Volume XLIII. Number 30

TOPEKA, KANSAS, JULY 27, 1905

Established 1863. \$1 a Year

### KANSAS FARMER.

Established in 1863.

P	ublished e	very '	Thu	rsd	ay by the	Hall I
	FARMER					

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E. B. COWGILL	Asso	cial	Editor
H. A. HEATH	Advertis	ng	Manager

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ADVERTISING RATES.

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

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

Address all communications to

KANSAS FARMER CO.

KANSAS FARMER CO., 116 West Sixth Ave., Topeka, Kans.

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Exports of wheat for the year ending June 30 were only 43,797,000 bushels. This is the smallest showing since 1872

The spokesman for the Southern Cotton Association says: "Hold for 12 cents, as you are sure to get it." While cotton has not brought above 10 cents since last October, it may be that the new crop will go as high as 12 cents If the production shall be light.

The next meeting of Shawnee County Horticultural Society will be held at Shorey, August 3.

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The date for the great meeting of the American Pomological Society at Kansas City has been changed to September 19-21. The fruit-grower will find this a profitable meeting.

For the fiscal year 1800 the exports from the United States amounted to \$70,971,780. One hundred years later they were \$1,394,483,082. For 1905 the exports were valued at \$1,518,462,833.

The Kansas State Treasury muddle is the most disgraceful public scandal that has happened in this State during recent years. The people expect the Governor to protect the interests of the State.

The balance of trade for the year ending June 30, 1905, is \$400,955,333 in favor of the United States; that is, the people of this country have sold abroad over 400 million dollars' worth more products than they have bought of the products of foreign countries. This is about the average balance for the last six years.

Sentimentalists of late have been making a good deal of noise and have succeeded in having brought from some old graveyard in France a lot of old bones said to have been once the framework of the body of John Paul Jones. A detatchment of the U.S. Navy did the transporting. Peace to the soul of John Paul Jones. No doubt there are other old bones in France.

There has been a good deal of talk of black rust in the Northern spring wheat fields. When first reported this sent the price of wheat up several cents a bushel. Of course many green, would-be speculators bought on the "bulge." The price has again fallen several cents a bushel and no doubt the greenies have been "shaken out." They have left their money with the speculators, but that is according to the rules of the game.

It has always been the policy and pleasure of the Kansas Farmer Com-PANY to retain its employees year after year. It is with much regret that we now part company with Mr. E. E. ho many been manager of the mechanical department of our work. As a workman he is competent, careful and energetic; as a manager he is efficient, both in laying off the work and in keeping those under his charge in good spirits and interested. During the years of his connection with this office there has never been a disagreable word between him and the management. He goes to Southern California and carries with him the best wishes of all who have been associated with him in, any way.

#### REPUBLIC COUNTY FAIR.

The Republic County Agricultural Association, being duly incorporated under the laws of Kansas, met on Saturday, July 22, and organized by elect-

ing R. B. Ward, president; Jas. A. Mosher, vice president; I. P. Savage, secretary, and J. F. Angle, treasurer. Preliminary steps had already been taken towards holding a fair on September 12, 13 and 14, and other matters will be rushed so as to have everything in readiness by that time. Premium lists will be out in about two weeks, which can be obtained by addressing the secretary.

#### STATE FAIR PREMIUM LIST.

The premium list for the Kansas State Fair, to be held at Topeka, September 11-16, is now out and ready for distribution. This will be the fourth annual event of the Kansas State Exposition Company, and will be a regular old-fashioned fair conducted according to up-to-date methods. Every Kansas resource is provided for with liberal premiums. About \$21,000 is offered in the way of cash premiums, prizes, purses and special premiums, comprising live-stock, agriculture, horticulture, dairy, poultry, and apiary. The new feature of the women's department, which includes fine arts, educational exhibits, textile fabrics, floriculture products, kitchen and pantry stores, will make the best exposition of women's art and handicraft ever shown in the State.

All railroads in Kansas have made a rate of one fare from all points in Kansas, including Kansas City and St. Joseph, Mo., to Topeka and return.

The various departments of the fair will be in charge of the following officials: General live-stock superintendent, H. A. Heath, Topeka; cattle, T. P. Babst, Auburn; draft-horses, H. W. Mc-Afee, Topeka; light horses, D. O. Orr, Topeka; swine, M. S. Babcock, Nortonville; sheep, E. W. Melville, Eudora; speed department, J. A. VanVechten, Topeka; poultry department, Thos. Owen, Topeka; dairy department, I. D. Graham, Topeka; agricultural department, H. H. Kern, Bonner Springs; horticultural department, S. M. Crow, Topeka; apiary department, E. W. Dunham, Topeka; general superintendent women's department, Mrs. May Belleville Brown, Salina. Each of the superintendents will have entire charge of his respective department and the selection of competent expert judges.

For premium lists and entry blanks, address: Chas. H. Samson, Secretary, Topeka, Kans,

#### THE COMING CHICAGO MEETING.

The confidence of the American people in legislature cures for public ills is almost equal to their confidence in patent medicines as specifics for personal ailments. Doubtless where a public ill is of legislature origin, legislation will be required to remove it. On this account a great movement is on foot which seems likely to bring together, at Chicago, representatives of those industries in the United States whose products seek foreign markets. The exception will be those which, like the steel trust, sell for lower prices in the foreign than in the home markets.

The occasion for the meeting is the action taken by some European gov-

ernments to place discriminative tariffs upon American merchandise in retaliation for our high tariffs on products of their countries.

The Chicago meeting is not in the hands of chronic free traders and, if those who are managing the preliminaries know their ground, it will not be controlled by those who regard the present tariff schedules of this country as infallible. The farmer's interest in the proposed movement grows out of the fact that, while such countries as Germany are naturally good customers for American meats and other farm products, that country has taken measures to make these American goods pay a very much higher duty than is paid by other countries whose tariff laws are more liberal towards certain German products, such as sugar.

Several years ago James G. Blaine proposed that this country enter into reciprocal arrangements with such other countries as might be willing to make mutually advantageous agreements as to tariffs. Blaine's suggestion was adopted in a modified form. But, in the mutations of political control, the reciprocity arrangements were lost. It is now proposed in brief that a schedule of maximum and minimum tariffs be enacted, the maximum to prevail in all countries which fail to give reciprocal advantages to imports from this country.

Every industry is benefited by a wide market. Stockmens' and farmers' associations will be well represented at the Chicago meeting and, it is believed, that their interests will be properly cared for. If the effort shall be such as is hoped for and expected, it should be promoted by the writing of thousands of letters from farmers and stockmen to their senators and representatives in Congress.

#### FOLK ENFORCES THE LAWS.

Governor Folk, of Missouri has scored another victory. He first came into prominence in the office of public prosecutor in St. Louis County by bringing to the bar of justice the "boodling" officials of the city. Later he was equally successful against those who in State offices had offended by accepting bribes. Every effort was made to deter him from his purpose. It was pleaded that he would ruin his party. This did not affect Folk. He was told these things had been pracin the State. Folk said it was time they were brought to an end. His life was threatened. Folk continued to prosecute and live. Some of the "high toned" boodlers escaped to Canada. Folk induced them to return and face. the charges. Many were sent to the penitentiary. It was suggested that Folk would make a good Governor. The corruptionists thought they had him, then. But he went right on crowding lawbreakers to the wall. His party nominated him. The corruptionists of his and all other parties tried to defeat him at the polls. He was the only nominee of his party on the State ticket to be elected. He has continued to do his duty, to enforce the laws without fear or favor.

(Continued on page 774.)

### Hgriculture

Sweet Clover.

