State is in touch with the people, and every faithful citizen knows of a truth the meaning of "Ad astra per aspera."

Another important exhibit in Floral hall was that of the Kansas Tannery, of Lawrence, by M. C. Byrd. Here was displayed tanned leather, robes, rugs, elk and deer-skins, etc., all of which is the handiwork of Mr. Byrd, who is an expert in making fine goods from the raw material to the finish.

Swine husbandry is an important industry in Franklin, and the aggregation of choice hogs at this fair proves that it pays to have the best. The exhibit was larger than I have ever heretofore seen at a county fair in Kansas, and it speaks well for the many breeders of Franklin county. Among the exhibitors were the following: A. E. Staley, of Ottawa, with Poland-Chinas and Chester Whites, receiving five first prizes; H. Davison & Son, of Princeton, with Poland-Chinas and Berkshires, securing one first, four second, and two special and sweepstakes on best boar, any age or breed; J. R. Killough & Sons, of Richmond, with Poland-Chinas; Dietrich & Gentry, of Richmond, with Poland-Chinas, getting sweepstakes on best sow of any age or breed; S. McCullough, of Ottawa, with Berkshires, winning six first and three second; Ed. T. Warner, of Princeton, with Poland-Chinas, receiving two first, two second and one special.

In the sheep department, A. E. Carpenter, of Wellsville, got five first and one second on Southdowns. E. S. Kirkpatrick & Son, of Wellsville, received five first, four second, two sweepstakes and one special on their Shropshires. Their flock is headed by Cyrus 30313, whose weight is 230 pounds; he is 4 years old and has headed their flock for the past three years; in this time he has never failed to secure first and sweepstakes wherever exhibited.

This firm recently purchased one of Geo. Allen's best-bred Shropshire rams.



good results are here shown. The association will hold a poultry and pet stock show in Ottawa, January 20 to 24, 1896, with F. M. Hitchcock as judge. Among the exhibitors of poultry I saw E. A. Mott, of Pomona; H. C. DeWitt, of Ottawa; J. T. Harrah, of Pomona; Carter Bros., of Lane, and A. E. Staley, of Ottawa. Mr. Mott secured seven first, four second and three specials. Mr. DeWitt, being superintendent of the department, did not compete for premiums. Mr. Harrah got eight first and one special, Carter Bros. received three first, one second and three specials.

The next department was farm products and machinery; a finer display would be difficult to find than was seen in this department. The farm products seemed to vie with each other as to size, and appeared to chuckle over the fact that no other State in the Union could produce such monstrosities as here seen. Corn, on every side, was stacked up in cord-wood style, so large were the ears, and the samples on exhibition were not "picked ears," but taken as they happened to come in the course of gathering.

The fruit department occupied an entire floor, in the Floral hall, and consisted of hundreds of choice specimens, large and handsome. Mr. A. Willis was in charge, and a more practical person could not have been selected. As a propagator and producer of reliable nursery stock, he stands second to none.

Everything shown in the farm product and fruit department was on the "great big" order, and the comments thereon would fill a volume, the consensus of opinion being that this section of Kansas was a trifle better than any other part of the West, and I am inclined to believe that they are about right. It is a peculiarity of Kansans, however, to believe that their section of the State is the best and decidedly the most productive. Kansas people can overcome difficulties quicker and easier than any other folks, hence her prominence before the American public.

They own about seventy-five head of sheep in all. Six yearling lambs are for sale, and each of them registered. E. S. Kirkpatrick & Son have shown their Shropshires at three fairs this season, and captured thirty-seven premiums.

In the cattle department the writer saw Short-horns, Herefords, Holsteins and Jerseys. C. F. Wolf, of Ottawa, and J. O. McDaniel, of Wellsville, showed Short-horns and the premiums were about equally divided. J. F. Wright, of Princeton, had the Herefords and received the prizes. It was a good and well-bred herd. P. I. McEchron, of Richmond, showed the Holsteins, and a man by name of Lawson had the Jersey herd.

In the horse department, J. R. Killough & Sons secured first premium on stallion colt, in the ring of "horses for all purposes." This firm also captured first on best 100 ears of white corn, and first on best 100 ears of yellow corn.

### Dehorning—A Modern Necessity.

At this season of the year, in the West, when cattle-feeding is being carried on so extensively, the importance of dehorning is a practical question for present consideration; therefore, we quote the following extracts from the catalogue of A. C. Brosius, Cochranville, Pa., the patentee and maker of the famous Keystone Dehorning Clippers, as shown in the illustration herewith:

"Dehorning is an improvement in the herd that is becoming very popular and spreading with great rapidity. Every one that tries it is so well pleased with the way the cows herd together (much after the manner of a flock of sheep) that they wonder how they put up with the goring and loss of calves, to say nothing of the danger of life to man as well as beast. There is never a summer but that we have a colt killed or crippled among some of our neighbors. And no one seems to be able to advance the first good reason for this risk.

"Farmer Miles, of Illinois, being asked by a Rural New Yorker representative:

## Over Thirty Years Without Sickness.

Mr. H. WETTSTEIN, a well-known, enterprising citizen of Byron, Ill., writes: "Before I paid much attention to regulating the bowels, I hardly knew a well day; but since I learned the evil results of constipation and the efficacy of



### AYER'S

Pills, I have not had one day's sickness for over thirty years — no! an attack that did not yield to this remedy. My wife had been, previous to our marriage, an invalid for years. She had a prejudice against cathartics, but as soon as she began to use Ayer's Pills her health was restored."

# AYER'S

## Cathartic Pills

Medal and Diploma at World's Fair.

To Restore Strength, take Ayer's Sarsaparilla.

"What do you think of dehorning?" replied: "In all my travels I have never found a man who knew nothing of dehorning but what opposed it. On the other hand, I have never met a man who had as many as twenty-five dehorned who was not in favor of it. We know that the operation is a great benefit, and, instead of being a cruelty, is in reality one of the greatest preventives of cruelty."

"The Binghamton agent of the S. P. C. A., of Broome county, New York, was recently instructed to look into the matter of dehorning, and reports as follows: 'There have been about 2,000 cattle dehorned in Broome county, and I have found that it has been done by the most intelligent and humane dairymen, those who take excellent care of their herds. I am also informed by Profs. Roberts, Laws and Wing, of Cornell University, who have experimented with and investigated the matter, that it is beneficial. The cows after the operation are less vicious and will lie down together like a flock of sheep; a number will drink at the same trough, and they keep in better condition for producing milk. I have been unable to find any persons who are competent from knowledge and experience to give evidence against dehorning.'"

D. Trott, of Abilene, writes: "The Ash Grove herd is in the best of health. Sales are fairly good for the time of the year. There are a number of fine Poland-China pigs for sale, sired by Black Model (Vol. 17), Victor Tecumseh 30693, and others, and out of such sows as Tecumseh Prize 2d 83092, that was sired by the great \$1,000 King Perfection, Graceful T. 79734 and others of equal breeding. There are also a nice lot of Duroc-Jerseys ready for customers, sired by Trott's Big Bone 4607, a grand good hog, of a beautiful color, large and shapely, of the mellow, easy-keeping order, always ready for market, Iowa King 4609 and others. Dams of pigs are such sows as Sunflower 9458, Sunflower Queen 9460 and others equally as good. The pigs are principally of the short-leg, broad-back, lengthy fellows, just the kind to make vigorous breeders. Altogether, there was never a better lot of pigs for customers, than the present lot. I will try to please all customers."

The passions of mankind are partly protective, partly beneficent, like the chaff and grain of the corn; but none without their use, none without nobleness when seen in balanced unity with the rest of the spirit which they are charged to defend.—Ruskin.

To attain excellence in society, an assemblage of qualifications is requisite; disciplined intellect, to think clearly, and to clothe thought with propriety and elegance; knowledge of human nature, to suit subject to character; true politeness, to prevent giving pain; a deep sense of morality to preserve the dignity of speech, and a spirit of benevolence, to neutralize its asperities and sanctify its powers.—Mrs. Sigourney.

### Old Mexico.

Modern Mexico is a beautifully illustrated monthly journal, published in the English language, and devoted to the interests of Mexico. Send 10 cents for sample copy. Address Modern Mexico Publishing Co., Topeka, Kas. Mention KANSAS FARMER.



## Irrigation.

### KANSAS STATE IRRIGATION ASSOCIATION.

It is impossible in this issue of the Kansas Farmer to make any detailed report of the proceedings of the State Irrigation Association at Garden City. A mere statement of the program is interesting, however, and conveys strikingly an outline of the progress of irrigation thought and development.

#### PROGRAM.

Papers on general subjects are expected to occupy but ten minutes.

#### TUESDAY FORENOON, OCTOBER 1.

Calling to order at 9 a. m., by President D. M. Frost, of Garden City.  
Song by the Modoc Quartet.  
Remarks and prayer by Rev. Lyman Hull.

Song by the Modoc Quartet.  
President's address—Hon. D. M. Frost.  
Appointment of two standing committees of nine members each on Rules and Order of Business and on Resolutions. Each committee will consist of one member from each Congressional district in the State and an additional member from the Sixth and Seventh, to be named by the delegates present from each district.

The Committee on Rules and Order of Business will report at the close of each session any changes in the program for the following session or sessions.

Election of officers for ensuing year. Nominating speeches limited to five minutes.

Installation of officers (informal).  
Address of welcome, J. W. Gregory, Garden City.

Welcome on behalf of the Finney County Agricultural Society, I. L. Diesem, Garden City.

Address, Hon. R. W. Blue, Congressman-at-Large.

"Irrigation, Old and New," Hon. L. Bradford Prince, Santa Fe, N. M.

"Fifteen Minutes' Contribution to the Disturbance," Hon. F. D. Coburn, Topeka.

"Western Kansas as We'd Like to See It," T. A. McNeal, Editor Kansas Breeze.  
"The Works of the State Board of Irrigation," Hon. W. B. Sutton, Russell, Committee on Order of Business.

#### TUESDAY AFTERNOON, 1:30.

"Sub-Irrigation," Fred Dumont Smith, Kinsley.

"The Machinery of Irrigation," Prof. E. B. Cowgill, Topeka.

"The Flow of the Underflow," H. V. Hinkley, C. E., Topeka.

"The Development of the West the Prosperity of the East," Prof. Robert Hay, Junction City.

"The Relation of Western Kansas to the Packing Interest," Jacob Dold, Wichita.

"The Key-Note of Successful Fruit Culture in Western Kansas," C. H. Longstreth, Lakin.

"Profits of Small Farming," Hon. G. W. Swink, Rocky Ford, Col.

"Irrigation," Judge J. S. Emery, Lawrence.

"Alfalfa and Cattle," A. B. Kramer, Pierceville.

"Raising Oysters in Kansas," C. H. Kellogg, Fay, Russell Co.

"Fruit in Hamilton County," L. P. Worden, Syracuse.

"Dairying and Irrigation," John Bull, Cimarron.

"Bee Culture," Capt. Wing, Syracuse.

#### TUESDAY EVENING, 7:30.

"The Future of Upland Farming in Western Kansas," Hon. A. P. Heminger, Santa Fe.

"The Status and Prospects of the Southwest Corner," Judge W. E. Hutchinson, Ulysses.

"Early Experiences at Garden City," Hon. Jno. E. Frost, Topeka.

"Early Days in Greeley," Senator David Boyd, Greeley, Col.

"The Pioneer Irrigator in Western Kansas," Capt. J. H. Churchill, Dodge City.

"Homes Under Irrigation," Hon. M. B. Tomblin, Goodland.

"Central Western Kansas," J. U. Brown, Tribune.

"The Underflow Waters of Western Kansas," Prof. E. Haworth, Lawrence.

"Progress of Irrigation in Semi-Arid America," Hon. E. R. Moses, Great Bend.

"The Prospects of Irrigation in Hamilton County," Judge H. N. Lester, Syracuse.

"Irrigation Progress Away From the Streams," J. C. Starr, Scott City.

"The Outlook," G. Nicholson, Ness City.

"Stock and Alfalfa," T. A. Ford, Syracuse.

Songs by Modocs.

Committee on Order of Business.

#### WEDNESDAY FORENOON, 9.

"Protection Against Prairie Fires," Geo. W. Watson, Larned.

"Mechanics and Irrigation," Irvin Van Wie, Syracuse, N. Y.

"A Rambling Talk," Hon. A. J. Holsington, Great Bend.

"Subsiding and Sub-Irrigation," Thos. Knight, C. E., Kansas City.

"Subsiding and Irrigation," Hon. J. B. McAfee, Topeka.

"Fruit-Growing," Hon. Fred Wellhouse, Topeka.

"Application of Water," Lute Wilcox, Editor Denver Field and Farm, (with charts).

"Seepage and Evaporation," Prof. L. G. Carpenter, Fort Collins, Col.

"Alfalfa in Edwards County," R. C. Edwards, Kinsley.

"Water Storage," C. D. Perry, Englewood.

"Kansas Irrigation From an Outside Standpoint," Hon. C. M. Heintz, Los Angeles, Cal.

"Effects of Irrigation on Rainfall," W. E. Hutchinson, Hutchinson.

"Practical Points," Hon. A. L. Kellogg, Rocky Ford, Col.

"My First Experience in Western Kansas," Hon. Clark E. Carr, Galesburg, Ill.

#### WEDNESDAY AFTERNOON.

Inspection of great display of irrigation machinery and appliances.

#### WEDNESDAY EVENING.

Reception in Windsor court and parlors.

### Riparian Rights.

In a suit just decided by the Nebraska Supreme court, it is held that riparian rights in streams not navigable are private property and as such cannot be taken for public use in the form of irrigation ditches without compensation to the owner. The case was brought on appeal by one Clark, who owns a grist mill at Arapahoe, on the Republican river, and the Cambridge & Arapahoe Improvement Company was taking away the necessary water from Clark's mill. The Nebraska Supreme court says (opinion by Justice Post):

"1. The courts of this country have not, as a rule, adopted the common law definition of the term navigable waters, which here include those waters only which afford a channel for useful commerce, whether the beds thereof are public or private property and without regard to the influence of the ocean tide.

"2. The courts of this State (Nebraska) take notice without proof that the Republican river is unnavigable.

"3. Except as abrogated or modified by statute, the common law doctrine with respect to the rights of private riparian proprietors prevails in this country.

"4. The right of a riparian proprietor as such, is property, and when vested can be impaired or destroyed only in the interest of the general public upon full compensation and in accordance with the established law.

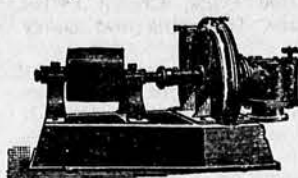
"5. The provision of the (Nebraska) irrigation law of 1889 and the act of 1893 amendatory thereof, abolishing riparian rights in all streams over twenty feet in width, is a clear invasion of private property and within the prohibitive features of the constitution.

"6. A suit which has by his laches made it impossible to prevent the completion or use of public works without great injury to his adversary, or inconvenience to the public, is not entitled to the preventive remedy of injunction, but will be confined to the relief obtainable by ordinary means in a court of law."

### Some South Dakota Irrigation Figures.

"Thirty-four bushels per acre. That is the yield of wheat on the Hunter farm this year," says the Redfield, (S. D.) Press. "The ground was given water only once, about the 1st of June. We believe it might very easily have been fifty bushels; in fact, the proprietors think they did not sow seed enough. We believe a little more water and seed would have made it fifty. But let's look at this thirty-four bushels a few minutes. The wheat on the same farm, treated in the same way in every particular except irrigation, gave sixteen bushels per acre. The irrigated wheat weighed out sixty-two pounds to the bushel, which makes the yield a little over thirty-five bushels. This sells for No. 1 hard. There is then a little difference of nineteen bushels per acre in favor of the irrigated wheat. Wheat is now about 50 cents a bushel, so that the irrigated wheat gave \$9.50 an acre more than not irrigated. Of course, there was a little more expense attending its production. Most prominent is the cost of spreading the water, and that depends on the number of acres and the ease with which the work is done. It will not do to figure on the cost of spreading water on a single acre, but on the average of a large number of acres. The well is capable of irrigating 800 acres, but call it 640, or a full section. A man can easily irrigate, those who have tried it say, fifteen acres a day. Then it will require about forty-three days' work to spread the water once, as was done this year. Call it twice, once in the fall and once in June. That would make eighty-six days' work, say at \$2 per day, \$172 for irrigating. Then handling the extra amount of grain in harvesting and threshing and delivering must be counted in. Just how much this would be is hard to figure. The threshing would cost 6 cents per bushel, or \$1.14 per acre, or \$729.60. Let's call all the extra expense \$1,000, which you will see is very high. Now let's look at the extra gain. At \$9.50 per acre the 640 acres will give \$6,080. Remember this is for the extra nineteen bushels per acre. The extra cost is \$1,000. Therefore the profit in this one crop is \$5,080. The well and reservoir and all ditches cost less than \$5,000. So that in a single season, on what we all believe was not a very large return for irrigation compared with what might have been obtained, and when the unirrigated crop had a good chance, the well would have paid its entire cost and the extra expense of its use."

Joel Shoemaker predicts that sub-irrigation by means of tiles is the coming system of all the arid States where the soil will admit of its practice.



### IRRIGATION MACHINERY.

If you want the most practical, efficient and cheapest irrigation pumping machinery, write for catalogue of Centrifugal and Triplex Pumps, Engines, Boilers, Gasoline Engines, etc., to

IRVIN VAN WIE,

717-726 W. Fayette St., SYRACUSE, N. Y.



#### Now for 1896.

Now that the harvest is practically over, and such an abundant one it has been, the results must be very gratifying as we look back on those days of careful thought and continual toil.

How was this wonderful crop accomplished? We can all unite in saying that nature's element had much to do with it, but in addition comes cultivation and planting stock. Certainly the latter comes in for a good bulk of the praise, for what strides of advancement have been made both as to yield and quality. Corn easily yielding over 100 bushels per acre on an average, in many sections; oats 125 bushels per acre is truly marvelous, while wheat, rye, barley, and all general field crops form a rear guard of unusual strength. But look at the array of garden products. Every State and county fair, as well as all exhibitions, have been crowded with the choicest products from the market and family garden. It all goes to show that we are entering a new era of advanced agricultural and horticultural interest.

I have received testimonial letters from thousands of my customers in almost every country, testifying in glowing terms the results obtained by planting Buckbee's seeds.

Now comes the time when all farmers and gardeners are commencing to plan for next year, and first of all comes in their mind, seed. Is that which you have been planting for years good enough? By all means, no. It is absolutely necessary that a change be made occasionally, and then to get the latest improved and very best stock obtainable.

Buckbee's Seed and Plant Guide for 1896 (mailed to all regular customers January 1, and is free to all intending buyers for the asking), portrays with accuracy the products of the Rockford Seed Farms. Tells all about the great oat—Illinois—which produced from 100 to 150 bushels per acre in 1895; the new corn—Buckbee's Colossal—which gave an average yield of over 100 bushels to the acre in many sections.

The valuable novelties in the garden and flower seed line will be attractive to every one, while the array of plant novelties will be of much pleasure to all lovers of the beautiful.

Now is the time to begin plans for next year. Don't put off until too late. Take time by the forelock and make the harvest of 1896 stand out as an example of the wonders which the agricultural and horticultural world can accomplish.

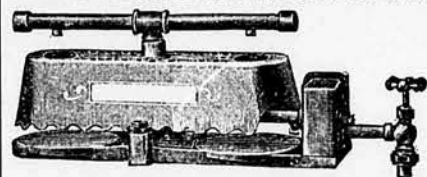
H. W. BUCKBEE,

Rockford Seed Farms, Rockford, Ill.

### The Champion Oil Burner.

After years of experimenting the National Oil Burner Co. have produced what they claim is the only perfect and successful oil burner in the world.

This burner is intended to go in any cook stove, heating stove or range. It burns any kind of kerosene or fuel oil, with less expense than coal or wood, and without smoke, odor or dirt of any kind. They have manufactured and sold in the last three years over 5,000 of the Champion Oil Burners and they are giving perfect satisfaction. The burners can be run one-half



cheaper than coal or wood. They make a hotter and perfect even fire at all times. No odor or smoke, and are perfectly safe in every way.

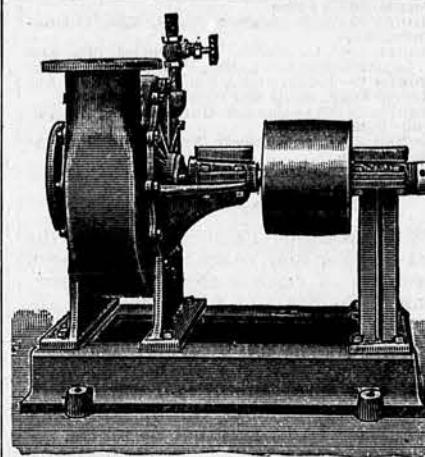
Any one can set the burner and outfit up ready to run in a few minutes time. Simply place the burner in the stove on the grate, drill a five-eighths-inch hole in the stove door (or put on a sheet-iron door); then connect pipe and valve to burner. Place the oil tank on the wall near the stove, or on the outside of the house, as you may desire, fasten the pipe to the tank and burner, and you are ready to run. The heating stove burner is put in the stove the same way.

They guarantee their burners to be a complete success in every particular; that they will not smoke or carbonize, and that they do not make any odor or noise. They make their burners strong and durable,

## IRRIGATE!

All right; you need CHEAP Power. One Cent per Horse-Power per Hour is CHEAP. Weber Gasoline Engines run anything. "Economy is Power" is our motto. For Catalogue and testimonials, address

Weber Gas and Gasoline Engine Co., 459 Southwest Boulevard, Kansas City, Mo.



## CENTRIFUGAL AND IRRIGATING PUMPS

We manufacture a full line.

Write for our pump catalogue.

KANSAS CITY HAY PRESS CO.

KANSAS CITY, MO.

## THE Kansas City Northwestern RAILWAY COMPANY

Is now running its trains to and from the UNION DEPOT in KANSAS CITY without transfer of passengers or baggage, and connecting with all lines for

### ALL POINTS.

As good service and low rates as offered by our competitors.

For tickets or full information, call on any Agent of the Company, or

H. C. TOWNSEND, M. K. FLEMING,

Gen'l Passenger Agt., ST. LOUIS, MO. Asst. Gen. Pass. Agt., KANSAS CITY, KAS.

and offer to replace any flaws or defects within one year. A special rolled lead pipe is used to convey the oil from the tank to the burner. This pipe is better than iron, as there are no joints to make; you can bend it where you want it, and it will not break or dent. The oil tanks are made out of heavy galvanized iron, and they, it is claimed, will never rust or leak.

Strongsville, O., March 8, 1894.

To Whom it may concern:—This is to certify that we have been using two of the Champion Cook Stove Oil Burners for the last eight months, and will say they are a complete success in every particular. The burner is cheaper, cleaner and much nicer than any other kind of fuel. We are using one of the burners in our range and it bakes and cooks to perfection. I have a general store at this place which I also heat with one of the burners and it gives me perfect satisfaction. We would not part with the burners at any price and go back to using coal or wood. I will be pleased to answer any correspondence regarding the burner and would advise any one wanting something cheaper and cleaner than wood or coal, to buy one of the burners and outfit.

MR. D. B. FREESE, MRS. D. B. FREESE.

The State of Ohio, Cuyahoga county, ss:

Before me, a Notary Public in and for the said county, personally appeared the above named parties, who acknowledged that they did sign the foregoing instrument and that the same is their free act and deed.

R. GIBBONS, Notary Public.

Send for circulars and prices to National Oil Burner Company, Cleveland, O.

### Are You Hard of Hearing or Deaf?

Call or send stamp for full particulars how to restore your hearing, by one who was deaf for thirty years. John Garmore, Room 18, Hammond Bldg., Fourth and Vine, Cincinnati, O.

## DRAIN TILE

W. S. DICKEY CLAY MFG. CO., 20th and Main Sts., Kansas City, Mo.

## IRRIGATION.



## Our First-Page Illustration.

On page 1 of this issue, we present a group of young Kansas-bred Herefords, from the Sunny Slope farm, owned by C. S. Cross, Emporia, Kas. These young Herefords were sketched from life by Lou Burke, the famous live stock artist.

The Sunny Slope farm herds of cattle and swine were the only representatives of Kansas improved stock that went forth to outside State fairs and crowned Kansas with victory.

The result of the contest in Iowa and Nebraska is reported as follows: At the Iowa State fair, Wild Tom, the head of the Hereford herd, won first in two-year-old bulls; sweepstakes in bull of any age. Archibald VI. was first in bull calves; first in sweepstakes under 1 year, all beef breeds competing, and was head of herd winning second, all beef breeds competing. Climax was second in bull calves. Miss Wellington 5th was first in helper calves; Beau Real's Lily was second in helper calves; Lady Benjamin 2d was third in helper calves.

At the Nebraska State fair, Omaha, the Poland-China swine won first breeder's prize, boar and four of his get, won by Hadley Jr.; this is the prize most sought for by breeders. First with Faultless Queen Corwin, in yearling sows. First with King Hadley, in boars under 6 months. Second with Hadley Jr., in boars over 1 and under 2. Second with yearling herd, headed by Hadley Jr. Second with Lady Longfellow, sow under 12 months. Second with Sambo-line, sow under 6 months. Third with Maggie, aged sow. It was the universal

mammoth brood sow, Miss Lord Corwin 28498; Onward, bred by Col. F. M. Lail, sired by Hummer 11268 and out of Marshall Maid, also the dam of Lail's Victor and Gov. Wilkes 13057. They are out of a grand lot of mature sows noted for their blue blood and fine quality. Among the pigs which go in the sale will be the produce of Mr. Null's champion heavy-weight sow, Miss Lord Corwin 28498 by Lord Corwin 4th 901, a grandson of Give or Take 24 S., and one of her daughters, also that of the great brood sow, Elwood Maid 4235, a full sister to the \$800 boar, Free Trade, and the produce of two of her daughters, Elwood Beauty 28821 and Lady Elwood 31510, also Lady A. 23047 by King Perfection 7013 and out of Halme 5565. The produce of many more good sows will be offered, representing the blood of Geo. Wilkes, Lail's Victor, Free Trade, King Butler, Hadley, Commonwealth, M.'s Wannamaker, The Colonel and others. The offering of Chester Whites is a grandly-bred lot, sired by such well-known boars as Chester Pride 6393, King Eclipse (a son of the World's Fair winner, Eclipse) and Pedro 2d, out of such magnificent sows as Sunset, Quality Girl, Maule's Beauty, Edna Bunch and others.

## Publishers' Paragraphs.

The Western Manufacturing Company, of Kansas City, Mo., is a new institution which is now advertising in the Kansas Farmer. They manufacture a subsoil plow, lister cultivators and corn cribs. Every farmer who has corn to crib will be especially interested in their new corn-crib, which is economical, serviceable and durable for a temporary crib. These cribs,

be slaughtered. My two herd boars, fit to head any herd, and other things will be sold very cheap."

Elsewhere in this paper will be found the advertisement of the celebrated Victory Corn and Feed Mill, manufactured by Thomas Roberts, Springfield, Ohio. The steady growth and sale of these mills has been something very gratifying to the manufacturer, as well as to his customers. Mr. Roberts is the pioneer in the manufacture of power grinding mills for ear corn, shelled corn, oats, rye, barley, cotton seed and all kinds of small grain and does not hesitate to say that there are a greater number of Victory feed mills in successful operation to-day than of all other makes combined. Mr. Roberts is continually experimenting with new grinding parts of every design, and this year will put upon the market a mill containing the very best grinding parts, plates and crusher of any similar style of mill made in the world. His mills for the past two years have more than met all requirements, but his present mill is better than they were, if such a thing is possible. His mills this season are lighter-running and grind faster than ever before, and the quality, along with the low price at which they are sold, make them the very best mill now offered to the trade. The Victory is the most simply constructed and easiest mill to operate now sold and these features alone should commend them to all. Send for catalogue and prices.

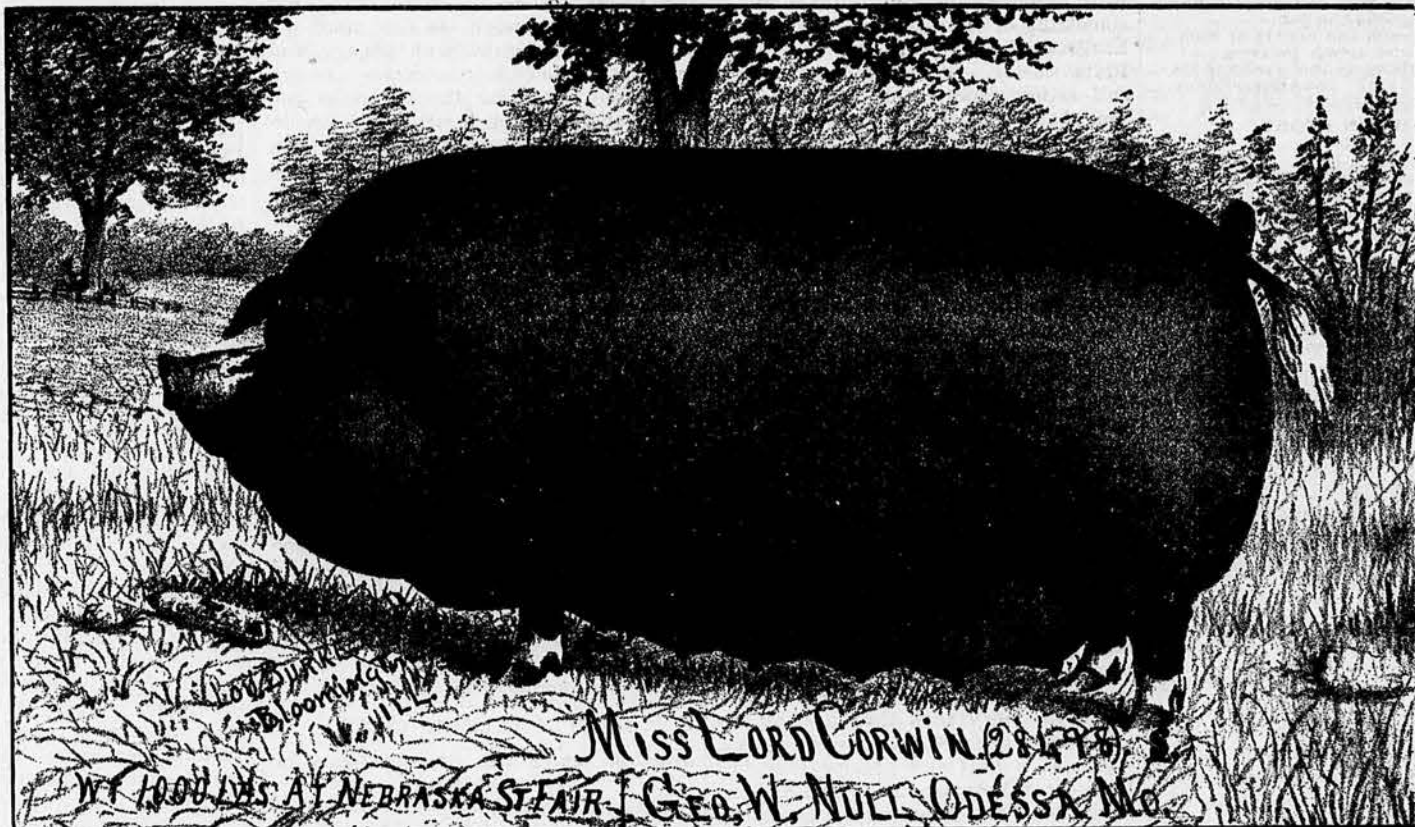
J. A. Worley, proprietor of the Pleasant View stock farm, Sabetha, Kas., writes to cancel his Poland-China sale date of October 3, on account of the hog cholera scourge. He says: "I have lost about one-half of my herd, and they are still dying. Eight head died to-day. Lost all my herd of show sows (nine head) except two. But very few that have taken sick

## Killough's Poland-Chinas.

The forthcoming sale of Poland-China swine, property of J. R. Killough & Sons, Richmond, Kas., will be the noteworthy event of the season. Their animals are choice in every way. Individually each animal is about all that any person could ask for, and collectively, one would have to go a long distance to find better swine, or even as good.

The boar at the head of their herd is the noted Upright Wilkes 18246 S., sired by Geo. Wilkes 5950 S. and he by King Tecumseh 3921 S., out of White Face 18380 S.; Upright Wilkes' dam was Luyster's Lady 31121 S. by Luyster's Choice 18233 S., out of Pride I. 31120 S. Of the leading sows the writer noticed Sealskin 24450 S. by Duke 7362 S., out of Choice 16677 S. Duke was by Royal Duke 7363 S. and out of Howey's Bess 16676 S., while Choice was by Young America 937 S., out of Fox Beauty 5th 800 S. Queen Bess 24451 S. is by Duke 7362 S. and out of Black Bess 20139 S. Black Bess was by Tom Crowder 7361 S. and out of Choice 16677 S. Little Bess 24453 S. has same breeding as Queen Bess, being from the same litter. Bess McKinley 32292 S. is by McKinley 8777 S. and out of Black Bess 20139 S.; three of her pigs are by Riley Medium 12306 S., the \$500 prize boar of Ed. T. Warner. Queen Bess is the dam of the following choice sows: Nellie 31152 S., May 31155 S., Sue 31154 S. and Ideal 31153 S.; they are each by Solidity 10479 S. and were farrowed October 26, 1893.

Send for a catalogue. It will tell you all about them. The sale takes place on Thursday, October 10, beginning at 1 o'clock p. m., rain or shine; so don't re-



MISS LORD CORWIN 28498  
WT 1200 LBS AT NEBRASKA STATE FAIR  
GEO. W. NULL, ODESSA, MO.

opinion that Hadley Jr. would easily have won first had he not been so lame. He sprained a tendon upon a slippery floor just before he went from home.