EDITOR KANSAS FARMER:-Referring "Sweet Clover," page 693 of the Kansas Farmer of July 6, with respect to what Mr. Roberts says (his opinion is. of course, of far more value than that of the writer), we regard sweet clover as next to alfalfa for feeding-purposes. It will thrive where alfalfa will die. It will run salt-grass out, and while it may be of as little value as Mr. Roberts states, we will say from personal experience in the Arkansas Valley, in Hamilton County, Kansas, that horses and cattle will run after and fight for sweet clover hay, and will grow fat on the same. Messrs. Hauts, Hixson and Davidson, on the south side of the river, a few miles above Kendall, each have a large amount of this grass on their places, and I have heard them speak in terms of praise of it. I once heard a man say, "It's not worth a —," but the same day B. A. Monroe, who has fed it, spoke in the highest terms of this grass; and if I had a bottom-land farm in the Arkansas Valley, I would not try to kill it out, but would do all I could to induce sweet clover to grow. I know of a few men who are death on sweet clover. If one will let it stand till it is ripe, he might as well try to make hay of hazel brush, for one is about as hard as the other; but if cut early before it is in bloom, it is a very fine hay, and as I said, horses and cattle will run after and get fat on this grass.

Last summer when I was at Kendall, Kans., I wrote to Manhattan, and asked if there had been any experiments made to learn the feedingvalue of sweet clover as compared with alfalfa. The reply was "None," but a farmer near there had been growing and feeding sweet clover for two years, supposing it was alfalfa, and was highly pleased with it. 1 am sorry I have not his letter to send you.

L. C. TEED. Wexford County, Mich.

#### Winter Wheat for Kaw Valley.

I would like some information as to the best winter wheat to grow in the Kaw Valley. Our farm is in the valley near Topeka, and we want to put in some wheat this coming fall. If you have any bulletins on wheat-sowing please send to my address.

Shawnee County. W. M. Forbes.

I believe the hard red winter wheat is better adapted for growing in Shawnee County than the soft wheat, although at this station we are able to produce good crops of the soft or semisoft wheat such as the Fultz & Zimmerman, and the Zimmerman variety is an excellent variety of winter wheat, being among the best producers at this station. Of the hard red wheat we have several varieties which have given large yields during the past two seasons; among these the Russian varieties appear to be superior to the others. We have for sale seed of the following varieties of hard red winter wheat: Defiance and Red Winter and Malakoff. Our supply of seed of these varieties of wheat is limited; we are selling the seed at \$1.50 per Manhattan. hushel f o. b.

The Fort Hays Branch station, Hays, Kans., also has considerable seed wheat of the best producing hard red winter wheats, and you can secure seed also from the McPherson station, McPherson, Kans.

We have no late bulletins on wheat. A. M. TENEYCK.

#### Pounds of Wheat Per Bushel in Kansas and Other States.

Will you please inform me what is the highest number of pounds to the bushel which wheat has tested in Kansas? Also, is there any other State where wheat tests more to the bushel than it does in Kansas?

ED. HUMPHRIES. Roberts County, Texas.

So far as I know there is no data kept by which we would be able to

compare the relative weight of wheat grown in different States. Many conditions influence the weight and quality of wheat; the weight of wheat in Kansas is probably not the same during any two successive seasons. For instance, this year the wheat crop is especially good in quality and heavy in weight. The average weight of wheat recently sold at this station was sixtyone pounds to the bushel; while last year our wheat was poor in quality and light in weight, some of it weighing as low as 52.5 pounds to the bushel. We have not yet tested the weight of all of our wheat of this season's crop, but I am sure that some of it will weigh more than 61 pounds to the bushel. The highest weight which I find recorded at this station previous to this year is 61,5 pounds to the bushel, in 1896.

It is true that the hard wheats when fully developed and of good quality usually outweigh the soft wheats. For this reason our western country produces a heavy wheat when the crop is good, but as to whether Kansas is especially noted for producing heavier wheat than Nebraska or Texas, I am not informed.

I have secured the following data from bulletins of different experiment stations, in which a report of the weight per bushel for different varieties of wheat is made for different sea-

State.	Bulletin No.			weight	Average weight per bushel lbs.	
Kansas Kentucky	59 11 15 69 77 83 89 94 118 129 28	1895 1896 1904 1887 1888 1897 1898 1899 1900 1896 1900	59 61.5 61 66.5 63 64.7 66 65 60.5 61.5 58.7 62.5	55 59 52.5 56 60.5 59 57.5 60.5 57.5 56.2 57.5 56.75	57 60.25 56.75 58.5 61.85 61.75 62.5 59 58.35 64.85 59.75 59.625	
Pennsyl'a Tennessee,	67	1903	63.8	59.3	61.55	
No. 2, Vo	250	1900	61.5	56	58.75	
No. 2, Vo Wyoming Wyoming	48	1901 1900 1902	60 63 63	52.5 53 59	56.25 58 61	1

At the North Dakota Station (bulletin No. 39), it was observed that while the ordinary fife wheat weighed 60 pounds per bushel, some of the best durum wheat weighed 63 pounds to the bushel.

As I stated at the beginning of this letter, the weight per bushel of the wheat depends not only upon the weather conditions but upon the kind of wheat grown, the condition of the soil, etc. In a single season wheat will vary several pounds per bushel on this farm, according to the variety and according to the conditions under which it was grown, and I presume this is true also with the State at

A. M. TENEYCK.

#### Black-Dotted Boralea.

Mr. L. O. Fuller, of Clyde, Kans., inquires concerning a leguminous plant

\* In Bulletin No. 83, in which the highest weight was given as 66 and the lowest as 57.5, a discussion was made as to methods of taking the weight per bushel. The method of taking the weight at the Kentucky Station has not been the same as the method practiced by grain-buyers. The highest weight was 62 instead of 66, while the lowest was 53.75 when the grain-weigher was used, such as is used by grain-buyers. If this correction were made for all of the weights given from Kentucky, the average weight per bushel would not be higher than that from other States.

†In Bulletin No. 46 of the Pennsylvania Station the average weight per bushel for nine years, of wheat grown at that station, was given as 62.38 pounds. From the data given above it would not appear that Kansas wheat was especially heavier than wheat grown in other States. I have given data only from winter-wheat States. While the hard red wheat such as is grown in Western Kansas and the Northwest weighs heavier as a rule than the soft wheat, the durum or macaroni wheat weighs still heavier.

that he sends for identification. The plant in question belongs to the botanical genus, Psoralea, of the great family, Leguminosae, which includes so many useful agricultural plants, such as the clovers, alfalfa, cow-pea, soybean, etc., as well as our common garden peas and beans. The Psoraleas number about 110 species with a wide distribution over the earth, and having about 35 species in the Western States. They are all herbs or shrubs with dark glandular dots on the leaves, which are divided into from three to five leaflets, arranged palmately, or like the arrangement of the fingers on the hand. From the dotted character of the leaves has come the scientific name of the genus-Psoralea-which is from a Greek word meaning "scurfy." From this the English name "Scurf-pea" is sometimes found used. Of the species found growing in Kansas, the most interesting one is Psoralea esculenta, which has a tuberous, edible, starchy root. It is sometimes called "Prairie Apple" or "Prairie Turnip," and is also known by the name "Indian Bread-root." The species sent in by Mr. Fuller is Psoralea obtusiloba, a species not hitherto collected for our herbarium, and we are obliged to him for the specimen. The plant is a perennial, branching, shrubby, herbaceous plant, from one to two feet in height, with spreading branches and with leaves silky beneath, which are covered on both sides with distinct black dots, marking the location of certain glands. It is hence called the "Black-dotted Psoralea." It is a plant of no particular importance one way or another, but occurs among the wild prairie flora, without special distinction either as a useful plant or as a weed. It is of no importa se to the farmer and has no interest or concern except to the botanist.