This herd goes to Wichita and to the Texas State fair, at Dallas, where they hope to show Hadley Jr. sound on his feet as he has always been.

## Miss Lord Corwin 28498 S.

The illustration herewith of Miss Lord Corwin, owned by Geo. W. Null, is a fine specimen of the dam of the produce offered to breeders at the grand two-days' sale of 150 head of Poland-China and Chester White swine, the property of Messrs. George W. Null and C. L. Gibson, of Odessa, Mo., to be held at their respective farms, three and a half miles northwest of Odessa, Wednesday and Thursday, October 9 and 10. We are assured that some of the best breeding known, as well as the highest quality of individual merit, is represented in the animals to be sold, both in Poland-Chinas and Chester Whites. The offering will consist of the cream of the Messrs. Null and Gibson's spring crop of pigs, and one richly-bred Holstein-Friesian bull calf. The Poland-Chinas are sired by such boars as Lail's Victor 4298 S. by Victor 2994 S., that sold at ten months for \$300 and has sired some of the most noted hogs of the day; dam of Lail's Victor, that remarkable brood sow, Marshall Maid 4752, sired by Stemwinder 1214 S., one of the best, Poland-China sires of the breed ever known; John L. 9517, a grandson of Lail's Victor and out of Minnie Cook 17416 by King Klever; Null's King 13517; Holden Header 12289; Corwin King 13394 by the Sunset boar, The Colonel 8236, and out of Mr. Null's

after the corn is out, can be used for a garden or yard fence. Nearly every reader of this paper will be interested in this Western factory, which is making a line of farm implements and appliances especially adapted to Western agriculture.

We direct the attention of irrigators this week to the new Centrifugal Pumping Machine, manufactured by the Kansas City Hay Press Company, of Kansas City, Mo. These pumps are heavy, well made and the best of material, and will stand great wear and do a large amount of work.

The National Stockman and Farmer, published at Pittsburg, Pa., price, \$1.50 per year, is the best up-to-date general agricultural journal published, and a great many of our readers have expressed a desire for such a paper in connection with the Kansas Farmer, and we have recently arranged a special deal, whereby we can offer this paper and the Kansas Farmer, one year, for only \$1.50. See our offer in another column.

## Gossip About Stock.

Attention is directed to the closing-out cattle sale of Kirkpatrick & Son, of Connors, Kas., advertised in this issue. The farm on which the Angus cattle have been carried has been sold, so that hereafter the breeding business will be confined to fine sheep and hogs.

Wilkie Blair, of the Beulah Land farm, Beulah, Crawford county, Kas., writes: "Since my card was placed in your 'Breeders' Directory,' I desire to report sale of first-prize sow, for a foundation for a Chester White herd, to S. E. Veatch, of Girard, Kas., at the very low price of \$20. Also a male pig, to head herd of Mr. Alseasser, of Brazilton, Kas., at \$8. These prices are very low, but until sold out all will go at such prices. Have some fine hogs that breeders ought to have, but if they are not taken soon they will go to

have got well, so far. It is the worst scourge of the kind that we have ever had. Some sections of the county it has taken out so clean as not to leave enough hogs among the farmers to supply them with their year's meat. The disease seems to be traveling west. The Brown county fair came off last week, with the slimmiest showing of hogs that I ever saw. Had a large attendance Thursday and some very good racing. I notice, in talking with a good many farmers that have lost their hogs, that they have about concluded to quit the business and turn their attention to some other branch of live stock raising. They claim that they can't stand it to lose their hogs every two or three years, hence are going to quit. It is a severe blow to our section, with the big corn crop coming on. I am waiting for mine to quit dying, so as to take my bearings for a fresh start, if I have anything left to start with. I have not lost all hope yet. My herd boars are all right yet."

Crane Company, of Kansas City, advise us that they obtained first premium on all of their mills and on all the Frizell cylinders shown at the Irrigation Congress and fair at Albuquerque. They also obtained first premium on their Worthington irrigation pump. They made at Albuquerque the largest exhibition of irrigation machinery ever shown at any fair. They are in receipt of a letter from Mr. Churchill, Vice-President of the Zimmerman Hardware Co., Dodge City, Kas., in which he states that the Crane windmills were running in a light breeze when all the others were at a standstill. In a letter from a resident of Plainville, Kas., he writes that the Crane windmill at the State Irrigation plant is working the "finest kind."

main away on account of the weather. Free conveyance from and to all trains. Col. S. A. Sawyer will be master of ceremonies, and this at once insures the purchaser that stock will be as represented in every particular. See advertisement elsewhere in this paper, read it, and then hasten to answer the invitation to send for a free copy of their catalogue. It will pay you.

## That Trip East

May be for business or pleasure, or both; but pleasure comes by making a business of traveling East over the Santa Fe Route as far as Chicago.

Thirty miles the shortest line between Missouri river and Chicago; that means quick time and sure connections.

Track is straight, rock-ballasted, with very few crossings at grade.

No prettier, cozier, or more comfortable trains enter Chicago than those over the Santa Fe. They are vestibuled limited expresses, with latest pattern Pullmans and free chair cars. Meals in dining cars served on plan of paying for what is ordered.

Inquire of nearest agent, or address G. T. Nicholson, G. P. A. Santa Fe Route Monadnock building, Chicago, or W. J. Black, A. G. P. A., Topeka, Kas.

## Homes for the Homeless.

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

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



## The Home Circle.

### To Correspondents.

The matter for the HOME CIRCLE is selected Wednesday of the week before the paper is printed. Manuscript received after that almost invariably goes over to the next week, unless it is very short and very good. Correspondents will govern themselves accordingly.

### A POET'S LESSON.

Poet, my master, come, tell me true,  
And how are your verses made?  
Ah! that is the easiest thing to do—  
You take a cloud of silver hue,  
A tender smile or a sprig of rue,  
With plenty of light and shade.

And weave them round in syllables rare,  
With grace and skill divine;  
With the earnest words of a pleading  
prayer,  
With the cadence caught from a dulcet  
air,  
A tale of love and a lock of hair,  
Or a bit of a trailing vine.

Or delving deep in a mine unwrought,  
You find in the teeming earth  
The golden vein of noble thought;  
The soul of a statesman still unbought,  
Or a patriot's cry with anguish fraught  
For the land that gave him birth.

A brilliant youth who has lost his way  
On the winding road of life;  
A sculptor's dream of the plastic clay;  
A painter's soul in a sunset ray;  
The sweetest thing a woman can say,  
Or a struggling nation's strife.

A boy's ambition; a maiden's star,  
Unrisen, but yet to be;  
A glimmering light that shines afar,  
For a sinking ship on a moaning bar;  
An empty sleeve; a veteran's scar,  
Or a land where men are free.

And if the poet's hand be strong  
To weave the web of a deathless song,  
And if a master guide the pen  
To words that reach the hearts of men,  
And if the ear and touch be true,  
It's the easiest thing in the world to do.  
—Arthur Macy.

### A COMMON STORY.

She was fairer than a lily,  
He was handsome, he was tall,  
But they both were very silly  
At the Rosedale's annual ball;  
For they sat among the flowers  
In a solitary place,  
And they flirted there for hours—  
As is frequently the case.

Then he came a fortnight after,  
And was snubbed by her mamma,  
And contemned with scornful laughter  
By her corpulent papa.  
But she met him at the portal,  
With a sweet, unhappy face,  
And they pledged a love immortal—  
As is frequently the case.

So they fled, and they were mated,  
And they took a little flat.  
But they might as well have waited,  
Or done better still than that;  
For they're quite too poor to mingle  
In the scenes they used to grace,  
And they wish that they were single—  
As is frequently the case!  
—Marston Moore.

### BRAZILIAN ZEBRAFISH.

A Real Novelty for Ladies Fond of Pretty Aquarium Pets.

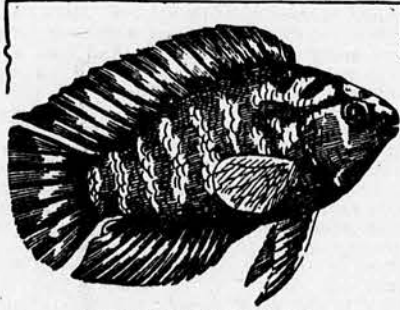
This new aquarium fish was first brought to Germany by an enthusiast a year ago and was successfully propagated last summer. We saw the original imported fish, with their fry. Our picture, which we reproduce from Natur und Haus, is a good representation.

The fish attains a size of about five inches in length by two inches in width. The general appearance is that of a sunfish; the ground color of the body, which is entirely covered with small scales similar in size to those of the Paradise fish, is a brassy yellow marked with a number of irregular vertical bars or stripes of black; the dorsal and anal fins are large and long, being composed of a great many rays of which about one-third are spinous; they are black in color; at times, however, when the fish is excited, the yellow of the body becomes brighter and runs in streaks into the black dorsal fin, making this appear as if it was a continuation of the body; the ventral fin is colorless and transparent; the caudal fin is rounded. The eyes are yellow, flashing like fire on some occasions, and reminding those of the moss bass.

The fish is very attractive, especially when excited; it reminds one of a herald of the middle ages, whose dress used to display the colors of their masters in stripes. At other times the fish will assume a very plain grayish color with only one irregular black spot on each side of the body, midways and near the ends of the dorsal and anal fins. Young specimens show these peculiar markings even more distinctly than the adults.

The habits of the zebrafish are very much like those of our moss bass; they are very pugnacious and display the same motions when attacking one another as the moss bass do, but their point of attack is the mouth, and if they succeed in grasping it, they hold firmly, like much fighting male Paradise fish do, until the weaker gives up. But although they fight a great deal we have not yet seen one that was seriously hurt. They seem to be on friendly terms again soon after.

Their breeding habits, too, are much like those of the sunfish family. They pair off during the summer and prepare a nest on the bottom of the tank, where



BRAZILIAN ZEBRAFISH.

the female deposits her eggs, which both guard. Four days after spawning the young hatch. These are as carefully guarded as the eggs were, and later on the fry are instructed for their future career by both parents, who swim about with them as a hen walks around with her chicks. We find that the zebrafish stand captivity well, immensely enjoying their meals, consisting of scraped raw beef or I. X. L. fish food. Their native home is La Plata valley. The South Americans call them "Chanchitos," which means "pig," either because in form they are somewhat like that animal or because they fight in a manner similar to young pigs. In Germany the name "chameleon fish" is proposed, owing to the ability of the fish to change its colors. This, however, we consider no denominative feature, as nearly all of our sunfishes, and also the Chinese Paradise fish, possess this ability, in cases even to a greater extent than the zebrafish does. We selected the latter name for them because we find that through their color and stripes this fish resembles a zebra more than anything else, especially when the fish are most brilliant in colors and the yellow appears in the dorsal fin, then even the markings of the mane of the zebra are represented.

### Rice Soup a la Creme.

A rice soup that is valuable in these high priced meat days is made without stock. Let two quarts of water, in which an onion has been sliced and a bunch of celery tops thrown, boil for an hour; remove the onion and leaves, and add a half cup of rice that has been carefully washed and looked over. Cook for three-quarters of an hour, stirring often, or until the rice is well swollen and tender. Just before serving beat up in the tureen itself the yolks of two eggs, with half a tumblerful of rich milk—cream is better—and a pinch of nutmeg, if liked. Pour the boiling soup over this mixture from a height, beating it still with a whisk, to mix all thoroughly, and serve with toast squares.

### How to Relieve Colic.

For relieving colic one eminent physician recommends simple bicarbonate of soda, of which one-half teaspoonful is to be dissolved in half a tumblerful of water, and a teaspoonful of the solution given to the infant every fifteen minutes. This, by the way, is a very good preventive of colic, and may be safely administered half a dozen times a day to children predisposed to the trouble. In addition to giving this simple medicine, the abdomen should be gently massaged with the hand, the movement being from right to left; or, if this fails to alleviate the distress, hot flannels may be applied to the stomach and bowels.

### How to Clean Nickel Ware.

The best cleaning compound for nickel ware is fifty parts of alcohol and one of sulphuric acid. The article to be cleaned is held in the solution five to fifteen seconds, after which it is washed with water, rinsed with alcohol and wiped dry with a clean rag. The dirtiest of nickel goods is said to come out with a bright, new look.

The shortest and surest way to live with honor in the world is to be in reality what we would appear to be.—Socrates.

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

# Royal Baking Powder

ABSOLUTELY PURE

### THE GIRL OF THIRTEEN.

Unless She Has Good Care She Will Make a Forlorn Woman.

The girl of thirteen is the future woman and a very important parcel of humanity, says the New York Sunday Advertiser. She is a child and just growing into womanhood, and this transition which, to grown-ups, means only a sudden shooting up beyond all bounds and a tendency to stooped shoulders, is much more to the girl who leaves childhood behind and is not yet a young lady. Fast growing is a very great drain on any child's strength, and as at thirteen she usually has considerable work at school, both mind and body are called upon to do double work. That is why she needs care.

Good food, rest and congenial company are some of the things which are necessary for the girl of thirteen. She should not have too much excitement, or books to read which tax her thoughts too much, as her mind develops only too quickly at this age, and everyday life and lessons are enough to occupy her. She should go to bed early and sleep ten hours. For breakfast she should eat strengthening, bone-making food, oatmeal, oranges, brown bread, eggs and milk. For her midday meal she should have something more sustaining than a bread-and-butter lunch, if she is to grow up into a strong woman. Hot soup and a chop and a baked potato every day for three months will make her stand up straighter than braces will.

She should have a walk in the open air every day; if she does not get this she will grow nervous and sleepless, have fantastic notions about an early grave and running away from home, or, worse still, grow sentimental and write morbid little verses and weep over the poor. These are all true symptoms of the girl of thirteen. She begins to think she is very old as soon as she gets into her teens, and the responsibilities affect her sensitive new mind to an appalling degree—if she is given the time to think of them.

### NEAT PARASOL CASE.

Just the Thing for Dressing-Room or Traveling Outfit.

This is a very handy case, either to put umbrellas in while traveling or to hang on the wall of a dressing-room to



keep them in. The foundation is unbleached linen, the back is cut 36 inches deep and 19 inches wide; the front is 25 inches deep, and 29 inches wide. The front is arranged in two box plaits, which form the pockets, the top of each of which is embroidered with a stripe in crewels or flax thread; a shorter stripe is worked between the pockets. The edges are sewn together, and a border of leaves is worked entirely round. The embroidery will look best worked with one color or shades of one color. A rosette of ribbon, with a pointed strap between them, is placed at each of the upper corners, and if the case is to be hung up a loop should be sewn under

each of the 'rosettes' by which to suspend it from hooks on the wall. When used for traveling the case is rolled up and tied round with ribbon, fastened in a bow.—St. Louis Republic.

### PIQUANT PEA SOUP.

Recommended as an Excellent Addition to the Home Menu.

A recipe for a pea soup which has a little different flavor from our everyday pea soup comes from India, where it is customary to use sharp, piquant flavorings. This soup may be recommended as an excellent addition to our home menu.

Put a pint of sound green peas to soak in a quart of water over night. In the morning drain them and add three pints of cold water and a bit of soda the size of a pea. Boil them very slowly until they are soft enough to press through a sieve. An ordinary flour sieve will do. Cut a small onion in bits and add two cloves of garlic, or use two onions if more convenient. Fry these in two tablespoonfuls of butter. Add six cloves and one bayleaf, and finally add the whole to the peas that have been strained through the sieve. Put in a tablespoonful of salt and a cup of canned tomatoes, or fresh ones in their season. Let the soup cook slowly for half an hour, when, if it is too thick for a soup, thin it with a little boiling water and let it cook ten minutes longer. At this time add a pinch of red pepper, a tablespoonful of butter and a cupful of squares of bread which have been fried golden-brown in butter.

This soup has an additional advantage of being comparatively inexpensive.—N. Y. Tribune.

### New Bread Pudding Recipe.

A new recipe for bread pudding is one worth adding to the housekeeper's note book. Soak one pint of fine crumbs in a pint of milk until soft, add three tablespoonfuls of cocoa dissolved in a little water, three well-beaten eggs, a half-cupful of granulated sugar, and another pint of milk. Set the pudding-dish in a pan of hot water and bake one hour. Whipped cream flavored with vanilla is very good with this pudding, or a sauce made from a scant cupful of sugar, a tablespoonful of corn starch and a cupful of water may be used. Cook the ingredients in a double boiler ten minutes, and just before serving add an ounce of butter and a half-teaspoonful of vanilla.—St. Louis Republic.

## ORGANS AND PIANOS

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Write for catalogue and prices.

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## FLORIDA— Oct. 15. EXCURSION

SPECIAL TRAIN. Cars start from Chicago, St. Paul, Omaha, Kansas City, Cleveland, New York, Indianapolis, St. Louis and Cincinnati, picking up passengers en route.

HOME-SEEKERS who contemplate moving..... will do well to confer with us. By joining a FARM, FIELD AND FIRESIDE colony you secure the advantages of good society, schools, churches, such as you are accustomed to, and many helpful conveniences not to be obtained in any other way, and what is equally good,

Land at About Half the Usual Prices.

Send for particulars of our colony plan and the excursion. CALIFORNIA EXCURSION, with special train, November 14. Address

Farm, Field and Fireside, Chicago, Ill. When you write mention Kansas Farmer.



## The Young Folks.

### THE OLD APPLE TREE.

I love to recall my childhood days,  
And the humble scenes that I loved so well;  
The rambling attic with corners dim  
And the air of secrets and "Don't you tell!"

The crooked stairs with the little nook,  
The place where we played at "Go to see,"  
The long, long path to the garden gate,  
And, better than all, the apple tree.

That dear old friend, in whose kindly lap  
I nursed my dollies with tender pride,  
And conned my lessons and read my tales,  
And in lieu of a pony played "go ride."

And e'en in childish sorrow and pain  
I fled to its tender soothing care,  
And sobbed my woe on its tender breast,  
The griefs that "were just too hard to bear."

Perhaps my memory plays me false  
And heightens the charms that it really had,  
But never since have I known a time  
When life has looked so supremely glad.

And the dear old apples though hard and green  
And full of knots as a fruit could be,  
And small and puny, are far more dear  
Than the famous apples of gold to me.  
—Good Housekeeping.

### YOU NEVER CAN TELL.

You never can tell when you send a word—  
Like an arrow shot from a bow  
By an archer blind—be it cruel or kind,  
Just where it will chance to go.  
It may pierce the breast of your dearest friend,

Tipped with its poison or balm;  
To a stranger's heart in life's great mart  
It may carry its pain or its calm.

You never can tell when you do an act  
Just what the result will be;  
But with every deed you are sowing a seed,

Though its harvest you may not see.  
Each kindly act is an acorn dropped  
In God's productive soil;  
Though you may not know, yet the tree  
shall grow  
And shelter the brows that toil.

You never can tell what your thoughts  
will do  
In bringing you hate or love;  
For thoughts are things, and their airy wings  
Are swifter than carrier doves.  
They follow the law of the universe—  
Each thing must create its kind;  
And they speed o'er the track to bring  
you back  
Whatever went out from your mind.  
—Ella Wheeler Wilcox.

### ANTS KILL REPTILES.

Armies of the Insects Attack and Vanquish Large Snakes.

That ants can actually kill snakes is a hard thing to believe. There is irrefutable evidence, however, that they do, and scientists have discovered that the snake has hardly a more dangerous enemy. The large red-brown forest ant is the sort that is the most fatal to the ophiidians, and a curious thing about the attack of these tiny creatures on this comparatively enormous reptile is that they kill it for food and not on account of any natural antipathy.

When some of the ants catch sight of a snake they arouse the whole community at once. In platoons and battalions the little fellows set upon the reptile, striking their nippers into its body and eyes at thousands of points at once. So rapidly and concertedly is this done that the snake has no chance at all of escaping. It is like a thousand electric needles in him at once. The snake soon becomes exhausted and dies ignominiously.

Then the ants set harder at work. This may seem a strange story, but it is true. They begin to tear off the flesh in small pieces, gradually stripping off the skin and working inside of it. Not until they have carried away everything except the bones and the skin itself do they leave it.—N. Y. World.

### Humming Birds and Flowers.

It has long been known that insects assist plants by carrying the fertilizing pollen from flower to flower, but the fact has only recently been prominently brought forward that humming birds are just as effective distributors of pollen as insects are. It has been shown that these little birds, which are as fond as bees of the honey of flowers, carry the pollen grains in great quantity, not only on their feathers but on their long bills also. Indeed, so well suited is the humming bird to do this work of distribution, without any intention of its own, that the question has been raised whether it may not be the most beneficent of all the unconscious friends that the flowers have in the animal world.

### THE AMERICAN BISON.

Only Two Hundred Wild Buffaloes Still Alive in the United States.

In a wild state, the American bison, or buffalo, is practically, though not quite wholly, extinct. At the present moment there are about 200 wild buffaloes alive and on foot in the United States. To obtain these high figures we include the 150 individuals that the white head hunters and red meat hunters have thus far left alive in the Yellowstone park, where the buffaloes are fondly supposed to be protected from slaughter. Besides these, there are only two other bunches; one of about 20 head in Lost park, Col., protected by state laws, and another, containing between 30 and 40 head, in Val Verde county, Tex., between Devil's river and the Rio Grande.

Four years ago there were over 300 head in the Yellowstone park, thriving and increasing quite satisfactorily. Through them we fondly hoped the species would yet be saved from absolute extinction. But, alas! we were reckoning without the poachers. Congress provides pay for just one solitary scout to guard in winter 3,575 square miles of rugged mountain country against the horde of lawless white men and Indians who surround the park on all sides, eager to kill the last buffalo! The poachers have been hard at work, and as a result our park herd has recently decreased more than one-half in number. It is a brutal, burning shame that formerly, through lack of congressional law adequately to punish such poachers as the wretch who was actually caught red-handed in January, 1894, while skinning seven dead buffaloes! and now, through lack of a paltry \$1,800 a year to pay four more scouts, the park buffaloes are all doomed to certain and speedy destruction.

Besides the places mentioned, there is only one other spot in all North America that contains wild buffaloes. Immediately southwestward of Great Slave lake there lies a vast wilderness



AN ANCIENT BISON.

of swamps and stunted pines, into which no white man has ever penetrated far, and where the red man still reigns supreme. It is bounded on the north by the Liard and Mackenzie rivers, on the east by the Slave river, on the south by the Peace river, and on the west by the Rocky mountains. Mr. Warburton Pike says it is now the greatest beaver country in the world, and that it also contains a few bands of the so-called wood buffalo. "Sometimes they are heard of at Forts Smith and Vermillion, sometimes at Fort St. John, on the Peace river, and occasionally at Fort Nelson, on the Liard; \* \* \* but it is impossible to say anything about their numbers." At all events, in February, 1800, Mr. Pike found eight buffaloes only four days' travel from Fort Resolution, on Great Slave lake, and succeeded in killing one. The Canadian authorities estimate the total number in that region at three hundred.—W. T. Hornaday, in St. Nicholas.

### Perplexed Without Cause.

A famous Chicago lawyer once had a singular case to settle. A doctor came to him in great distress. Two sisters, living in the same house, had babies of equal age and sex, who so resembled one another that their own mothers were unable to distinguish them when they were together; and it happened that by the carelessness of the nurses the children became mixed. How were the mothers to make sure that they received back their own infants? "But, perhaps," suggested the lawyer, "the children weren't changed at all." "Oh, but there's no doubt that they were

changed!" said the doctor. "Are you sure of it?" asked the lawyer. "Perfectly," was the reply. "Well, if that's the case," said the lawyer, "why don't you change them back again? I don't see any difficulty in the case."

### EVERYBODY LAUGHED.

Huge Crowd Amused by a Terrier and an Indestructible Rat.

A rat, a terrier and a small boy caused thousands of people to congregate on West Madison street about nine o'clock the other night, and it was not a real rat, either. The rat, which was a most natural-looking rubber affair, was connected with a long, thin pipe and a bulb. Every time the boy squeezed the bulb the rat would leap forward in a most lifelike manner and the ladies on the street would shriek with terror and gather up their skirts. This delighted the crowd, which surged down on the boy and the rat from every direction.

The fun was kept up for an hour or more, even the policeman on the beat stopping now and then for a good laugh. Suddenly, however, a sleek-looking rat terrier sprung through the crowd and made for his mortal enemy. Down he pounced. The boy gave the bulb a jab and the rat leaped about six feet. Again the dog made a spring. This time he caught the rat in his teeth and the pressure caused it to give out a most lifelike squeak, which delighted the dog and audience alike.

By this time the street was packed. Time after time the dog would shake the rat and put it down, only to see it leap again, to the wild delight of the crowd. For the first half hour it was mere play to the plucky little terrier, but after awhile things began to grow monotonous. The dog lay down for a rest and the rat jumped over him. This was too much for canine flesh and blood to stand; he leaped up again, and now the contest kept up until the dog fell from sheer exhaustion. Panting and with eyes protruding, he made a few more ineffectual snaps at the rubber rat, then turned over on his side and laid his head on the pavement. His owner worked his way through the crowd, picked up his pet in his arms, uttered a few remarks, and offered to lick the man who had killed his dog. The crowd jeered and dispersed, while the small boy strolled down the street in search of another ambitious rat terrier.—Chicago News.

According to a southern correspondent, a great, gaunt, colored man entered the express office in a small town and asked if there had been anything received for George Washington. The clerk gave him a knowing look, and said, sharply: "What game are you trying to work on me? Washington died long ago!" This is a companion to the story of the congressman who began an address by saying: "As Daniel Webster says in his great dictionary—" "It was Noah who wrote the dictionary," whispered a member at the next desk. "Noah?" replied the speaker, contemptuously. "Nonsense! Noah built the ark!"

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The greatest truths are the simplest, and so are the greatest men.—Hare.



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## PROF. SNOW'S REMEDY FOR CHINCH BUGS.

I would like to hear what the Kansas Farmer thinks about Prof. Snow's remedy for chinch bugs. A. E. CARNES, Rogers, Kas.

The Kansas Farmer has watched with interest the experiments with the white fungus infection, by the distribution of which Professor, now Chancellor Snow, of the State University, has sought to aid farmers in their struggle against this enemy. Whatever has been done and all that has been discovered in the course of these experiments has been promptly and faithfully given to the public in the published reports.

Careful readers of these reports have learned that (1) infectious diseases of the chinch bugs have been discovered. (2) The spores or germs, by which these diseases are communicated to well bugs have been clearly identified and have been greatly multiplied by careful culture. (3) The most destructive of these diseases has been communicated to the bugs in the field. (4) Some of the conditions necessary to the effectual destruction of bugs in the field and consequent protection of the crop have been ascertained and described. (5) It is clearly ascertained that the destructive disease may be made effectual if there is a suitable degree of moisture to favor the rapid propagation of the disease. (6) If diligently used on the first hatch of chinch bugs any season, the next hatch is not likely to be in sufficient numbers to do serious damage. If each hatch, large or small, be met with the disease, considerable injury is unlikely. (7) To be a full protection the disease must be applied to all fields in the vicinity, for, at a certain stage of development, the bugs travel. (8) The sufferer from chinch bugs does not usually become alarmed or think of applying a remedy until their numbers have become millions, and nothing but immediate destruction of the army of bugs can save the crop. The disease is communicated only after several hours' exposure and many may escape for several days if the weather be dry. (9) Chancellor Snow has rendered a valuable service. He has sought out and described methods by which crops may be protected from the ravages of chinch bugs. This is all that should be expected in the matter of a man of science. It remains for the State, counties, communities and individuals to apply the remedy, if they deem the crops to be protected worth the effort.

Further, the Kansas Farmer thinks this protection so important and the chances of making it effective through the use of the infection so favorable, that the matter ought to be taken in hand by every county board in the State, and every brood of bugs, however few in numbers, should be given the disease as soon as hatched, to the end that the next brood may be so few as to be harmless.

Pasteur, the leading bacteriologist of the world, died of paralysis in Paris, France, last Saturday evening. Perhaps no man of any age or time has done more than Pasteur to help people to successfully battle against the minute organisms of disease. His name will go down to posterity as that of a benefactor of his race.

## THE QUESTION OF WAGES.

It has long been the boast of patriotic orators in this country that laborers' wages were higher than in any other country, and whoever wanted to work could readily find the opportunity. There has been contention among political parties for the honor of having been the chief promoters of this enviable condition, and this contention has in measure prevented clear discernment. The vast extent of unoccupied land on which the laborer might locate and become his own employer and an independent producer, if wages threatened to go too low. This fact, together with the ample security afforded by good government to the pioneer and his possessions, doubtless in large measure accounts for the phenomenal good wages and ready employment noted.

While other reasons doubtless have contributed to the notable decline of recent years, in both wages and opportunities for service, the fact that the limit of free lands in the humid belt has been reached, is sufficient in itself to contribute to the apparent surplus of laborers and the consequent tending to lower wages.

It will not be forgotten that in this country increase of population, especially of wage-earners, results not alone from the excess of births over deaths, but also from immigration. The fact of higher wages and greater opportunities here has attracted vast numbers of those at the lower end of the scale of prosperity in every land in which became known the opportunity for better advantages here offered. Great as has been the immigration, a glance at wage-earning conditions in other countries can only result in surprise that the movement to our shores has not been of even greater magnitude.

A volume of United States Consular reports, published in September, 1895, gives tables of average wages for various classes of laborers in the principal countries of the world. These are too voluminous for reproduction in full here, but if we select as a representative kind of skilled labor that of the carpenter, we find his average weekly wages to be as follows in the several countries: Austria, \$5.10; Belgium, \$4.07; Bohemia, \$2.85; Brazil, \$7.13; China, \$2.15; Colombia, \$7.74; Denmark, \$7; England, \$7.66; France, \$6.20; Germany, \$4.11; Holland, \$4.80; Ireland, \$6.97; Italy, \$4; Japan, \$1.56; New South Wales, \$14.15; New Zealand, \$14.58; Ontario, \$11.60; Persia, \$2.40; Peru, \$9.00; Russia, \$3.30; Scotland, \$6.91; Spain, \$3.90; Switzerland, \$4.74; Venezuela, \$9.84; Victoria, \$14.60; United States, \$15.25. It will be observed that the countries in which wages approach those paid in the United States are chiefly the colonies of Great Britain, in which the conditions of surplus land and stable and efficient government have been similar to those in this country. But in other countries, which, in many respects, have made great advancement, wages are far lower, in many cases only a small fraction of those in the United States.

The ports of this country are open to the unrestricted influx of the cheap laborers of all these countries except China. True, they may not be imported under contract, but if they deem the chances for higher wages in this country sufficient inducement to come and compete with those now here for positions, there is no legal obstacle to their coming. During recent years the migratory instinct of humanity has suffered no diminution, and facilities for migration have multiplied, while the cost has been diminished. There is apparent every prospect for continually augmenting competition for positions of employment in all countries where high wages are paid and a gradual equalization throughout the world. The tendency in this direction may be contended against by all the powers of combination and by such legislation as organized labor may secure in opposition to the capitalized interests whose profits are to be found in cheapened production, but such contention must be largely in the nature of a fight against the inevitable.

The efforts heretofore made to promote the wage rate in this country have had, among other effects, the not entirely desirable one of promoting the disposition to seek wage employment. The apparent certainty of competence without much responsibility has seemed to millions to contrast favorably with the risks and greater cares being one's own employer. The political parties have each claimed that its policies would conduce to yet more liberal wages for labor and to the further bettering of the condition of the em-

weighing prospects for the future, has naturally yielded to the temptation to surrender a portion of his independence and choose what appeared to be a "sure thing," rather than by frugality accumulate a small capital and assume the risks of business. By reason of this easy surrender the consolidation of properties and industries in the hands of the comparatively few aggressive and acquisitive has been rapidly accomplished. The spirit of pride of ownership has become extinct, or at least dormant to an extent unknown a generation ago. The sons of parents who would scarcely associate with a hireling are eager for a clerkship or other employment at wages.

But the tendency to equalization of wage conditions in this country with those of the wage-earning world, a tendency which has set in with apparently resistless force, should awaken anew the disposition of American freemen to take upon themselves the responsibility of their own employment and the desire to acquire and to hold a part of the possessions necessary to make one an employer.

The lowering of wages means the cheapening of the cost of production and the lowering of prices of all products except those of the farm. Prices of farm products may be kept up by the gradual limitation of the supply, owing to the lack of opportunity to extend areas under cultivation to correspond with increase of population. The employer who can, by other economies than that of wages, reduce his cost of production, will be spared the brunt of the conflict which is sure to ensue on the wage question, and will force upon his less economical rival the expense and the opprobrium to the contest.

The farmer's boy who has wished that he could find some means to get away from the farm may well pause and consider what is before the contestants for position of salary or wages. The small excitements and doubtful pleasures of the town, the partial exemption from care and the prospect of money received as fast as earned, are poor compensation for the life of servitude, are a poor exchange for the ability to be independent and the opportunity to develop one's powers of aggressiveness and manhood.

## BET SUGAR IN NEBRASKA.

A representative of the Havermeier Sugar Companies (sugar trust) was in Topeka last week, and in conversation with the writer gave some valuable information as to the progress of the beet sugar industry in Nebraska. The Nebraska sugar companies, whatever their local names, are owned and operated by the Havermeier interests. The factory at Norfolk is the largest and most modern. It is now working up beets at the rate of 1,000 tons every three days and is turning out granulated sugar at a profit, even at present low prices. The fact of the satisfactory condition of the industry is easily inferable from the fact that the Havermeiers are this season operating the Grand Island factory, which was idle last year, and especially from the fact that they are preparing to build at least one new factory, to be in readiness to commence operations with the opening of the season of 1896.