H. T. ROBERTS. Botanist Kansas Experiment Station.

#### Cockle-bur Questions.

EDITOR KANSAS FA ... Kindly answer these questions. Does the cockle-bur sprout only one or its two seeds during the season? If it sprouts only one seed, would the other one be destroyed if I should pull the weed instead of cutting it?

JOHN FOX, JR.

Marion County. The cockle-bur does not necessarily germinate one seed only during the season, although this is quite a common occurrence. If, as often happens, the germinating seedling carries the bur up above the ground and afterwards drops it when the seed-leaves fully develop, the bur will be left on the surface of the fround where it falls, and will be rather unlikely to find again soon conditions of continued moisture closely applied, which are necessary to germinate the other seed, and which may therefore lie over until another season. The various processes of preparing the soil the following fall or spring may bring the bur with its remaining ungerminated seed beneath the soil, where it will germinate. In case the bur does not happen to get above the ground in the first instance, however, there is nothing necessarily to prevent the remaining seed germinating like the first. As to pulling the plant, if pulled while very young, there is some chance of the bur still adhering, which, with its ungerminated seed, may no destroyed. Ordinarily, however, the bur will be left in the ground, so that pulling is not necessarily move efficacious than mowing. H. F. ROBERTS.

Botanist Kansas Experimen Station.

#### Killing Crab-G- .s.

The crab-grass has about taken onethird of my clover and thmothy patch. Last year I moved it twice and got about three tons of hay to the acre. This spring I turned the hogs in, as hog pasture was what it was intended

The timothy is now about three feet tall and almost ready to mow. Clover is eaten down rather close and can not be cut.

Will it be best to cut this timothy or let it go to seed?

Labette County. D. H. GLICK. **EAVE YOUR BACK** Electric Handy Wagon trie Whee' Co. Bz 48, Quincy. | 1

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#### Why not seed another field to grass and clover and break the field in question-planting it to corn and cultivated crops next season? To clear the land of crab-grass with the present crop growing on it, is a difficult problem, but with corn or some cultivated crop you can keep the crab-grass from seeding.

Clover is usually considered a biennial plant; that is, the plants that start one year usually die the next year after seeding, and for this reason unless the clover seeds on the ground it will gradually run out, and the thinner stand of clover probably accounts for the presence of crab-grass.

If you intend to use this field for hog pasture, crab-grass may not be seriously objectionable since hogs will keep it cropped off and by running a mower over it once or twice a season it may be kept from seeding. Cutting the crab-grass with the mower to prevent its seeding is the only means I can suggest of destroying it.

It will not do to disk a field of timothy since the bulbous roots of the plants will be injured and the grass largely destroyed by disking. From the the experiments at this station this season, it appears that clover is thinned by disking. I always recommend to use grass and clover in rotation with other crops. I recommend in the present case to seed down other land and plow up the land in ques-Also, if you desire pasture for I suggest that you sow some other grass than timothy with the I usually recommend to sow a combination of Bromus inermis and English blue-grass with red clover for pasture, sowing 8 or 10 pounds of each grass and 3 or 4 pounds of clover per acre. On bottom-land where it is inclined to be wet, Alasike clover is to be preferred to red clover, and on very wet land I would sow redtop with English blue-grass instead of Bromus inermis.

On account of the bulbous roots which timothy developes near the surface, it is easily injured by pasturing and this will be especially true in pasturing with hogs.

A. M. TENEYCK.

#### Alfalfa on Corn-land.

We have a piece of ground planted to corn which we would like to sow to alfalfa. Do you think this could be sown to alfalfa this fall and obtain good results from so doing? Have you ever tried sowing wheat and alfalfa together in corn-stalks, if so with what results? If you sow wheat and alfalfa together, how would you seed them? What time in the fall would be best CLAUDE L. HENDRICKS. to seed? Mitchell County.

We have not experimented with sowing alfalfa in corn, at least not during the past two seasons, and I find no record of such experiments in previous years. As a rule, I would not advise to sow alfalfa in corn, and especially with wheat. Experiments have been carried on in seeding with nursecrops and the results have always favored sowing alfalfa without a nurse-We have seeded alfalfa in cornstubble after the corn was cut up, with good success. Our plan is to disk and harrow the ground well, seeding the alfalfa about the first part of September; this requires early-maturing corn in order that the crop may be cut up by that date.

In a favorable fall the method of sowing in corn-stubble will succeed, but if the fall is dry you are not apt to secure a good stand. It is true, also, that in a favorable moist summer and fall you are likely to get a stand of alfalfa by seeding in the corn about the last of August or first of September; in fact I know of no reason, if the corn is early in maturing, why this method should not succeed as well or better than the method I have described above, of cutting up the corn before seeding. But with late-maturing corn which shades the ground and draws heavily on the moisture and plant-food, the alfalfa is not so likely to start and may make a poor stand and feeble growth, and I would especially recommend not to seed alfalfa with wheat in this way.

There is no advantage in seeding

# Increase the Value of Your Crop 40%.



There are thousands of farmers in the United States, who in the last few years have doubled the profit they used to make on their corn crop, by harvesting the whole plant, stalks, leaves and all. Yet there are tens of thousands of other farmers who still snap or husk their corn in the field, letting the valuable stalks and blades go to waste.

We know that farmers, of all men, must base their operations upon the most strict business principles if they are to succeed; then why are so many of them following this practice of gathering only one-half of their corn crop?

Our Government Experiment stations tell us that the ears represent only 60 per cent of the feeding value of the crop, and that the other 40 per cent is in the plant. And they have demonstrated further that the plant loses this value if it is allowed to stand in the field at the mercy of the weather.

Let'us suppose you have 75 acres of corn and are going to husk it in the field; do you realize that your neighbor who has only 50 acres of corn, and who will harvest the whole crop, stalks and all, will make just 3 much profit on his crop as you will on yours? You have paid taxes or rent on 25 more acres than he maspyou have plowed, planted and cultivated 25 more acres, and yet your net profits will be about the same. Can you afford to do business on that basis?

Here is the way it figures out. Suppose you both get sixty bushels of corn to the acre; your seventyfive acres at 50 cents a bushel will bring you \$2,250.-00. His fifty acres of corn at 50 cents a bushel will bring him \$1,500.00, and his fifty acres of stover

would bring him \$800.00 more, \$2,300.00 in all-\$50.00 more from fifty acres than you get from seventy-five acres.

These are not random figures; they are based on the statements and experience of some of the highest authorities in the country. For instance, an acre in corn will yield two tons of stover, and these authorities place the value of shredded stover at \$8.00 a ton, producing \$16.00 extra profit on each acre. You might just as well have this extra profit as not by cutting your corn at the right time, just when the ears begin to glaze.

You cannot expect to get this stover profit if you leave it in the field and turn the cattle on it. By the time the cattle get to it, it is practically valueless.

Neither can you realize good results cutting it by hand. In the first place, the plant must be cut promptly, just when it is ripe, and by the time the field could be cut by hand much of the feeding value would be gone. Besides this, farm labor is so high that this mean-Amould reduce the profit too much.

Use a corn binder. It cuts at stalks and binds them into well-shaped bundles, which are socile shocked or stacked for curing.

With this machine the field may be harvested rapidly, just in the nick of time, when the ear and plant are at their best.

The experience of the best dairymen and feeders of the country demonstrates that the corn binder is very nearly indispensible to the man who has a silo and regularly fills it with corn.

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Remember. The International lines are represented by different dealers. See them for ca talogues.

alfalfa, with a nurse-crop in the fall. If the alfalfa is seeded alone, you may cut several crops of hay the next year, while if seeded with the wheat you would probably not get a cutting of alfalfa, and would run the risk of losing the seed, or at least of getting a poor stand.