The farmers who furnish beets for the Norfolk factory have 5,000 acres. The average yield it is thought will be twelve tons per acre, and the price paid is \$5 per ton. (Placing the average yield at ten tons, it will be seen that the cash to be distributed in that vicinity for beets will be at least \$250,000, and that the land is yielding \$50 per acre. A flat price of \$5 per ton is guaranteed for all beets cultivated according to the directions of the company, experience having shown that such cultivation is sure to result in a sugar content high enough to be worth this price.

The representative referred to, who is one of the company's scientists, sees no reason why equally good beets may not as well be produced in Kansas as in Nebraska, and thinks the experiments thus far made in this State are not conclusive to the contrary.

As a straw showing the direction of the wind, in the determination of the size of the farm, it may be mentioned that on one farm in northeastern Colorado 11,000 acres of alfalfa under irrigation will constitute a leading feature. This is to be devoted to the production of beef.

A correspondent asks for the experience of practical farmers as to the relative feeding value of Kaffir corn and Indian corn.

## AN IRRIGATION HAND-BOOK.

One of the most useful books recently from the press, is "Irrigation Farming," a hand-book for the practical application of water in the production of crops, by Lute Wilcox, editor of the Denver Field and Farm. Beginning with a brief history of irrigation, and following with a chapter on the advantages of irrigation, the book comes quickly to practical details. The relation of soils to irrigation is considered in a common-sense way. Directions for the treatment of alkali are such as are suggested by experience. It is noticeable that the irrigator is able to cure the alkali spots in his land. Water supply is treated in a general way and the reader is sure to wish that it had been possible to give ten times the information that is anywhere to be found on this important subject. The chapter on canal construction contains some good points, but is perhaps the least interesting chapter to the Kansas irrigator, from the fact that, in general, he will have but small ditches to construct. On reservoirs and ponds the book is more applicable in Colorado than in Kansas. The chapter on pipes for irrigation purposes is confined almost exclusively to descriptions of well-known forms of pipes, and while useful to the general user, is less exhaustive than the irrigation engineer could wish. Flumes will come in the course of development in all irrigated countries. The discussion in the book under review will be found useful. Duty and measurement of water are treated in a way to give a good deal of valuable information to beginners.

But the most valuable part of the book begins with the eleventh chapter, which treats of methods of applying water. These are well illustrated and clearly explained. The general discussion of this subject is followed by a chapter on "Irrigation of Field Crops," including in detail wheat, oats, barley, rye, Egyptian corn, beans, peas, rice, flax, hemp, cotton, hops, tobacco, potatoes, sugar beets, turnips, beets and carrots, canals, and meadows. "Irrigation of the Garden" has a chapter in which the treatment of every kind of garden crop is given. Irrigation for the orchard has a chapter, and another chapter is given to the vineyard and small fruits. In all of these the best practice is described, making the book indispensable to every farmer or gardener who uses water, even in a small way.

"All About Alfalfa" is a valuable chapter.

"Windmills and Pumps," "Devices and Appliances," "Sub-irrigation and Subsoiling," and "The Common Law of Irrigation" conclude the book, with a chapter devoted to each.

This is the first really practical treatise on irrigation to make its appearance, and, while later editions will doubtless be improvements over the present work, this book of 300 pages should go at once into the hands of every irrigator in the country.

## Grain Moth.

Editor Kansas Farmer:—A great deal of wheat is damaged in this county by the heavy rains since harvest, and the weevil are in it. What can be done to get rid of them? Answer through the Kansas Farmer. A. J. RYMPH, Harper, Kas.

The best thing to be done is to thresh at once and treat the wheat in bin with carbon bisulphide. This is indeed the only suggested plan for heading off the "weevil," by which I take it your correspondent means the grain moth.

E. A. POPENOE,  
State Agricultural College.

## Kansas City--Cincinnati.

(Wabash and B. & O. S. W.)

A vestibule sleeping car leaves Kansas City Union depot every day at 6:20 p. m., via the Wabash railroad, running through to Cincinnati, O., without change, via B. & O. S. W. railroad from St. Louis, arriving in Cincinnati at 11:30 next morning, making the run in seventeen hours and ten minutes, the fastest time ever made. On this same train are through sleepers to Washington, D. C., Baltimore and Philadelphia, and passengers for points east of Cincinnati can step from the Kansas City-Cincinnati sleeper into the through sleepers any time after leaving St. Louis. Passengers for Louisville and points South leave the sleeper at North Vernon at 9:34 a. m.

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## FREE MEDICAL BOOKS.

(Ell Perkins.)

Stafford.—The past week was favora-

Wallace.—Threshing is progressing well; alfalfa seed crop of poor quality; a good corn crop has been cut; no wheat

(Ell Perkins.)



## Horticulture.

### How Much Land is Devoted to Fruit Culture in the United States?

While there is so much said about the extent of fruit culture in this country, my opinion is that the reader will be surprised to learn how small is the proportion of American soil devoted to this industry. In order to give a faint idea, I have drawn a map, which is given herewith, in which I have attempted to mark the area of land in the United States devoted to fruit culture, as well as to the leading staples, waste land, etc. I have not attempted to be exact, knowing that it was practically impossible to arrive at any absolute data on the subject.

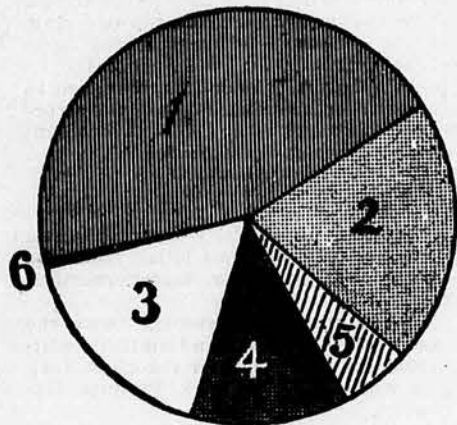
In constructing this map I find it difficult to mark a strip sufficiently small to indicate the territory devoted to fruit culture. The strip shown on the map as that devoted to fruits is too large, but it is the nearest approach that the artist could construct.

Our readers will be surprised at the extent of waste land as shown in space marked No. 1 on the map, and yet there is no doubt that as large a proportion of the United States is covered by forests, mountains, desert, swamps, rocky and other lands, which come under the head of waste lands, although forests are not properly such.

No. 2 is devoted to the various spring crops, such as oats, barley, flax, buckwheat, and other crops than those named on the map.

No. 3 is intended to indicate the proportion of land devoted to wheat culture. While wheat is considered our leading staple, corn very closely rivals it, if indeed the corn crop should not prove to be quite as valuable as the wheat crop.

No. 4 is intended to represent the amount of land in this country devoted



to corn-growing. One reason why corn does not figure so extensively in our statisticians' reports is that so large a quantity is consumed on the farm.

No. 5 represents the amount of land in the United States devoted to growing cotton. I suspect that possibly too much territory is allotted to this staple.

The smallest division of all, that dark space, which is but little larger than the lines separating the various staples from the others, is intended to represent the amount of land in the United States devoted to fruit culture. This shows at a glance that fruit culture in this country is in its infancy, for surely a land famous the world over for its success in every line of fruit culture, both north and south, east and west, the amount of land occupied by this industry is insignificant. It will need no prophet to foretell that in the years to come a much larger area in this country is to be devoted to fruit. But you ask, "What are we to do with it?" My reply is, that in the first place, our population is increasing largely, and this will be one avenue for consumption; in the second place, our people will be led to consume much larger quantities as prices get within their reach; in the third place, we will adopt methods of canning and preserving not now known or not now practiced, by which our fruits can be consumed in every country in the world. At present the United States is supplied with dried fruits, such as raisins, figs, currants, prunes, largely from other countries. We are also importing largely lemons, oranges, pineapples, bananas, and other tropical fruits.

If the map illustrates the small measure of attention which fruit-growing is receiving at the present time in this country, as compared with what it might, or what it will, the object of the writer will have been attained.—Green's Fruit Grower.

They are the weakest, however strong, who have no faith in themselves or their powers.—Bovee.

### Tent Caterpillars.

Editor Kansas Farmer:—The discussion in the paper about the web-worm reminds me to speak about the "tent caterpillar," that was so destructive to the fruit trees in some places some twenty-five years ago. The people not understanding their nature, or the damage they would do, let them increase until it took immense labor to destroy them.

Total annihilation of every caterpillar, whenever found, is the only sure remedy. Having been in Kansas nineteen years, I saw the first nests of them this year—one on an apple tree and one on a cherry tree. It being convenient, the limbs on which they were "tented" were sawed off and burned. That cannot always be done, but some way to destroy every one of them should be devised, for one hour's work on the first nest will save days' work next year. If any reader of the Farmer knows of any he should lose no time in their destruction, and if they have passed into the chrysalis state, look for eggs in winter or early spring, when they can be destroyed. They are of a brown color, in clusters, and are gummed to or near the end of small limbs. "Eternal vigilance" is the price we have to pay for fruit. AUNT POLLY.

### The White Elm.

Editor Kansas Farmer:—For ornamental planting in Kansas there is no tree that surpasses the white elm. It is perfectly hardy, standing all the peculiar weather prevailing in this region. It is, under most circumstances, a fast grower. Notwithstanding the general impression that the tree grows very slowly, any one who will take the trouble to notice some of the beautiful streets of Topeka, lined for miles with well-developed specimens, giving twice the amount of shade that other trees of same size trunk give, will be thoroughly convinced that the tree grows well or time flies very fast.

After the elm is once started it grows beautifully, sending out its long, spreading limbs where they will do the most good for the coming season. They should be given plenty of room. Too many people plant them just twice as close as they should be. The long, reaching limbs and general spreading habit of the tree makes plenty of room a necessity for a proper development. By planting close together, they grow straight up, making tall, slender trees, with a correspondingly small top.

I have a queer specimen, five years old, from seed. When the tree was one year old, I moved it from its birthplace. My experience in a financial way at that locality was not pleasant, so I thought I would take up the small tree (only three feet high) and move it to my present location as a remembrance of the old place. We planted it in the back yard, where it could be seen from the dining-room window. It has grown beautifully, is thirteen feet high and has an angular top, spreading ten feet. As yet, there is not shade, but the outline for a beautiful tree could not be improved on. I have given it only fair care, and have not trimmed one single branch but shall do so in the near future.

The cost of young elm trees should be only the digging, etc., as they come up in large numbers near seed-bearing trees. Take them when from three to six feet high. The trouble of transplanting does not amount to much. Nursery-grown trees can be got at a very low price. GEO. W. TINCER, Topeka, Kas.

### Thayer's Berry Bulletin for October.

Winter protection is an absolute necessity for growing small fruits successfully in a northern climate. It should be practiced in every locality where the temperature reaches zero or below. With the high cultivation now practiced, a large and tender growth is stimulated; hence the greater necessity to maintain as uniform a temperature as possible throughout the winter. Even in localities where plants show no injury, and among those considered most hardy, the vitality is often affected, and the succeeding crop very much reduced.

The best winter protection for blackberries, raspberries and grapes consists in laying them down and covering lightly with dirt. All old canes and weak new growth should be cut out and burned soon after fruiting, leaving only strong, vigorous plants. If plants have been well mulched in summer with green clover, clean straw or coarse manure, as they should be, less dirt is required by using this mulching.

In laying plants down (the rows running north and south), commence at the north end, remove the dirt from

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the north side of the hill about four inches deep; gather the branches in close form with a wide fork, raising it toward the top of the bush and press gently to the north, at the same time placing the foot firmly on the base of the hill, and press hard toward the north. If the ground is hard, or bushes old, a second man may use a potato-fork instead of the foot, inserting same deeply, close to south side of hill, and press over slowly, bending the bush until nearly flat on the ground. The bush is then held down with a wide fork until properly covered. The top of succeeding hill should rest near the base of preceding hill, thus making the continuous covering. This process is an important one, but is easily acquired with a little practice. In the spring, remove the dirt carefully with a fork, and slowly raise the bush. With hardy varieties, and in mild winters, sufficient protection may be had by laying down and covering the tips only. Grapes, being more flexible, are laid down without removal of dirt near the vine.

There is no more important work on the fruit farm, or garden, than winter protection, and there is no work more generally neglected. Let it be done thoroughly, after frosts have come, and before winter sets in.

Strawberries grow rapidly in October, and make many weak plants. Remove all runners starting this month, allowing four or five inches square space for each plant. This is necessary for best fruit. M. A. THAYER, Sparta, Wis.

### Larger Peaches.

Mr. J. H. Hale, one of the greatest peach-growers of the United States, in speaking of the manner in which he makes a success of the business, is reported as saying that one must thin by hand. He puts stepladder under the trees and puts boys on them whose bump of destructiveness is large, and tells them to go ahead. He begins when the peaches are three-quarters of an inch in diameter, and takes everything that is curculio-stung and diseased. These he carts away and burns. The rest that are taken off are dropped on the ground and left there.

In future, he says, three or four-year-old peach trees shall not bear over 250 peaches; four or five-year-old trees not over 300, and full-grown trees not over 500. That means six inches apart; 500 peaches on a tree will make six or eight baskets of fancy fruit. Three thousand peaches to a tree won't make more, or sell for more money, and the trees are ruined.

Peach trees are planted on good ordinary corn or wheat land in a fair state of fertility. The holes for the trees are dug about twice as large as necessary to receive the roots and a big handful of fine ground bone is scattered at the bottom of the hole and two or

three more on the dirt, and that is worked in around the roots at the time the tree is planted. Then is put on muriate of potash. The next year is broadcasted from 1,000 to 1,500 pounds per acre of fine ground bone and from 400 to 800 pounds of muriate of potash, or its equivalent, and this is kept up every year whether the trees bear or not. "It is pretty liberal feeding, but it pays to be liberal with trees," says Mr. Hale.

### Winter Wheat in Ontario.

The Ontario Experiment Station gives the following conclusions from its experiments in growing winter wheat:

1. The average results of winter-wheat growing on the experimental plots for six years in succession are as follows: Weight of grain per measured bushel, 60.6 lbs.; yield of straw per acre, 2.5 tons, and yield of grain per acre 38.2 bushels.

2. Dawson's Golden Chaff gave the largest average yield of grain per acre among fifty-three varieties of winter wheat grown at the Ontario Agricultural college for four years in succession; also among nine leading varieties tested over Ontario in 1894, and among eleven leading varieties tested over Ontario in 1893.

3. The varieties which possessed the stiffest straw among fifty-three kinds of winter wheat grown for four years in succession, were Dawson's Golden Chaff, American Bronze, Fultz, Velvet Chaff and Red Russian.

4. The varieties of winter wheat which proved the hardest in 1895, among one hundred and two varieties tested, were Dawson's Golden Chaff, Stewart's Champion, Siberian, Jones' Square Head, Turkish Red and McPherson.

5. When winter wheat was sown later than September 9, the crop was much poorer than when the seeding took place on or before that date.

6. In 1895, the varieties of winter wheat possessing bald heads and white grain gave an average of 4.3 bushels of grain per acre more than the varieties possessing bearded heads and red grain, but in average weight per measured bushel the latter surpassed the former by 1.3 pounds.

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

W. & T. TRUAX, Wholesale Druggists, Toledo, O. W. & T. KINMAN & MARVIN, Wholesale Druggists, Toledo, O.

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

ESTABLISHED IN 1865.

## Hart Pioneer Nurseries

— FORT SCOTT, KANSAS. —

W. F. SCHELL, Secretary and Manager.

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Five hundred and sixty acres in nursery and 240 acres in bearing orchard. Extensive growers for the wholesale and retail trade. All kinds of nursery stock for sale. Write and obtain our prices before placing your order elsewhere. Unequaled railroad facilities. No transfer or exposure of stock. We take up, pack and ship from the same grounds. SPECIAL PRICES on large orders and carload lots. We solicit correspondence and invite inspection of our stock.

RELIABLE AGENTS WANTED.



## In the Dairy.

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

### A Tale of Two Cows.

"Where am I at, who made me, and what am I good for? Is what I wish some one would let me know," said a cross-bred cow as she studied the thoroughbred Short-horns, standing under the walnut trees trying to swish the horn-flies off their backs. "I ain't as good lookin' as they are by a long shot. My horns are as ugly as sin and turn up in a most aggravating way; they are neither good for looks nor for hookin'. They tell me I have a beastly mixture of colors, neither black nor red nor white nor roan, nor a decent mixture, even, and I heard one fellow say, as he looked us all over, that I was neither fish, nor flesh, nor good red herring, whatever that may mean. The butcher says I am too shelly. The boss says I am N. G., which I suppose means no good. The madam says my milk is as blue as an indigo-bag and fit only to sell to town people. What hurts me most is that the calf-buyer threw out my steer calf last year, saying it would never pay for its feed, and took all the rest. To me he was the dearest calf in the whole lot. I eat just as much as any of them and more, too, and why it don't do me any good, and why I can't please the boss or the madam, is more than I can tell."

"The trouble with you," said Old Brindle, the family milk cow and wet nurse to the entire family, as she tried her horn in the latch of the gate that led to the garden and seemed to be studying the combination, "is that you are an experiment in cross-breeding, and so have your dam and granddam been. You are like Richard the Third, 'Curtailed of fair proportion, Cheated of feature by dissembling Nature, Deformed, unfinished, sent before your time'."