There may be some advantage in seeding alfalfa with a nurse-crop in the spring, since even when alfalfa is seeded alone in the spring, we do not expect to cut any crop the first season. However, as I stated above, the experiments favor seeding without a

nurse-crop. At this station we plan to seed aifalfa about September 15; seedings after that date are apt to winter-kill or make a poor stand. I prefer to seed about the last of August or first of September, although the condition of the soil will determine largely the date of seeding. There is nothing gained by seeding alfalfa in a dry soil or an unfavorable seed-bed which will not germinate and start the seed; better wait until the conditions are favorable, even if the seeding is delayed a week or so.

A. M. TENEYOK.

Bromus Inermis and Root Crops.

Will you please tell me what you know of Bromus inermis for pasture or hay? Does it take a year or two to get rooted before it should be used? When is the best time to put it in? Does it grow on all kinds of soil? Can you direct me to a reliable party for

What is the difference between turnips and rutabagas, or is there something in the beet-line better than either of these for cattle, and how is it raised? Where is a good place to order about twenty pounds of turnipGreenwood County. J. S. SAMPLE.

I have mailed to you a copy of Press Bulletin No. 129, giving information regarding Bromus inermis. This grass may be seeded either early in the fall or early in the spring; we have had perhaps better success in seeding in early spring than in the fall. Seeded in the fall, if the grass makes a good stand it will yield a crop of hay the first season, or it may be pastured, if care is taken not to allow the stock to graze it too closely. Seeded in the spring, the grass will not yield a crop of hay the first season, although if it makes a good start and a rank growth it will furnish some pasture in the latter part of the summer and early fall. The grass does well on almost any good land upon which corn or wheat will grow and produce good crops.

In comparison with other grasses, Bromus inermis will thrive well on upland and on sandy soils, but a rather heavy, compact soil, well drained, is more suitable to its growth. You can secure seed from several Kansas seed companies. The best seed which we -purchased last spring was northwestern-grown seed; I prefer the homegrown seed to imported seed. I am now making arrangements with a party in Dakota to secure a car-load of firstclass Bromus inermis seed, which will be distributed through this college or through the seed company located at Manhattan. It is quite important to secure pure seed of good quality. A great deal of inferior Bromus inermis seed has been sold in this State, with the result that farmers have often been prejudiced against the grass, from having been unsuccessful in seeding it, on account of poor seed. Always purchase the best grade of grass-seed, from a reliable seed com-

Turnips and rutabages are different species of the genus Brassica, one of the genera of the Cruciferae or mustard family. The rutabaga is botanically known as Brassica Campestris. The turnip is Brassica rapa. In growth, methods of planting, cultivating, etc., the crops are similar, and also have similar uses, both being used for stock feed, and also as a table vegetable. Both are biennial plants, the root or large fleshy bulb being produced the first year, while the seed matures the second year. Rutabages require a longer season to mature than turnips, and should therefore be sown a little earlier, usually from the last of June to the middle of July, in this State; turnips may be sown even later, until the first part of August. These crops are not easily injured by frost and make their best growth in the cool, moist weather of fall.

On old land, plant in rows twentyfour or thirty inches apart, and cultivate, thinning the turnips or rutabagas until the plants stand six to eight inches apart in the drill-row. At this station we have not succeeded in raising profitable crops of turnips or rutabagas; on our rather compact upland soil the crop does not thrive well. The soil best adapted for growing either of these crops is a deep, rich, wellprepared loam; such a soil is also best adapted for growing beets and mangels. For growing in this State I prefer the stock best of mangel wurtzel to rutabagas or turnips. This crop may be planted during the month of June or early in July, in drill-rows, as lescribed above, and given frequent cultivation, thinning the plants to six or eight inches apart in the row, when they have made a growth of two or three inches in height. We use the ordinary grain drill to plant mangel wurtzels, planting the rows the desired distance apart by stopping up part of the seed-cups in the drill. In order to secure a stand, the seed should be planted much thicker than it is desired to have the plants grow; set the drill to sow about two bushels of wheat per acre.

Varieties commonly grown are the Yellow rutabaga, and the Sweet Garman or Swede rutabaga. The flesh of the latter variety is white, while that of the former is yellow. The Globe varieties of turnips are perhaps preferable to the flat turnips, the White Amber or Redtop Globe being equally good

seed or its equivalent in the beet line? varieties. The Scotch Yellow is also considered a good stock turnip.

A. M. TENEYCK.

Protein Content in Irrigated and Nonirrigated Alfalfa.

We are about to commence the erection of an alfalfa-meal mill in Kansas City, Kans. We are large handlers of lfalfa, perhaps the largest in this market, and recently the question has come up as to the relative amount of protein in natural-raised Kansas alfalfa and the irrigated-raised hay of Colorado. We have seen the statement somewhere that the naturalraised alfalfa was much richer in protein than irrigated hay; and presuming that you have made thorough analysis, will ask that you kindly advise what the result of such analysis WOOLSEY-STAHL HAY CO. WAS.

Kansas City, Mo. Your letter to Secretary F. D. Coburn, has been referred to me. No experiments have been performed at this station which will throw any light upon the subject upon which you wish information. I have investigated the subject some but find no report of experiments published by any station, in which the effect of irrigation upon the composition of alfalfa is made a special study. Bulletin No. 80 of the Utah station contains a great deal of information along this line relative to grain crops, potatoes, and mixed grasses. In summing up the results of the experiments, the following conclusions are made: "Heavy irrigation increases the percentage weight of the heads of plants; light irrigations increase the relative weight of leaves.

"Irrigation modifies definitely the composition of plant-parts; the seeds are effected more than any other plant-

"The percentage of protein in cornkernels was increased from 12.05 to 15.08, as the amount of irrigation decreased; in oat-kernals from 14.07 to 20.79; in wheat-kernels from 15.26 to 26.72. In all these seeds the fat and nitrogen-free extracts were increased by liberal waterings.

"Increased irrigation increased the starch content and decreased the protein content of potatoes. \*

"The water in plants is somewhat dependent on the water in the soil.

"The proportion of ear-corn to stover increased regularly with the increased application of water. \* \* \*

"The percentage of grain in the wheat crop increased with increased irrigations.

The yield of wheat increased up to thirty inches of water.

"Crops in an arid district require a greater number of pounds of water for one pound of dry matter than in humid

climates." Although the experiments cited do not include alfalfa, yet the results with other crops would indicate that the percentage of protein in alfalfa hay may be less where the crop is grown by irrigation than where it is grown by dry-land farming. The composition of the alfalfa hay, however, will depend upon the amount of water supplied to the crop and not upon the method; that is, alfalfa which receives as much natural rainfall as other alfalfa would receive by irrigation would is similarly affected in composition, and from experiments with grains in the bulletin noted, it would appear application that with the amounts of water the percentage of protein is decreased; however, the yield is increased; that is, although the feeding-value of the crop may be a little less, the quantity may be greater, due to large application of

I have compiled the following figures on the composition of alfalfa hav:

State.	Bulle- tin No.	Protein per ct.	Carbo- hy'te per ct.	Fat. per ct.	No. An- aly's
New Jersey. Colorado Utah Kansas	39 61	15.84 17.36 9.22 11.89	38.97 36.71 43.25 41.03	3.82 1.65 .97 .66	2 9 29 3

Although it was not definitely stated, yet I take it that the Colorado and Utah hay were grown by irrigation, while the New Jersey and Kansas hay received no irrigation. It will be observed that while the percentage of



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Agrostologist, U. S. Department of Agriculture

An intensely practical discussion of the farm grasses of the United States of America is presented in this volume. It is essentially a resume of the experience of American farmers with grases, and it is safe to say that no other work has covered the ground so thoroughly. No .ttempt has been made to give a connected account of all the grasses known in this country, but the aim has been rather to give just the information which a farmer wants about all those grasses that have an actual standing on American farms. The whole subject is considered entirely from the standpoint of the farmer. One of the most wants about all those grasses that have an actual standing on American farms. The whole subject is considered entirely from the standpoint of the farmer, One of the most valuable features of the book is the maps showing, at a glance, the distribution of every important grass in the United States; and the reasons for the peculiarities in this distribution are fully brought out. The principal chapters treat on the grass crop as a whole and the relation of grass culture to agricultural prosperity, meadows and pastures, the seed and its impurities; the bluegrasses; millets; southern grasses; redtco and orchard grass; brome grasses; grasses for special conditions; haying machinery and implements; insects and fungi injurious to grasses, etc. etc. The methods followed on some pre-eminently successful farms are described in detail, and their application to grass lands throughout the country is discussed. The discussion of each grass is proportional to its importance on American farms.

This book represents the judgment of a farmer of long experience and wide observations regarding the plan in agriculture of every grass of any importance in American farming, in its preparation its use as a text book in schools as well as a manual of reference for the actual farmer has constantly been kept in mind. The book is most conveniently arranged and splendidly indexed, so that the reader may find any subject at a glance.

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protein and fat in the Utah samples are low, the percentage of carbohydrates is high, yet the Colorado samples grown under irrigation show a larger percentage of carbohydrates and fat than the Kansas samples grown without irrigation. The crude protein in alfalfa often varies according to the stage of maturity of the alfalfa when it is cut for hay, as shown by experiments at this station, published in Bulletin No. 114.

The general conclusion may be that the protein content of alfalfa hay will decrease to some extent according as the supply of water furnished the crop is increased; that is, by supplying the right amount of water a better quality of alfalfa may be grown by irrigation than is often grown in humid climates in soil which receives only the natural rainfall. From what I know of the Colorado and Utah stations I would judge that the amount of water supplied to the alfalfa at the Utah station was much larger than that supplied to the alfalfa at the Colorado station, since at the Colorado station the supply of irrigation water is often limited: hence the larger percentage of protein and fat which appleas in the samples of hay grown and analysed at that station.

A. M. TENEYCK.

### Horticulture

Strawberries and Blackberries.

J. M. KENNEDY BEFORE THE SHAWNEE COUNTY HORTICULTURAL SOCIETY. First, what we did for them.

Second, what they did for us. In asking me to give a "talk," or read a paper on "Berry Growing" before as intelligent and enlightened an audience as this is-men who have spent all their lives in the horticultural field —is a good deal like asking a 5-yearold boy to stand up and instruct his teacher in mathematics or algebra; for five years is our age in the berry business. What I have to say will be from experience, as theory and myself fell out years ago, and have not as yet made it possible to bury our dif-

Observation and experience have taught us that it is next to impossible to have land or soil too rich for growing berries of all kinds. In making our selection, we chose Deer Jeek and Kaw-bottom land, the ver best that our money could purchas -at a cost of \$180 per acre, with practically nothing on it, and laying within two miles of the business center of our city. The land is almost a dead level, is a deep, rich, black soil fully capable of producing 100 bushels of corn per acre when properly handled, and we consider the price paid as very cheap when we take into consideration its nearness to a good home market, where an abundance of manure can be had cheap, and where day laborers are plentiful, and pickers by the hundreds -all of which conditions must be taken into consideration when choosing a location.

STRAWBERRIES.

In preparing the soil to receive our plants, we first plowed the land just as deep as three good horses could pull the plow, which plowing turned the furrows on edge, rather than upside down. This plowing was done as soon as the frost was out, and the land dry enough to put a team on. We left it in this condition until just before we wanted to set the plants. As soon as our plants had arrived, we started the harrow crosswise first, then diagonally. This left the surface quite level. We then used an eightfoot float which pulverized the surface soil and left a fine bed for the plants which were set in rows three feet apart, and plants about 14 inches apart in the row, using about 14,000 plants to the acre. We used the 3- by 7-inch steel dibble in setting, and employed only the most careful men (not boys), to set them, while we walked behind them carefully tramping the soil firmly to the roots with our feet as fast as the plants were set. When the plants were all set we scattered one

ton of fertilizer on the field, using about 500 pounds per acre, spreading it quite thin directly on the rows of We then harrowed the entire field, using a twelve-foot steel harrow with teeth set at an angle of about 45 degrees, the harrow thoroughly mixing the fertilizer with the soil and killed all young weeds that had begun to germinate. This harrowing, we found on examination, had covered some plants. We also found after a few days when the plants began to grow, that this covering of the plants did no damage.

CULTIVATION.

Cultivation now began in earnest. When we could see the rows of plants from one end of the field to the other, we started our two-horse eagle-claw cultivator, hitched to a very slow team, with one man to handle the plows, whose business it was to do that and nothing else. This enabled the plowman to get very close to the plants without plowing them out. This plowing was made deep, as was all other plowing up to a time when the plants began to make a great many runners, when cultivation with the cultivator stopped. We did not stop this cultivator, however, until our plant-rows had set plants as wide as wanted. At each and every plowing we had good hands to follow sharp potato hooks, thoroughly stirring the soil between the plants, and placing the runners in a straight row. When the rows were full, we let runners set on each side of the row until the rows were about 18 inches wide. This accomplished, we used our one-horse, twelve-tooth cultivator with eight-inch rolling cutters attached, one on each side of the plow, going the same way all the time, cultivating shallow and cutting off all runners on both sides at a single passage through the field. At times we would have hands go ahead of this plow with wooden rakes, raking across the rows, thus drawing all runners that might be running lengthwise of the row into the walk or center where the cutters or plow would catch them; but sometimes this raking would not get them all, and we would then cut them by hand, using a common case-knife in the hands of a careful man or boy who would gently draw the knife across the row between the plants, thus cutting off all the runners not needed. This hand-cutting was repeated once a week up to the first of October. We cultivated once and sometimes twice a week, and always as soon after a rain as we could get into the field, up to the first of October, when all work was stoppel. MULCHING.

Late in the fall, just after the first hard freeze, we cover the entire field to a depth of four inches, with straw or old hay, let this remain on the plants quite late in the spring, until the plants begin to bleach, then with wooden rakes draw the mulching from off the rows to the center of the walks and tread down with the feet to prevent it from blowing about. This bleaching of the plants is not too much and will not hurt them in the least; and this late removing of the mulch serves to protect the plants from the late freezes in the spring which often kill.

VARIETIES

We find of the four varieties. Captain Jack, Staple, Splendid, and Warfield, that the two latter are the only ones that are suited to our soil, and the two former will be discarded after this year's fruiting. We have several other varieties that will fruit for the first time this year, and we shall discard all that are not suited to our soil. In the year 1901, we lost 80,000 plants practically by improper setting, by over-heating of plants in transit, by late setting, by drouth, followed by winter-killing. Results, no fruit for the year 1902. But we were learning, and the work described above was for the year 1902, so you can judge how much more painstaking we were.

AFTER FRUITING. Soon after we pick our last berries we put our teams on the reversible disk, and driving astride the rows, a little to one side so as to cut away Reference: DAVIS & SON Live Stock Commission Merchants South St. Joseph Mo.

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one-half or two-thirds of each row, said cutting being off the west side of all rows (our rows run north and south). This cutting of the mulch and old vines and rootlets adds a rich humus which is of great value to future crops. After this cutting is done we use the eagle-claw cultivator again, running the plow deep in the track of the disk. Repeat this several times, and when the runners begin to show signs of wanting to take root we pull them with wooden rakes over to the west side of every row, and force them to take root in the freshly plowed earth which was made fresh and loose with bull-tongue on the eagle-claw, so the roots of young plants can strike When these new deep into the soil. plant-rows are set with strong plants as thick and wide as wanted, we put on our disk again and drive astride of the newly set plant-row, cutting away all the remaining portion of the old row, thus leaving a fine row of young plants for next fruiting, set from the runners of the old row. By this system we can renew our fields for any number of years with perfect safety.