Into this breathing world, scarce half made up, And that so lamely and unfashionable That dogs bark at you."

"That's what's the matter with you. I ain't much on pedigree. I ain't got much to brag of, in fact, like old Melchizedek, I ain't got any at all. I am just a cow, that's all. I hold my situation because I am a good milker and know how to rustle for myself. I like pedigree and blooded stock when they are straight and not all mixed up. Strange bloods always fight in cows' veins and when they are about even matched they make a bad mess of it. I knew your granddam well. She was a Short-horn and cost \$500. She gave lots of milk, and it was taken to raise this family on; but the madam said she was no good for cream and they took mine instead. Bill Jones said, one day when he was helpin' thresh, that Jerseys gave one-third cream, and so the boss took her over to Jones' and the next year she had a Jersey heifer calf that was to give as much milk as her dam and as rich as a Jersey. She was experiment No. 1. She didn't give much milk, but it was fairly good, and the boss said he would try again, and that a dip of the Holstein would make the next calf all right. You are that calf. That's what makes you shelly and a mixture of all colors. There's good blood in you, in fact it is all good, but of too many kinds and they are all fightin' each other, and the result is you've got scrub horns, because the bloods couldn't agree as to their size or shape, and so the old scrub blood slipped in and made the horns. They fought over colors and that's why you are so badly mixed up. They failed to make you either a milk cow or a beef cow. You're experiment No. 2 and a failure. You are not hardy and you're not pretty; you're not a good feeder nor a good milker, and you haven't the 'get there, Eli.' You can't open gates and you can't boss this ranch the way I can. You wasn't made right to begin with. It ain't your fault. The boss is to blame. If he had known half as much as he thought he did, he wouldn't have made the experiment. I would like to be a Short-horn myself, because I'd be better lookin'. I wouldn't mind bein' a Jersey, because I'd be petted and wouldn't need to open gates. I'd like to be a big Holstein; but if I can't be either I'd rather be a scrub, leastwise I'm thankful that I haven't any different bloods fightin' in my veins."

"I've got the combination of this gate now, and if you'll stay by me next Sabbath when they are all gone to meetin', we'll have some nice new corn and things, and the boss will be none the wiser. But mind; mum's the word. It's not safe to know too much about this ranch. The boss thinks he knows

it all, and what he don't know about heredity isn't worth knowing."—Creamery Gazette.

### Quality of Butter.

One of the worst difficulties to overcome at the outset is to convince the maker that the butter they are making and selling at 10 or 12 cents a pound is not equal in quality to that selling at 25 and 30 cents. Once thoroughly do away with this prejudice that one's butter is as good as another's and a long step toward improvement has been made. It would seem that the fact that one sells readily at a good price while the other is difficult to sell even at a low price, should be sufficient evidence to start an investigation as to reason, and once thoroughly interested in knowing the reason why some butter sells so much better than others, it is easy to get starters to follow improved methods. It does not require peculiar conditions to make good butter.

### Dairy Yields.

It is always a pleasure to us to note the fact that this or that dairyman has reached the three-hundred-pound mark. Mr. E. R. Towne, living in Vermont, reports to Hoard's Dairyman that he has milked, during the year ending May 1, 1895, thirty-five cows and heifers, Jerseys and high grades, from which he has sold milk which made 10,638.34 pounds of butter. Good for Mr. Towne! They had grass alone in the summer and in addition to the pasture consumed eight acres of crimson clover between July 20 and September 1. He began feeding green corn at the latter date and gave about all they would eat of green corn and corn silage until May 1. He reports that he had some cows that made 600 pounds of butter, but the average was pulled down by good cows which failed to come up to the standard of the year before and five heifers which failed to come up to the expectations.

### Dairy Notes.

A calf from a thoroughbred bull is worth \$10 a year more than a calf from a scrub bull.

Do you raise calves from your best cows only? If your best cows make \$10 a year more than your poorest cows this is 5 per cent. interest on \$200.

Exposure to cold fall rains and chilly nights will cause scours in calves. The calves should be provided with a comfortable, well-bedded shed in which to sleep.

Dairy Commissioner Boardman says there is but one dealer in Iowa who has taken out a license to sell oleomargarine. A vigorous enforcement of the law was all that was necessary to clean them out.

Nothing is more helpful in allaying inflammation in the udder than frequent bathing with hot water, as hot as can be borne to the hand. If the udder is seriously inflamed steam it and apply flannel dipped in hot water.

The price a creamery pays for milk depends in a large measure upon the care taken of it by the patrons. If the milk reaches the creamery sweet and in good condition good butter can be made from it. The butter sells at a good price and the creamery can pay a fair price for the milk.

Prof. Wilson, of the Iowa Agricultural college, is growing four or five different crops for feeding to dairy cows this winter and has outlined a very elaborate series of experiments along dairy lines. The work will be mainly for the purpose of determining the effect of different foods on the quality of butter.

### What a Woman Can Do.

I want my lady friends to know of the new field now open for them. In the past six months we have made a profit of \$907.02 after paying all expenses. All our sales have been made at home, not having canvassed any. My official duties calling me away most of the time, I left the Dish Washer business in my wife's control with the above results. The business is rapidly increasing, and will continue to grow until every family has a Perfection Dish Washer. Not a day passes but we sell one or two, and some days fifteen or twenty dish-washers. It's easy selling what everybody wants to buy. You can wash and dry the dishes perfectly in two minutes. For full particulars address the Perfection Mfg. Co., Drawer a-3, Englewood, Ill. Get a sample washer and you can't help but make money. They only cost \$5. You may just as well be making \$5 a day as to be doing nothing.

**FARM CREAM SEPARATORS.**  
Power and Hand. Send for Catalogue.  
P. M. Sharples, West Chester, Pa., Elgin, Ill.

### Publications of United States Department of Agriculture for August.

**NOTE.**—The Department has no list to whom all its publications are sent. The Monthly List of Publications will be mailed to all applicants, from which they may select only such reports and bulletins as are likely to be of interest to them, which will be mailed to their address on receipt of their application to the Secretary of Agriculture, Washington, D. C., except for the maps and bulletins of the Weather Bureau; requests for these should be directed to the Chief of that Bureau. The serial publications of the Department are not for general distribution. All requests for the same are referred to the Division whence the publication emanates, and applicants will be instructed how to secure regularly the serial desired.

**Production and Price of Cotton for One Hundred Years.** By James L. Watkins, Special Agent.

**Monthly Crop Report—August, 1895.** There is appended to a part of the edition of the above report the transportation rates, as required by law, together with certain railroad and transportation statistics.

**Historical and Technical Papers on Road Building in the United States.** Compiled under the direction of Roy Stone, Special Agent and Engineer.

**Preliminary Report on the Food of Woodpeckers.** By F. E. L. Beal, Assistant Ornithologist. **The Tongues of Woodpeckers.** By F. A. Lucas, Curator Department of Comparative Anatomy, U. S. National Museum.

**The Geographic Distribution of Animals and Plants in North America.** By C. Hart Merriam, Chief of the Division of Ornithology.

**The World's Market for American Products.**—Great Britain and Ireland. Imports and Exports for 1893 and 1894.

**A Report on the Cultivation of Ramie in the United States.** By Chas. Richards Dodge, Special Agent. This bulletin also contains statements concerning the practice in foreign countries, cost of cultivation and percentages of yield, the machine question, and preparation of the fibre for manufacture.

**Grape Diseases on the Pacific Coast.** By Newton B. Pierce, Division of Vegetable Physiology and Pathology. **Alfalfa or Lucern.** By Jared G. Smith, Assistant Agrostologist.

**Souring of Milk and Other Changes in Milk Products.**

**The Grain Smuts; Their Cause and Prevention.** By Walter T. Swingle, Assistant, Division of Vegetable Physiology and Pathology.

**The Federal Meat Inspection.** By D. E. Salmon, Chief of Bureau of Animal Industry.

**The Dairy Herd: Its Formation and Management.** By Henry E. Alvord.

**The Pasteurization and Sterilization of Milk.** By E. A. de Schweinitz, Biochemic Laboratory, Bureau of Animal Industry.

**Dairy Bacteriology.** By H. W. Conn, Professor of Biology in Wesleyan University.

**Rules and Regulations Governing the Operations of the Bureau of Animal Industry; also the Acts of Congress Under Which They are Made.** By D. E. Salmon, Chief of the Bureau of Animal Industry.

**Mineral Phosphates as Fertilizers.** By H. W. Wiley, Chemist.

**Some Scale Insects of the Orchard.** By L. O. Howard, Entomologist.

**The More Important Insects Injurious to Stored Grain.** By F. H. Chittenden, Assistant Entomologist.

**Insect Life, Vol. VII, No. 5.** (Not for general distribution.)

**A Note on Experimental Grass Gardens.** By Jared G. Smith, Acting Agrostologist.

**Grasses as Sand and Soil Binders.** By F. Lamson-Scribner, Agrostologist.

**Education and Research in Agriculture in the United States.** By A. C. True, Director of the Office of Experiment Stations.

**Best Roads for Farms and Farming Districts.** By Roy Stone, Special Agent and Engineer.

**Library Bulletin No. 7.** Accessions to the Department Library, April-June, 1895.

**What Meteorology is Doing for the Farmer.** By Mark W. Harrington, Chief of the Weather Bureau.

**Instructions to Observers and Code for Enciphering Reports at Cotton-Region and Sugar and Rice Stations of the Weather Bureau.** (Not for general distribution.)

**Monthly Weather Review.** Annual Summary for 1894.

**Monthly Weather Review—February, 1895.**

**Charts of the Weather Bureau.** Weather Crop Bulletin (series of 1895), reporting temperature and rainfalls with special reference to their effect on crops. (Nos. 21, 22, 23 and 24 for the weeks ending August 5, 12, 19 and 26. Semi-daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

### REPRINTS.

**The World's Markets for American Products.**—The German Empire. This bulletin is the second of a series designed to show the world's markets for American products to all those who are sufficiently interested in increasing the demand therefor in foreign lands.

**The Journal of Mycology, Vol. VII, No. 1.** (Not for general distribution.)

**Spraying for Fungus Diseases of the Apple, Pear and Other Fruits,** with a special consideration of the subject in its relation to the public health.

**The World's Markets for American Products.** Great Britain and Ireland. This bulletin is the first of a series designed to show the world's markets for American products to all those who are sufficiently interested in increasing the demand therefor in foreign lands.

If your child is puny, fretful, troubled with glandular swellings, inflamed eyes, or sores on the head, face, or body, a course of Ayer's Sarsaparilla is needed to expel the scrofulous humors from the blood. The sooner you begin to give this medicine the better.

Any one may do a casual act of good-nature; but a continuation of them shows it a part of the temperament.—Sterne.



If you have **FIVE** or more Cows a Cream Separator will save its cost each year of use. Beware of imitating and infringing machines.

Send for new 1895 Catalogue.

**The DeLaval Separator Co.**

Branch Offices: General Offices:  
ELGIN, ILL. 74 CORTLANDT ST., NEW YORK.

**UR** invited to send for my latest price list of small fruits. Half million strawberry plants, 300,000 Progress, Kansas and Queen of West raspberry plants. B. F. Smith, Box 6, Lawrence, Kas. Mention this paper.

**A. H. GRIESE, Prop'r Kansas Home Nurseries, Lawrence, Kas.,** grows trees for commercial and family orchards—the Kansas Raspberry, Blackberries, standard and new Strawberries—also shade and evergreen trees adapted to the West.

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**WILLIS NURSERIES.**

Offers for fall of 1895 large stock, best assortment. Prices low. Stock and packing the best. We should be glad to employ a few reliable salesmen. Address: A. WILLIS, Ottawa, Kansas.

[When writing mention KANSAS FARMER.]

**Wanted, an Idea.** Who can think of some simple thing to patent?

Protect your ideas; they may bring you wealth. Write JOHN WEDDERBURN & CO., Patent Attorneys, Washington, D. C., for their \$1,800 prize offer.

**The Western Trail**

is published quarterly by the Chicago, Rock Island & Pacific Railway.

It tells how to get a farm in the West, and it will be sent to you gratis for one year. Send name and address to "Editor Western Trail, Chicago," and receive it one year free.

JOHN SEBASTIAN, G. P. A.

**Kansas Tannery.**

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Does a general tanning business, including robes, rugs, etc. Tanning Galloway hides for robes a specialty. Fir t-class work, reasonable prices. All kinds of leather in stock—best quality. Have you any oak bark? Good prices paid for it. Write me.

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**CALIFORNIA COLONY.**

Desirable families only; small capital necessary; five to forty acres in each farm; one acre keeps a cow and calf the entire year; poultry profitable; all kinds of fruit; vegetables planted and harvested 365 days in the year; perfect irrigation; no malaria; 150 miles from San Francisco; schools, etc.; over 500 people now settled there; fastest growing colony in California.

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**RANCH FOR SALE.**

**TEXAS RANCH,** near San Antonio, with cattle and horses. Ten thousand acres on Blanco river, Blanco and Kendall counties. Abundance of water, timber and grass; mostly fenced. Good house and ranch buildings. Everything in perfect order, with 250 horses, 100 cattle, including several fine Jersey and Polled Angus cattle. Land \$5 per acre, cattle and horses at market value. Would take some trade if unincumbered. Other ranches as low as \$1 per acre. JAY E. ADAMS, Owner, San Antonio, Texas.

**A NEW BOOK FREE**

It has 128 pages, is printed on fine book paper, it has hundreds of illustrations—wood cuts, zinc etchings. Its reading matter is interesting, as much so for a man as a woman, and the children also are not neglected.

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## The Veterinarian.

We cordially invite our readers to consult us whenever they desire any information in regard to sick or lame animals, and thus assist us in making this department one of the interesting features of the KANSAS FARMER. Give age, color and sex of animal, stating symptoms accurately, of how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. Sometimes parties write us requesting a reply by mail, and then it ceases to be a public benefit. Such requests must be accompanied by a fee of one dollar. In order to receive a prompt reply, all letters for this department should be addressed direct to our Veterinary Editor, Dr. S. C. ORR, Manhattan, Kas.

**SWELLING ON HORSES.**—I have a mare that has a swelling on her breast and between her fore legs. I blistered it with turpentine and lanced it, but it don't scatter. I have another filly that has never been kicked or hurt in any way, to my knowledge. A. W. M. Macksville, Kas.

**Answer.**—Your mare has evidently received an injury to the part in some way. Bathe three times a day with hot water, for a few days, then apply a cantharidine blister, and when pus forms open the swelling and let it out and the sore will soon heal.

**PIGS DYING.**—I have some pigs, from two to ten weeks old, that had sores and scabs on the sides of their heads. I washed them and used carbollized grease and they healed, but some got dumpish in a day or two and had what we call the thumps, and after a few days died. I have lost five, and there are still signs of disease among them. Give me your advice. Send me a catalogue of the latest publications on swine husbandry. A. R. J. Roxbury, Kas.

**Answer.**—Your pigs probably have hog cholera in a mild form. Follow the treatment given to W. T. R. for the same disease in the last issue of the Kansas Farmer. There are no very new books on the care of swine. "Swine Husbandry," by F. D. Coburn, is as good as any. Have your local book dealer order it for you.

One is scarcely sensible of fatigue whilst he marches to music. The very stars are said to make harmony as they revolve in their spheres. Wondrous is the strength of cheerfulness, altogether past calculation its powers of endurance.—Carlyle.

We never can say why we love, but only that we love. The heart is ready enough at feigning excuses for all that it does or imagines of wrong; but ask it to give a reason for any of its beautiful and divine motives, and it can only look upwards and be dumb.—Lowell.

## ATTENTION.

Should be given at once to any symptom or signs of disease as soon as they manifest themselves. By so doing you may save much suffering and expense. DR. HATHAWAY & CO., the experienced and established specialists, have devoted years to the exclusive treatment of those delicate and private diseases of men and women.



Blood and skin diseases, red spots, pains in bones, sore throat and mouth, blotches and eruptions of skin and ulcers, painful swellings, etc., kidney and bladder disease, frequent micturition, scalding inflammation, gravel, etc., organic weakness, undeveloped organs, nervous debility, impaired memory, mental anxiety, absence of all will power, weak back, lost vitality, melancholy and all diseases, excesses, indiscretion or over-work, recent or old, speedily, thoroughly and permanently cured. How many suffer from the above diseases for many weary months without being able to get cured, and yet how easily curable under DR. HATHAWAY & CO.'S treatment. "Where shall I go to get cured?" many a sufferer asks, not knowing whom to trust. Go where thousands of others have gone and be restored to perfect health, the comforts of home and the enjoyments of society—to DR. HATHAWAY & CO. Many chronic diseases that have been neglected or have failed to yield to the treatment of less skillful hands, soon get well under DR. HATHAWAY & CO.'S superior treatment. When suffering from diseases patients should seek advice from an expert whose experience and practice have taught him to apply promptly the proper remedy and quickly remove the disease. As experts DR. HATHAWAY & CO. acknowledge no superiors. An uncommonly successful practice during many years, with the enormous experience derived from it, enables them to apply the proper treatment at once, without useless experiments, thus saving the patient much time, anxiety and expense.