BURNING. Common sense teaches us that it is wrong to "mow and burn." It should not be done, as it destroys all material that should go to make humus in the soil. There is no potash or nitrates in the ashes of vines, or in mulching; and if there were any, would not the winds blow it away? If our fields should ever become infested with rust, blight, or leaf-roller, then we will "mow and burn," and will also plow up, cultivate in other crops for two years, then reset to berries again.

Yes, we find that it is needed. We lost one and one-half acres of as fine plants (Warfields), as man ever saw in the year 1903, for the want of some

POLLENATION.

perfect flower berry with it. This left us only three acres from which we gathered a fine crop of choice berries. We did not gather more than 65 twenty-four quart crates and of inferior berries from these perfect flowering va-

rieties, which occupied one-third of the three acres. We can attribute this failure to no other cause than that the varieties were not adapted to our soil. So practically all the berries we harvested were from the remaining two-thirds of three acres which were in Warfields.

The number of crates, and prices received for them will be stated farther on in this paper. I now come to no-

BLACKBERRIES.

After preparing the ground as for strawberries, we set the blackberry roots four feet apart in the row, the rows six feet apart, which is too close, and cultivated thoroughly twice a week and always after overy rain up to the first day of October of the first year, when all work was stopped. Clean cultivation was the rule at all times, with all plants. This brings us to the end of the first year's work,

The first thing we did in the springof 1903 was to cut all the previous year's growth off at the ground, or just above the first bud on the cane (must leave one bud on), removed and burned them; then with our eagle-claw plow we cultivated deep and often, running the plow up close to the str and following with the hoe as often as we plowed. In about ten days or two weeks the bud left on the stub will begin to grow. This growth draws the sap which soon starts the growth of strong shoots from the roots. As soon as those shoots were four or five inches in height we pulled the bud growth off of all stubs, thus forcing all the strength of the roots into the young canes which grew vigorously; and when they attained a height to just pass under the cultivator we pinched out the terminal bud. This pinching forces a strong growth of laterals which were allowed to grow at will. We permitted as many canes to stand as would, not allowing more than four to grow in a bunch or hill. The rows were not allowed to set more than a foot in width the first year.

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After the ground froze so as to bear a wagon we mulched the rows with manure fresh from the barns of the city, using about 70 two-horse loads to the acre. This ended the second or twoyears work with no returns. We call this patience.

· In March of the third year we pruned off one-half of last year's growth of all laterals, then cultivated between the rows only, using a onehorse hoe cultivator, which cuts off all weeds and sucker plants about three inches under the surface. This cultivating, with frequent hoeings, was kept up every week until the very day that we bagan picking, when we stopped cultivating for the year. This started the weeds and grass which choked the growth of the canes and hardened the wood and fruit-buds, and they passed the winter of 1903 like scrub oaks. We always pinch the terminal bud off of all canes every year.

Our work the fourth year was the same as the third with the exception of the additional labor of removing the old canes and burning them. We applied no more manure or other fertilizer to the vines after the application the second year. We can now notice (second) what they did for us.

SUMMARY.

Strawberries-(3 acres, one-third of which 

Total from four acres.....\$3,079.03

This is not so bad for four years' work and two years' crop. It beats growing corn and wheat by a good deal. The above figures are gross recelpts; all expenses had to come out of it.

CONCLUSION.

A man who is the happy possessor of a fruit farm, be it small or large, is a sovereign; and as such can sit down at the first table loaded with the best health-giving food of the land.

#### Onions For Market.

EDITOR KANSAS FARMER:-I would like to know through an early issue of your valuable paper the method of drying onions on a commercial scale, so as to keep them for the winter market. I would also be glad of any information as the methods of growing and harvesting the onion crop on a large scale. H. P. THOMAS.

Lyon County.

A crop of onions may be gotten in two ways. The seed may be sown directly in the field where one wishes to grow them, or the seed may be sown in the hot-bed and the resulting seedlings transplanted to the permanent field; or secondly, by setting out small onions-either top-onions, multipliers, or small onions obtained by sowing seed. Each method has its advantages and its disadvantages. We have had better success with transplants.

For sowing in the field the soil needs careful and thorough preparation. It should be well fined. The seed should be sown in early springtime-say, from the first to the middle of March. It is best to sow the seed with a seed drill. 'The rows should be about sixteen inches apart. The quantity of seed required per acre varies from three to four or more pounds. After the seedlings are well up they should be thinned to about four inches. Continued cultivation during the spring months should be given

When the onion tops begin to die and fall over, harvest time is approaching. · Onions can be pulled either by hand or by use of machinery. The more common practice is to pull the onions and leave them in the field in small piles where they may become thoroughly dry before they are taken to the storage sheds. After remaining in the field a few days they are topped. If the onion is fully grown and thoroughly ripe the tops can be removed very easily and without danger of decay by infection through the stem. The stem should be cut off about one-half inch from the bulb.

When the onions are thoroughly dry they should be stored away in a dry airy place. They should not be piled or heaped up, but should be placed in shallow, slat-bottomed boxes or shelves. Good circulation of air and dryness are essential. Examination from time to time with careful sorting out of a possible decayed one is desirable.

Sets of Yellow Globe Danvers and Burpee's Silver King planted at this station on March 14 were ripe and harvested June 23. They were large and perfect onions, their diameters running from one to nearly three inches. Seeds of White Victoria, Australian Yellow Globe, and Large Red Globe sown the same day are now ripening and will produce a large crop of beautiful onions. Seeds of ten or more varieties were sown in the greenhouse benches on March 8, and transplanted to the field April 27. They have made an excellent and uninterrupted growth from the beginning and are now ripening. It has always been more or less difficult to get a good stand from seed sown in the field. The weather and soil conditions must be near the ideal to bring good and satisfactory results by this method.

ROBT. E. EASTMAN, Assistant in Horticultural Department Kansas Agriculturel College.

A Shade-Tree Pest: The Fall Web-Worm.

Shade-trees on lawn, park and street are now subject to attack by dark caterpillars about an inch and a quarter long, covered with long, white hairs, and spinning, for the protection of the colony in which they live, a dirty, white, silken web, covering, when fully developed, the entire terminal portion of the branch infested. This insect is the fall web-worm, known for many years as a tree pest in lawn and orchard, but more abundant and attracting more attention than usual last year and

Observations by the Kansas Experiment station establish the fact that for this region the insect is two-brooded, and hence more troublesome than in States farther north where but a single brood is matured in a season. Its life history is in brief as follows: The parent insect is the white moth, about an inch in extent of wings. It appears in April and May from pupae which have passed the winter under rubbish and in loose soil at the foot of the trees on which the caterpillars of the preceding autumn had fed. These moths, which are night fliers, fly, after mating, to the trees and lay eggs in clusters on leaves mostly in open spaces and at the tips of the branches. The young caterpillars are social, and remain for most of their growth in the colonies hatching together. On hatching, they at once begin to spin webs for protection, and as the worms grow and extend their feeding grounds the webs are extended to correspond until they attain the size of a foot or considerably more in dimensions, depending upon the size of the colony. The first attacks merely shred the leaves, but later the entire leaf is eaten, and while at the time of the attack of the more abundant fall brood the tree is so far matured that no great injury to its vigor results, the presence of the worms is very disagreeable, especially when, as nearly full grown, they begin to crawl more widely, scattering over trunk and neighboring porches, fences and walks. The mature caterpillars descend the tree and hide under matted leaves or other rubbish, or in hollows and crevices, or in the loose soil to the depth of an inch or thereabouts. Here they enter the dormant pupa stage in which they remain until the latter part of July or the first part of August, when they change into moths. These soon after lay eggs, as did the earlier brood, and unless the first brood of caterpillars was greatly reduced by disease or parasites, the August brood is vastly more numerous and proportionally destructive. In one summer colony over six hundred moths matured. Others are almost entirely destroyed by parasites, of which there are two forms. Two-winged

flies, much like house-flies in general

appearance, are abundantly bred from some colonies. Four-winged flies known by the general name of braconids or ichneumon flies are, however, more widely effective, and are frequently reared in great numbers.

The late generation of caterpillars have habits like the earlier except that, entering their dormant state later in the season, they remain therein until next spring, when they hatch into moths by which the eggs for the early colonies are deposited.

Most common shade- and orchardtrees are subject to the attacks of these pests. They are specially fond of elm, box-elder, hickory, ash, apple, and plum, but scattered colonies occur in various other trees.

Owing to their hatching in dense colonies, it is comparatively easy to check their multiplication and prevent the appearance of the disgusting webs by destroying the caterpillars when young. They are mostly to be sought for at the tips of the branches toward the open, and when discovered they may be removed for destruction, or destroyed where they occur. In the latter case a kerosene torch will cook them with little injury to the branch, or a spray of arsenical poison may be applied. These methods should be repeated if necessary, and may also be employed in the destruction of the colonies after they have grown larger, but with correspondingly greater expense and trouble. The pupae may be found sometimes many together in attractive situations about the trees subject to attack, and their collection may be made so effective as to greatly lesson the annoyance incident to the presence of the following brood.

Bands about the trees are absolutely of no avail against the attacks of this insect, as the female is amply winged, and uniformly reaches by flying the leaves on which she deposits her eggs. E. A. POPENOE.

Manhattan, Kan., July 18, 1905.

Apple Prospect in Missouri July 15, After the unprecedented cold of the past winter and the cold east rains of April 15 to 20, we could hardly expect

a full crop of apples. While the orchards were in good condition, and are still in fine shape, blooming beautifully, yet injured vitality of the trees by the severe cold, and the failure of the bloom to well pollenize, caused the young apples to drop all through the months of May and June until the prospect for a crop is not good. In some places the fungus damages have been severe and the insect pests have been abundant.

The prospect, therefore, for a crop will be:

In the Ozarks, 25 per cent to 35 per cent.

In Central Missouri, 20 per cent to 30 per cent. In North Missouri, 15 per cent to

twenty-five per cent.

While this is true, we have special locations where the crop will be 50 per cent to 60 per cent, and even the small average that the State makes, means, because of the large number of orchards, a good many barrels of marketable apples for sale at picking time.

The prospect, so far as heard from, shows less than half a crop in New York, a little more than half a crop in Michigan, but a still larger percentage in the new Western and Pacific States. This justifies us in saying prices will be fairly good and that it will pay to take care of all our

Grapes will be an abundant crop. Peaches, of course, are a failure. Pears are a very light crop. Plums are a very good crop. L. A. GOODMAN, Sec'y Missouri Horticultural Society.

Glucose Industry.

The magnitude of the glucose business may be better appreciated when we consider the Warner Glucose House at Waukegan, Ill., which is now being enlarged. Its present capacity is 22,000 bushels of corn per day and the changes now in progress will raise this capacity to 30,000 bushels of corn per day. This corn will turn out 600 short tons of standard glucose per day. Twenty years ago it was said that the glucose factories were produc-

HORSE OWNERS! USE

CAUSTIC BALSAM.

safe, speedy and positive cure he safest, Bost BLISTER ver used. Removes all bunches roun Horses. Impossible to roduce scar or blemish. Send THE LAWRENCE-WILLIAMS CO., Cleveland, O.

HOGS WILL MAKE YOU RICH send loe for a whole year's trial subscription to the best hog paper in the SWINE BREEDER, Lincols. Neb.

#### PRIZE WINNING O. I. C. SWINE

Sows and gilts bred to Kerr Dick, sire to World's Fair Junior Champion, or by Kerr Dick and bred to ther equally good sires. Also fine crop of spring pigs from such sows as Big Mary, grand champion at St. Louis, Kerr Ulna, silver Mina and others. Headquarters for Boars and Gilts. Write me.

O. L. KERR, Independence, Mo.

#### PINK EYE CURE FOR HORSES AND CATTLE

Sure relief for Pink Eye, foreign irritating sub-tances, clears the eyes of Horses and Cattle when quite milky. Sent prepaid for the price, \$1.

Address orders to W. O. THURSTON,



An illustrated book on how to keep hogs free from Lice, Worms and Scurvy, Protect from Disease and bring to early maturity at small cost with Car-Sul. Contains illustration and price of hog dipping tank and many suggestions of value. Mailed Free on request. MOORE CHEMICAL & MFG. CO.,

Dr. H. Jawhittier, Pres., Kenses City, Me. 1601 Genesee Street.





#### XILLS TICKS AND LICE

ON ALL LIVE STOCK. SHEEP, SWINE, CATTLE, HORSES, ETC. PREVENTS AND CURES PARASITIC AND SK'N DISEASES.

Kreso Dip kills disease-germs, ticks, glosses the hair, heals scratches and wounds; cures seab, mange and ringworm, and acrs as a fly-repellant. It is scientifi-cally prepared in our own laboratories, never varies in strength, and is therefore reliable.

Easily prepared for dipping or hand-dress-ing-simply mix with warm, soft water.

\$1.26 PER GALLON, AT YOUR DRUGGISTS.

Special quotetions in quantities. Write for descriptive pamphlet-it's free

# PARKE, DAVIS & CO.

pile on harvester or windrows. Man and horse cuts equal to a corn binder. Price \$14. Circulars free showing Harvester at work. NEW PROCESS M'FG. CO., Lincoln, K ans personnel of Company.

Personnel of Company.

James Ingersoll, president; J. H. Ritchie, like president; H. H. Tucker, Jr., secretary and treasurer.

References: The Montgomery County References: The People's National National bank, the People's National bank and Cherryvale State bank, all of Cherryvale, Kan.

f. Ritchie, tr., secre-

Fifty Thousand Shares at Present Fifty Thousand Shares at Present Prices Will Secure an Oil Station for Both Refined and Fuel Oil at Once.

As before stated, the Uncle Sam company is already at work installing stations in Kansas. Any man or club of men who will band together and take sixty thousand shares at present prices can name the man they wish to be put in charge of the company's interests in their county and the company will at once compand the company them with both refined mence to supply them with both refined mence to supply them will at their county seat town just as and figel oils. It will also install a station at their county seat town just as sequickly as the machinery can be sequickly as the machinery can be sequickly as the manufacturers.

Strong Manufacturing and Rich Growing Industry of Sams company is a common man's company. It takes an is a common man's company to complete this stock and get lined up right for the one industry of Kansas. If you have from oil industry of Kansas and officers of the with the managers and officers of the with the managers and officers of the

stock you secure property that is really stock you secure property that is really increasing in value every day, because the rapid development and the erection of machinery goes forward with vim and cenergy. The refinery is now turning gold into the treasury every day.

Two Carloads of Barrels Arrive.

The Uncle Sam company is now selling oil and big money is already being realized on the Cherryvale plant, just completed. The Uncle Sam company received pieted in the Sam self of two car loads of the first shipment of two car loads of the first shipment of two car loads of the patrons until the tank stations are completed. Twenty car loads of barrels a few days ago in which to ship oil to patrons until the tank stations are completed. Twenty car loads of barrels will be received during the next few days. Orders for Uncle Sam refined oil are coming in from all over Kansasa and all will be filled just as fast as the refinery can turn out the oil, and the plant is now running night and day.

Write at once for prices on refined and fuel oil.