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Mail treatment given by sending for symptom blanks. No. 1 for men, No. 2 for women, No. 3 for skin diseases, No. 4 for catarrh.

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Cuts clean on all sides—does not crush. The most humane, rapid and durable knife made, fully warranted. Highest World's Fair Award Descriptive Circulars Free.  
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Certain in its effects and never bilsters. Read proofs below.

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Dr. B. J. KENDALL, Co.—I bought a splendid bay horse some time ago with a spavin. I got him for \$80. I used Kendall's Spavin Cure. The spavin is gone now and I have been offered \$150 for the same horse. I only had him nine weeks, so I got \$120 for using \$2 worth of Kendall's Spavin Cure.  
W. B. MARSDEN.

## KENDALL'S SPAVIN CURE

SHELBY, Mich., Dec. 16, 1893.  
Dr. B. J. KENDALL, Co.—I have used your Kendall's Spavin Cure with good success for Carb. on two horses and it is the best liniment I have ever used.  
AUGUST FREDERICK.

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For sale by all Druggists, or address  
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It is easy to find the word wanted.

Words are given their correct alphabetical places, each one beginning a paragraph.

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The pronunciation is shown by the ordinary diacritically marked letters used in the schoolbooks.

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A strictly first-class house at moderate rates. Central location. Half block from new million dollar court house and half million dollar city hall. On direct Fifth street cable line from Union depot and stock yards. 225 choice rooms, all newly decorated. Lighted by electricity. Rates, \$2 per day. Rooms with bath, and parlors, \$2.50 per day.

E. K. CRILEY & CO., Proprietors.

## VICTORY Feed Mill

Grinds Corn and Cob and all kinds of Small Grain

Made in four sizes for 2, 4, 8 and 10 horse power.

Send for catalogue and prices.

THOS. ROBERTS,  
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is a permanently well established INVALID'S HOME for the treatment of MALIGNANT, CHRONIC and SURGICAL DISEASES.

Our building is beautifully located, well lighted and ventilated, with ample room for the comfortable care of all patients. Our specialties are CANCERS, TUMORS, SKIN and BLOOD DISEASES. CANCERS and TUMORS successfully removed with the MORGAN CANCER ANTIDOTE. We are treating daily with universal success, Chronic Catarrh, Dyspepsia, DISEASES OF WOMEN, Rheumatism, Piles, Fistula, DISEASES OF THE LIVER and KIDNEYS, Hydrocele, Varicocele, Rupture (Hernia) CURED in 30 days without detention from business. Also Deafness, Hair-lop, Cross Eyes, Club Feet, etc. DR. JOHN MORGAN, of forty years' experience, physician in charge.

Patients will take GRANDVIEW car on Elevated road without change to our door. A book on Cancers mailed free.

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should contain a high percentage of Potash to insure the largest yield and a permanent enrichment of the soil.

Write for our "Farmers' Guide," a 142-page illustrated book. It is brim full of useful information for farmers. It will be sent free, and will make and save you money. Address,

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## TWO-CENT COLUMN.

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

**FOR TRADE.**—A new John Deere gang plow for a load of apples or potatoes. 116 East Fourth St., Topeka.

**DOUGLAS COUNTY NURSERY.**—Offers for fall and spring trade a general supply of all kinds of nursery stock. Send for catalogue. Address Wm. Plasket & Son, Lawrence, Kas.

**FOR SALE.**—One hundred head of Western steers that will weigh from 1,000 to 1,100 pounds per head; price, \$25 per head. Address G. Dautel, Ashland, Kas.

**WANTED.**—To rent a farm in eastern Kansas stocked with thirty or forty milk cows, to tend farm and keep cows on shares. Preferable near to creamery. Isaac Betts, Hough, Russell Co., Kas.

**TO FRUIT, MARKET GARDENERS AND POULTRYMEN.**—For rent, eighty-acre fruit and truck farm, five miles from Topeka. For particulars apply to "E. W. S." care KANSAS FARMER, Topeka.

**WANTED.**—By a sober and industrious man, a situation on a farm where trustworthiness and looking after employer's interests would be appreciated; capable of managing hands and taking charge of the farm; references can be given. Address Box 6, Minneapolis, Kas.

**FOR SHORT-HORN BULLS.**—Calves and yearlings, extra fine, write D. P. Norton, Council Grove, Kas.

**THREE BEST KINDS OF STRAWBERRIES.**—Downing, Bubach, Cumberland—mailed to any address for \$1. These varieties do well in Kansas. O. M. Record, Thayer, Kas.

**FOR SALE.**—Choice Single-combed White Leghorns, from the celebrated Knapp strain, which scored 83 to 85½ points. Have a few cockerels for sale, at one dollar each. None better. Eggs in season. Elwood Rush, Shaw, Neorho Co., Kas.

**FOR EXCHANGE.**—Finely located and choice rental and business properties in Kansas City or Topeka to trade for farms, stock ranches or wild lands. Send numbers and full description in first letter. I will make offers. John G. Howard, Topeka, Kas.

**FOR SALE.**—I have fifty cows, with calves, in good condition, for sale. H. J. Gyles, Dodge City, Kas.

**FOR RENT.**—Photo gallery, Syracuse, Kansas. County seat, no competition. Address Box 119, Syracuse, Kas.

**10 EXTRA FALL GIFTS AND FIFTY SPRING PIGS.**—The pigs sired by Tecumseh J. Corwin 10744 S. and the great breeding and show boar Riley Medium 12306 S. E. T. Warner, Princeton, Franklin Co., Kas.

**STEAM CIDER MILL.**—Two miles west of Kansas avenue, on Sixth street road, Topeka. Farmers, bring your apples Tuesdays, Thursdays and Saturdays of each week, until December. I will make cider for you at 2 cents per gallon. H. W. McAfee.

**WANTED.**—Young ladies and gentlemen to learn bookkeeping, stenography and office work. Limited number pay expenses by assisting two hours daily. Address H. Coon, Secretary, Kansas City, Mo.

**WRITE.**—To Alex. Richter, Hollywood, Kas., for information concerning sub-irrigation. Enclose 2-cent stamp for reply. Manufacturer of galvanized sub-irrigation pipe.

**FOR A GOOD HAND-SEWED BUCK, CALF OR kid glove or mitten.** Address Mrs. Ed. Warner, Lexington, Clark Co., Kas. Reference: KANSAS FARMER.

**FOR SALE.**—Hereford bulls sired by a son of Mr. Funkhouser's celebrated Heslod. Apply to Peter Sim, Wakarusa, Kas.

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

**THE FINEST HONEY.**—Is gathered from alfalfa and clover blossoms. You can buy it of the bee-keeper, cheap and in any quantity, by freight, and know it is genuine. Address Oliver Foster, Las Animas, Colo.

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

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

**\$75 a month and expenses to competent men and women.** Write for particulars at once. E. C. Morse & Co., 56 Fifth Ave., Chicago.

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\$100 to \$125 per month and expenses. Staple line; position permanent, pleasant and desirable. Address, with stamp, King Mfg. Co., P. 29, Chicago, Ill.

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Kansas Bee Journal

Devoted to the interests of Bee-keepers.

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MILLER & DUNHAM,

Topeka, Kansas.

## THE STRAY LIST.

FOR WEEK ENDING SEPT. 18, 1895.

Rice county—Robert Findlay, clerk.

MARE—Taken up by A. N. Hays, of Frederick, August 31, 1895, one bay mare, five feet seven inches high, 10 years old, blemish in right eye; valued at \$15.

Labette county—J. F. Thompson, clerk.

STEER—Taken up by Thomas Ryan, in Mount Pleasant tp., August 29, 1895, one red and white steer, 3 years old, branded T behind right shoulder; valued at \$15.

STEER—By same, one nearly black steer, 3 years old, short tail, branded D on right hip; valued at \$15.

Brown county—J. V. McNamar, clerk.

STEER—Taken up by Joseph Jeckel, of Fidelity, in September, 1895, one dark brown two-year-old steer, point of tall white, hole in left ear; valued at \$12.

Cherokee county—P. M. Humphrey, clerk.

PONY—Taken up by F. F. Burgess, in Spring Valley tp., one sorrel pony mare, shod all round, white spot in forehead, halter and strap on.

FOR WEEK ENDING SEPT. 25, 1895.

Pottawatomie county—Frank Davis, clerk.

HORSE—Taken up by Ed. Atkinson, in Union tp., September 12, 1895, one dark bay gelding, 12 years old, fourteen hands high, small white spot in forehead; valued at \$15.

Russell county—Ira D. Fleck, clerk.

FIVE CALVES—Taken up by J. A. Householder, in Lincoln tp., P. O. Russell, September 13, 1895, five calves, about 5 or 6 months old, as follows: Three black heifers, one red heifer and one red steer; no marks or brands; valued at \$25.

Cherokee county—P. M. Humphrey, clerk.

HORSE—Taken up by P. Curtis, in Garden tp., one iron-gray horse, fifteen hands high, 8 years old, scar on right knee supposed to be wire out, ring-bone on both hind feet; valued at \$15.

MARE—Taken up by Riley Wright, in Lowell tp., one bay mare, 4 years old, branded F on left hip, white on right hind foot; valued at \$15.

FOR WEEK ENDING OCTOBER 2, 1895.

Labette county—J. F. Thompson, clerk.

MARE—Taken up by John Byrum, in Howard tp., August 15, 1895, one black mare, fourteen hands high, star in forehead; valued at \$10.

HORSE—By same, one iron-gray horse, blaze face; valued at \$7.

Bourbon county—G. H. Requa, clerk.

MARE—Taken up by C. E. Shaffer, in Freedom tp., one black mare, 4 years old, about fifteen and one-half hands high, star in forehead, and what seems to be a wire out on right fore leg below knee; valued at \$25.

One-half cheaper than wood or coal. No smoke. Goes in any stove or furnace.

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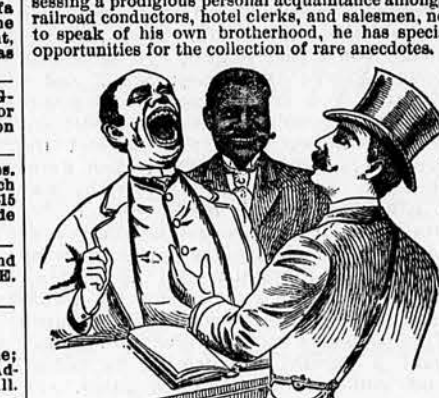
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KANSAS FARMER CO., Topeka, Kas.



## MARKET REPORTS.

## Kansas City Live Stock.

KANSAS CITY, Sept. 30.—Cattle—Receipts, 11,189; calves, 1,320; shipped Saturday, 3,735 cattle, 119 calves. The market was generally slow and steady on steers and weak on cows. The following are representative sales:

SHIPPING AND DRESSED BEEF STEERS.

No.	Ave. Price.	No.	Ave. Price.
41.....	1,335 \$4.65		

## TEXAS AND INDIAN STEERS.

27.....	1,043 \$3.05	23.....	1,175 \$3.00
1.....	1,115 2.85	103.....	909 2.75
19 grs.....	764 2.25		

## WESTERN COWS.

6.....	843 \$2.50	10.....	1,078 \$2.70
1.....	1,000 2.50	109.....	761 2.40
47.....	802 2.40	47.....	769 2.40
31.....	804 2.40	53.....	813 2.40

## COLORADO STEERS.

39.....	1,294 \$3.35		
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## SOUTHWESTERN STEERS.

16.....	773 \$2.45		
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## ARIZONA STEERS.

47.....	1,171 \$2.95		
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## NEW MEXICO STEERS.

75 fed.....	1,161 \$3.25	113.....	880 \$2.55
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## NEW MEXICO COWS.

156.....	630 \$2.20	136.....	627 \$2.20
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## TEXAS AND INDIAN COWS.

31 hf.....	775 \$2.85	29 hf.....	765 \$2.85
1.....	840 2.50	1.....	830 \$2.35
32.....	721 2.25	51.....	683 2.20
52.....	707 2.20	30.....	687 1.85

## COWS AND HEIFERS.

4.....	757 \$2.80	2.....	1,130 \$2.75
1.....	1,010 2.75	16.....	826 2.70
24.....	974 2.65	5.....	1,188 2.65
2.....	1,075 2.60	11.....	1,012 2.50
13.....	1,076 2.40	4.....	963 2.30
2.....	981 2.25	9.....	963 2.20
1.....	1,041 2.15	2.....	925 2.10
1.....	1,010 2.00	1.....	900 2.00
6.....	991 2.00	2.....	1,080 2.00
5.....	1,024 1.75		

## STOCKERS AND FEEDERS.

3.....	1,106 \$3.00	1.....	700 \$3.50
79.....	1,016 3.40	1.....	981 3.10
4.....	537 3.00	70.....	771 2.67½
1.....	730 2.50	1.....	630 2.15

Hogs—Receipts since Saturday, 4,779; shipped Saturday, 466. The market was 5c higher. The following are representative sales:

5.....	212 \$1.25	64.....	237 \$4.25	170.....	292 \$4.25
24.....	220 4.25½	123.....	223 4.25½	63.....	241 4.20
77.....	210 4.20	10.....	221 4.20	74.....	216 4.20
62.....	271 4.20	61.....	275 4.20	77.....	267 4.20
90.....	209 4.20	28.....	218 4.20	63.....	208 4.20
131.....	270 4.20	75.....	248 4.20	88.....	321 4.20
75.....	194 4.20	61.....	222 4.20	125.....	250 4.20
78.....	221 4.17½	36.....	218 4.17½	84.....	227 4.17½
82.....	229 4.17½	34.....	199 4.15	36.....	195 4.15
10.....	236 4.15	94.....	205 4.15	35.....	234 4.15
70.....	234 4.15	51.....	251 4.15	72.....	231 4.15
80.....	241 4.15	67.....	231 4.12½	56.....	184 4.10
102.....	203 4.10	86.....	190 4.05	32.....	245 4.03
9.....	248 4.00	6.....	190 4.00	6.....	281 3.90
17.....	275 3.80	8.....	121 3.50	106.....	94 3.00

Sheep—Receipts since Saturday, 6,282; shipped Saturday, 1,416. The market was slow and 10c lower in some cases. The following are representative sales:

298 Ariz.....	59 \$3.25	884.....	57 \$3.20
649.....	61 2.60	10 Utah.....	100 2.00

Horses—Receipts since Saturday, 218; shipped Saturday, 67. There was very little trading done in horses to-day outside of regular private sales. The receipts are increasing and the feeling among the traders is firm. The demand will be fair when the market opens tomorrow. A good many out of town buyers came in and are inquiring for good heavy draft and smooth drivers. Prices are nominally steady.

## Chicago Live Stock.

CHICAGO, Sept. 30.—Cattle—Receipts, 20,000; market steady; good grades strong; common and westerns dull; fair to best beefs, \$3.50 @ 5.40; stockers and feeders, \$2.25 @ 3.65 mixed cows and bulls, \$1.25 @ 3.50; Texas, \$2.75 @ 3.50; western, \$2.65 @ 4.10.

Hogs—Receipts, 25,000; market active and prices averaged 5c higher; light, \$3.85 @ 4.45; packing, \$3.75 @ 3.95; mixed and butchers, \$3.90 @ 4.45; heavy packing and shipping, \$4.05 @ 4.40; pigs, \$2.25 @ 4.30.

Sheep—Receipts, 23,000; market 5 to 10c lower; native, \$1.50 @ 3.50; western, \$2.00 @ 3.20; Texas, \$1.50 @ 2.80; lambs, \$3.00 @ 4.75.

## St. Louis Live Stock.

ST. LOUIS, Sept. 30.—Cattle—Receipts, 5,000; market steady on steers, lower on others.

Hogs—Receipts, 4,000; market 5c higher; heavy, \$4.00 @ 4.30; mixed, \$3.80 @ 4.00; light, \$4.00 @ 4.30.

Sheep—Receipts, 1,000; market steady.

## Chicago Grain and Provisions.

Sept. 30.	Opened	High'st	Low'st	Closing
Wht—Sept....	62¾	62¾	60¾	62¾
Dec.....	63¾	64	62¾	63¾
May.....	67¾	67¾	65¾	67¾
Corn—Sept....	31¾	31¾	30¾	31¾
Dec.....	28¾	28¾	28¾	28¾
May.....	29¾	29¾	29¾	29¾
Oats—Sept....	19¾	19¾	18¾	19¾
Dec.....	19	19	18¾	19
May.....	21¾	21¾	20¾	21¾
Pork—Sept....	8 42½	8 42½	8 42½	8 42½
Oct.....	8 40	8 47½	8 32½	8 42½
Jan.....	9 70	9 75	9 55	9 62½
Lard—Sept....	5 87½	5 87½	5 87½	5 87½
Oct.....	5 85	5 90	5 85	5 87½
Jan.....	5 92½	5 92½	5 90	5 92½
Ribs—Sept....	5 57½	5 57½	5 57½	5 57½
Oct.....	5 40	5 70	5 35	5 57½
Jan.....	4 95	4 95	4 90	4 92½

## Kansas City Grain.

KANSAS CITY, Sept. 30.—Wheat by sample sold to-day at about the prices ruling Saturday. Some grades went rather slowly. A much larger proportion of the receipts than usual were hard winter wheat and the receipts were larger than expected.

Receipts of wheat to-day, 154 cars; a year ago, 52 cars.

Sale of car lots by sample on track, Kansas City: No. 2 hard, 12 cars 60¾c, 15 cars 60¾c, 1 car 60c; No. 3 hard, 1 car choice 59c, 11 cars 58¾c, 18 cars 58c, 2 cars 57¾c, 1 car 57c, 3 cars 56¾c, 2 cars 56c; No. 4 hard, 1 car 56c, 3 cars 55c, 3 cars 53c, 1 car 52c; rejected, 1 car 40c, 1 car 41c, car 42¾c, 1 car 43c; soft, No. 2 red, 1 car 64c; No. 3 red, 2 cars 63c, 1 car 62¾c, 1 car 62c, 4 cars 61¾c, 2 cars 61c; No. 4 red, 1 car 52c, 2 cars 55c, 1 car 55¾c, 1 car

**HORSE BLANKETS**  
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Made in 250 styles.  
Square Blankets for the road.  
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Many Have Worn 16 Years.  
Thousands of testimonials.  
Sold by all dealers.  
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56c, 1 car 57c; rejected, 1 car 47c, 3 cars 50c, 1 car 51c, 1 car 54c; no grade, nominally 30c @ 40c; spring, No. 2, 8 cars 59c, 12 cars 58¾c, 1 car 58c, 3 cars 57¾c, 1 car 57c; No. 3, 8 cars 57c, 2 cars 56¾c, 2 cars 56c; white spring wheat No. 2, 1 car 55c, 1 car 54c.

Corn was in fair demand at a decline of ¼c @ ½c, closing at the latter figure.

Receipts of corn to-day, 55 cars; a year ago, 13 cars.

Sales by sample on track, Kansas City: No. 2 mixed corn, 19 cars 26¾c; 9 cars 26¾c; No. 3 mixed, 6 cars 26c, 2 cars new 25¾c; No. 4 mixed, nominally 25c; no grade, nominally 24c; No. 2 white, 4 cars 27c, 5 cars 26¾c, 14 cars 26¾c; No. 3 white, 4 cars 26c.

White oats were about ¼c lower to-day. Mixed sold slowly at about Saturday's prices for good samples, but low grades were lower.

Receipts of oats to-day, 55 cars; a year ago, 17 cars.

Sales by sample on track, Kansas City: No. 2 mixed oats, 1 car color 19c, 5 cars 18c; No. 1 oats, 4 cars 18c; No. 4, 1 car 15c; 1 car 14c; no grade, 1 car 13c, 1 car 14c; No. 2 white oats, 5 cars 20c, 6 cars 19¾c, 2 cars 19¾c; No. 3 white oats, 3 cars 19c, 2 cars 18¾c, 2 cars 18¾c.

Hay—Receipts, 114 cars; market barely steady on good grades; common and poor sell very slowly; timothy, choice, \$11.00 No. 1, \$10.00; No. 2, \$9.00 @ 9.00; fancy prairie, \$8.00; choice, \$5.50 @ 5.75; No. 1, \$4.50 @ 5.00; No. 2, \$4.00 @ 4.50; packing hay, \$3.00 @ 3.50.

## Kansas City Produce.

KANSAS CITY, Sept. 30.—Butter—Extra fancy separator, 20c; fair, 17 @ 18c; dairy fancy, 14 @ 15c; store packed, fresh, 9 @ 11c; off grade, 7 @ 8c.

Eggs—Strictly fresh candled stock, 12c per doz.

Poultry—Hens, 6½c; springs, 8c; roosters, 15c. Turkeys, 7½ @ 8c; spring turkeys, over 8 lbs., 8½c; under 8 lbs., not wanted in this market.

Ducks, 5½c; springs, 8 @ 8½c. Geese, not wanted, 3½ @ 4c springs, 7c. Pigeons, 75c @ \$1.00 per doz.

Fruits—Apples—Cooking apples sell from 15 to 25c per bu; choice eating apples sell from 30 to 40c; fancy, \$1.00 @ 1.50 per bbl; common to good, 50 @ 75c per bbl. Grapes—New York Broctons, 5-lb. baskets, 17c; Niagara, 16c; Delaware, 20c; Pennsylvania, New York and Ohio Concord, 9-lb baskets, choice to fancy, 18 @ 20c; wild grapes, 10 @ 1c per peck. Peaches—Home grown, 45 @ 60c per peck; Michigan stock, \$2.00 @ 2.25 per bu; trays, 75c; ½ bu. box, 75c; 6-basket crate, \$1.50. Pears—Keller, 50c per peck. Cranberries, \$7.50 @ 8.00 per bbl.

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References: Metropolitan National Bank, Chicago, and this paper.

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are the most complete and commodious in the West,

and second largest in the world! The entire railroad system of the West and Southwest centering at Kansas City has direct rail connection with these yards, with ample facilities for receiving and reshipping stock.

	Cattle and calves.	Hogs.	Sheep.	Horses and mules.	Cars.
Official Receipts, 1894.....	1,772,545	2,547,077	589,555	44,287	107,494
Slaughtered in Kansas City.....	969,646	2,060,734	387,670		
Sold to feeders.....	808,181	11,496	69,816		
Sold to shippers.....	406,965	468,616	45,780		
Total sold in Kansas City, 1894.....	1,677,792	2,530,896	503,116	28,903	

CHARGES: YARDAGE, Cattle, 25 cents per head; Hogs, 8 cents per head; Sheep, 5 cents per head. HAY, \$1 per 100 lbs.; BRAN, \$1 per 100 lbs.; CORN, \$1 per bushel.

NO YARDAGE CHARGED UNLESS THE STOCK IS SOLD OR WEIGHED.

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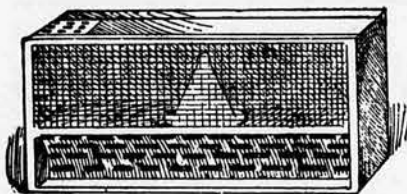
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### TRAPS FOR DRONES.

An Easy Way of Getting Rid of Useless Honey Consumers.

Almost any warm afternoon one may see numerous large black bees buzzing about the hives with a noise equal to more than twice their number of workers. These are the drones who toil not, and are useful only to fertilize the queen. As this is necessary but once in her lifetime, it is evident that by far the greater part of a drone's life is spent in useless consumption of stores. Nor is this all; as soon as honey becomes scarce in the field the attention of many of the workers is taken up with destroying these idlers, and the working force depleted to that extent. It is no uncommon thing to see two or more workers hauling out a drone, and either executing him or driving him into exile.

It is important to save the bees as much work as possible, and thus economize their time. That is just what drone traps are for, and the one here illustrated is regarded almost universally as the drone trap for all apiaries. A close examination of the cut will explain the method of its use, I think, appearing as the trap does to the observer, when in place across the hive entrance. The back is open sufficiently to admit the bees readily, but the front is closed with a strip of perforated zinc, the perforations of which allow the worker bees to pass through



ALLEY TRAP.

freely, but not the larger drones. The latter, trying to escape to the outer air, crawl about in search of an exit, and finally find it through the apex of the wire cone shown in the center of the trap. (The latest patterns contain three cones.) This leads them into an upper chamber or apartment entirely inclosed with perforated strips, and from which there is no exit for them, except through the one by which they entered, a route they are very seldom able to retrace. In this way in the course of one or two warm afternoons about all the drones in the hive may be captured and destroyed at leisure. Or, if one does not care to kill them, an opening from the end of this chamber to the outer air, closed by a sliding tin, may be left open and the drones allowed to pass out this way. As they cannot return by this route, they are effectually debarred from reentering the hive. If this method is adopted, however, care should be taken that they do not simply go into another hive. If they are killed while caged see that no workers are with them.

So much for this "alley trap," as it is called, as a drone excluder. As a queen catcher it is also valuable. The queen is also larger than the workers, hence unable to pass through the perforated zinc. To prevent the issuing and departure of a swarm during the absence of the apiarist, place the trap before the entrance as for drones, taking care to see that the entrance at the end is closed. If a swarm attempts to issue the queen will either be forced back into the hive or caught in the drone chamber, and held till the return or convenience of the apiarist. Of course the swarm is not likely to go without her.

Formerly it was considered sufficient to catch her, and prevent the departure of a swarm to parts unknown. Now a new feature is being successfully introduced—a self-hiver. The top of the trap is perforated or removed for this, and a box made with the ends fitting tightly over the ends of the trap, the back consisting of the front of the hive, and the front a sloping board, not too smooth, extending upwards; all forming a second chamber above the trap, bee-tight, but with open top, which should be exactly on a level with the top of the hive. On top of this, place the hive into which you wish to introduce the new swarm. The large chamber of the self-hiver then will open at the top, directly into the empty hive, and the swarm following their

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queen up through the trap, will presently find themselves in their new hive. By placing a trap across the entrance to this to retain the queen, one can be sure the swarm will stay here, and at the same time allow the workers free passage out of and into their new home. By this method one may leave the apiary to look after itself for the day, without fear of losing a swarm of bees, and find them on his return at night already hived and settled in their new quarters.—American Gardening.

### Green Food for Poultry.

The feeding of green food to poultry in summer demands some attention, says the Farmers' Home Journal, especially if the fowls are confined in the yards. It is usually the custom to chop green food to a fine condition and place it where the fowls can reach it. Such a practice is the best for the winter, but in summer it is a saving of labor to use a spade and take a large sod to the fowls. They can thus pick at it to advantage, and will be better satisfied, not ceasing until they have eaten tops, leaves, stems and roots, as well as scratching the earth to pieces. Even clover is given in this manner, and vegetables need not be cut if they are acceptable. One thing connected with feeding green food is that the hens do not bite the grass, but pull, consequently when they receive green food they can supply themselves much more easily when the sod is given. A stock of clover would simply be pulled about the yard and be eaten with difficulty, but if the earth is attached to the roots, the fowls will easily manage it.



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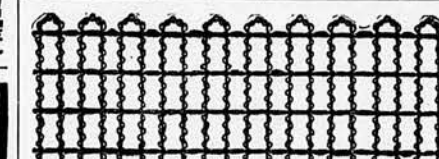
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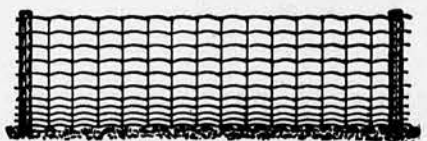
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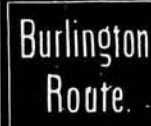
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(Continued from page 1.)

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Breeder of pure-bred POLAND-CHINAS of best families. Herd headed by Roy U. S. 24195 A., assisted by Western Wilkes 12847 S. Spring pigs at reasonable prices. A few choice fall gilts for sale cheap. Also breeds Plymouth Rocks of best strains. When writing mention KANSAS FARMER.

## SUNNY SLOPE FARM, EMPORIA, KANSAS.

200 head of Poland-China hogs, headed by Longfellow 24985 O. (who has the best Columbian record west of the Mississippi), J. H. Sanders Jr., Hadley Jr. 27605, Sir Charles Corwin. We also combine the blood of Black U. S., Ideal U. S. and Wilkes. 100 head of brood sows. Also 100 head of Berkshires, headed by the well-known boar, Major Lee 31139. We have 25 gilts bred by him to General Lee of Gentry breeding and Royal Peerless the Great. We have one of the largest lots of hogs in the United States. Why not come to the fountain head for brood sows? 200 head of fashionably bred Herefords. H. L. LEIBFRIED, Manager.

## 1,309 POLAND-CHINAS

Shipped by express to eighteen States and Canada. Original Wilkes, Corwin, Tecumseh and World's Fair blood. Write for one to Box 218, W. S. HANNA, Ottawa, Kansas.

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HIGHLAND KENNELS, TOPEKA, KAS.—Great Danes and Fox Terriers. The first prize and sweepstakes winner, Great Dane King William, in stud. Dogs boarded and treated for all diseases; also, remedies by mail. Correspondence solicited.

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## SEEDS



## Bayfield Herd Pedigreed Poland-Chinas

Ninety spring pigs, twenty-four brood sows. Boars in service, Souvenir 9421 S., Magnet 18537 S. and Duke of Bayfield 14327 S. Write for particulars, or better, come and make selections. J. S. MACHIR, Linwood, Leavenworth Co., Kas.

## Catalogues of Cherry Orchard Poland-Chinas

Now ready for distribution. One hundred tops out of my spring crop of 140 pigs, will be sold at PUBLIC SALE, SEPTEMBER 11, 1895. They were sired by my herd boars, Wren's Medium 12387 and Corwin's White Face 9924. The pigs are in fine health and making good growth on alfalfa and light feed of slop. FOR PRIVATE SALE, fall boars and sows bred. Correspondence and inspection invited. Address W. H. WREN, Marion, Marion Co., Kansas.



## OCTOBER 29. Dispersion Sale of Aberdeen-Angus Cattle!

Forty head of cows and heifers and fifteen young bulls, all of the most fashionable families, at public sale at our farm adjoining the village of CONNORS, Wyandotte county, Kansas, October 29, next. The bulls, yearling and two-year-old heifers are sired by Baron Maurice 5442, a grand Erica-bred bull. Catalogue will be ready by October 10.

KIRKPATRICK &amp; SON.

## KENNEDY'S SALE OF POLAND-CHINAS!

## Wildwood Farm, Wednesday, October 30, 1895.

On the above date I will sell at public auction, 100 head of pure-bred Poland-China hogs, consisting of aged sows, sows with litters, yearling gilts, bred and unbred, yearling boars, and my entire crop of 1895 pigs. WILKES, FREE TRADE, BLACK U. S. and other best blood.

Free transportation from depot and free entertainment. Sale begins at 10 a. m. Dinner at 12. Write for catalogue and particulars.

COL. J. W. SPARKS, Auct., L. N. KENNEDY, Nevada, Mo.

## FIRST ANNUAL SALE!

## POLAND-CHINAS!

I will disperse at public auction, on my place, two miles east of

Richmond, Franklin County, Kansas, Thursday, October 10, 1895,

at 1 o'clock p. m., sixty-six head of POLAND-CHINA SWINE, consisting of autumn and spring litters, their sire being the noted Upright Wilkes 13246, whose line of breeding and individual merit is second to none. All stock registered or eligible to record. Send for catalogue. They are free

Terms of Sale:—Cash, or six months time at 6 per cent. interest on approved notes.

RICHMOND is on the Atchison, Topeka & Santa Fe railroad, south of Ottawa, Kas. Free conveyance from and to all trains. Address

COL. S. A. SAWYER, J. R. KILLOUGH & SONS, Richmond, Kas.

## PUBLIC SALE!

OF

## SHORT-HORN CATTLE AND POLAND-CHINA SWINE!

FOUNTAIN, KAS., OCTOBER 10, 1895.

Consisting of nine bulls, from such families as Floras, Daisys and two branches of Blossoms. Included will be one son and two grandsons of my noted butter cow, sired by Prince Thistletop (dam Callista Vol. 22, page 17,075) and Lord Mayor 112727.

The POLAND-CHINAS consist of forty head, tracing to four different families.

Sale to commence at 1 o'clock, at the farm, six miles northwest of Carbondale.

Terms:—Six months' time without interest if paid when due.

CAPT. HUNGATE, Auctioneer. M. WALTMIRE & SON, Fountain, Kas.

## GRAND PUBLIC SALE

OF

## BERKSHIRES!

Savannah, Missouri, Tuesday, October 22, 1895.

At my farm, one mile east and one-half mile south of Savannah, Mo., I will sell three yearling boars and fifty sons and daughters of King Lee 27500, an sensational show boar at World's Fair. Those wishing choice, well-bred sale will commence at 1 p. m. Bids sent est figure. Send for catalogue.

E. C. L. LARCH, M. D., Savannah, Mo.

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

## LIVE STOCK AUCTIONEERS.

Live Stock Auctioneer. JAS. W. SPARKS, Marshall, Mo. Sales made everywhere. Refer to the best breeders in the West, for whom I sell. Satisfaction guaranteed. Terms reasonable. Write before claiming dates. Mention KANSAS FARMER.

ELI ZIMMERMAN, Hiawatha, Kansas, Live Stock and General Auctioneer.

Pedigreed and registered live stock a specialty. Write for dates. Sales conducted anywhere in the country. Best of references and satisfaction guaranteed.

S. A. SAWYER, FINE STOCK AUCTIONEER—S. 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, Colo., 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.

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DR. U. B. MCCURDY, Veterinary Surgeon. Graduate Ontario Veterinary college, Toronto, Canada. Can be consulted on all diseases of domestic animals at office or by mail. Office: 114 West Fifth Street, Topeka, Kas.

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