Stock Will Be Advanced 25 Per Cent
at Midnight, Tuesday, August 1.
The Uncle Sam company has met with
north great success in raising the necessuch great success in raising the necessary capital to crowd the work, both on
refinery and pipe line and in its oil field
development, that stock advertised at the
present prices will either all be sold or
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acons why the Stock Will Certainly sons Why the Stock Will Certainly acons Why the Stock Will Certainly sons Why the Stock Will Certainly sons Worth, on a conservative basis, a quarter of a million obligation. This refinery is now worth, on a conservative basis, a quarter of a million dollars to the stockholders of the company and is already being increased in the capacity. The company has miles of a million dollars to the stockholders of the company has miles of lateral lines. A field, and is laying more having by the company secured and owned by the company we secured and owned by the company. Forty miles of the main trunk pipe line for its now on the ground along the pipe line route at Neosho Falls, LeRoy, lipe line route and controls over thirty thousand sown and controls over thirty thousand some of the richest oil fields in Labette, Montgomery, Elk and Chaunal and are seventy-nine (73) and arress of valuable oil and gas lands, located in some of the richest of Bartles ville, in the five hundred barrels district, right up regainst the Osage line in the reflect of barrels of barrels of oll are owned and in storage, ready to be refined and turned in storage, ready to be refined and turned into money. More oil is being stored every hour. The company has thousands of barrels of tankage completed, one big tank alone having a capacity of one million six bundred thousand galons. The company has nonted the fields. The field during the next six months. The company has purchased tank cars and has company has purchased tank cars and has

ments of \$3.00 each 1,000 shares, \$16 cash and six monthly payments of \$19.00 each 1,000 shares, \$16 cash and six monthly payments of \$19.00 each 3,000 shares, \$48.00 cash and six monthly payments of \$57.00 each. 10,000 shares, \$155.00 each and six monthly payments of \$170.00 each and \$1.00 per share.

HOW TO SEND MONEY—Make all checks, drafts or money orders to The Uncle Sam company or H. H. Tucker, Jr., and stock will be sent promptly by registered mail.

Big Deals Are Being Closed Daily on This Stock.

Investors can depend, as before stated, on this stock advancing 25 per cent on August 1st. However, this does not mean that you have any certainty that it will remain at the present price for even the maxt five days. Big deals are pending all over the United States. This announcement will be read by close to fifteen million people. The savings banks of the country are full of money that is bringing the depositor practically no income and it is not any safer than it would be if invested in this company as the Uncle Sam company as the Uncle Sam company as the Uncle Sam company has oil lands in the transury. Every well managed refinery company that owns its own production succeeds that two that will be built during the encugh to feed the present refinery and the two that will be built during the pract control of the west what the two that stock you invest in one of the present refinery and the two that genterprises in the nation. It will be to the west what the pract of over a century. When you should not delay an hour after reading the product of the samouncement. Send your remittance this announcement. Send your remittance that the eastly weeks. Several deals for ten and twenty weeks. Several deals for the sompany are welcome to join us, for this company are welcome to join us, for this company wall be selling for that in less than six weeks. Several deals for the sompany wall products in every part of the Union. For further particulars write or wire,

storage tanks for stations th mediately be installed at Hutchinson, Topeka, Wichita Kansas.

supported tenths of Uncle Sar the most sold in t good price

AUGUST

ing 1,000 tons of glucose per day, or over 300,000 tons per year. Now we find this big Warner factory is getting ready to turn out daily more than half of what all the factories turned out twenty years ago. The Warner factory, we believe, is not the Glucose Trust, and this latter organization conceals its business as far as it can. Judging from the above data it seems probable that the present production of glucose in the United States reaches half a million tons per annum.

The man who iz allways anxious to help sumboddy gits snubbed the oftenest, but hen over Josh Billings.

est, but he can stand it better than enny one I kno ov.-Josh Billings.

#### Kansas Fairs in 1905.

Following is a list of fairs to be held in Kansas in 1905, their dates, locations and secretaries, as reported to the State Board of Agriculture and compiled by Secretary F. D. Coburn:
Allen County Agricultural Society: J.
T. Tredway, Secretary, Iola; September 12-15.

T. Tredway, Secretary, Iola; September 12-15.

Barton County Fair Association: W. P. Feder, Secretary, Great Bend; August 29-September 1.

Brown County—The Hiawatha Fair Association: Elliott Irvin, Secretary, Hiawatha; September 5-8.

Butler County Fair Association: H. M. Balch, Secretary, Eldorado; October 2-6.

Chautauqua County—Hewins Park and Fair Association: W. M. Jones, Secretary, Cedar Vale; October 17-19.

Clay County Fair Association: Walter Puckey, Secretary, Clay Center; October 10-12.

Fair Association: W. M. Jones, Secretary, Cedar Vale; October 17-19.
Clay County Fair Association: Walter Puckey, Secretary, Clay Center; October 10-12.
Cloud County Fair Association; W. G. Reld, secretary, Concordia; October 3-6.
Coffey County Agricultural Fair Association: Henry Jackson, Secretary, Burlington; September 19-22.
Cowley County—Eastern Cowley County Fair Association: J. M. Henderson, Secretary, Burden; September 27-29.
Cowley County—Eastern Cowley County Fair Association: J. Wilson, Secretary, Burden; September 27-29.
Cowley County Agricultural and Live-Stock Association: W. J. Wilson, Secretary, Winfield; October 3-6.
Crawford County Agricultural Fair Association: Frank McKay, Secretary, Pittsburg; September 18-23.
Elik County Agricultural Fair Association: E. B. Place, Secretary, Grenola; September 19-21.
Finney County Agricultural Society: A. H. Warner, Secretary, Garden City.
Ford County Agricultural Society: Nic Mayrath, Secretary, Dodge City; second week in August.
Franklin County Agricultural Society: Nic Mayrath, Secretary, Ottawa; September 5-9.
Greenwood County Fair Association: C. H. Welser, Secretary, Eureka; August 15-18.
Harper County Agricultural Society: J. T. Axtell, Secretary, Newton; September 28-30.
Jefferson County Agricultural and Mechanical Association: Geo. A. Patterson, Secretary, Oskaloosa; September 5-8.
Jewell County Agricultural and Mechanical Association: Geo. A. Patterson, Secretary, Oskaloosa; September 5-8.
Jewell County Agricultural and Mechanical Fair Association: Henry R. Honey, Secretary, Mankato; September 11-16.
Marshall County Agricultural and Mechanical Fair Association: C. L. Miller, Secretary, Marysville; September 11-15.
McPherson County Agricultural and Mechanical Fair Association: R. Y. Kennedy, Secretary, Paola; September 25-28.
Mitchell County Agricultural Association: P. G. Chubbic, Secretary; Beloit.
Morris County Exposition Company: M. F. Amrine, Secretary, Confeyville.
Morris County Agricultural Association: P. G. Chubbic, Secretary, Seneca; Aug

Secretary, Chanute; August 23-September 2.

Ness County Agricultural Association:
J. S. Wagner, Secretary, Ness City; September 6-8.

Norton County Agricultural Society: M.
F. Garrity, Secretary, Norton; August 29-September 1.

Osage County Fair Association: E. T.
Price, Secretary, Burlingame; September 5-8.

Reno County—Central Kansas Fair Association: A. L. Sponsler, Secretary,

Reno County—Central Kansas Fair Association: A. L. Sponsler, Secretary, Hutchinson; September 18-23.

Rice County Agricultural Fair and Live-Stock Association: E. E. Potter, Secretary, Sterling; September 4-6.

Riley County Agricultural Society: Jno. W. Cone, Secretary, Riley; August 8-11.

Rooks County Fair Association: E. S. Williams, Secretary, Stockton.

Saline County Agricultural, Horticultural and Mechanical Association: H. B. Wallace, Secretary, Salina; September 18-22.

Shawnee County—Kansas State Exposition Company: C. H. Samson, Secretary, Topeka; September 11-16.
Smith County Fair Association: Milo Dimond, Secretary, Smith Center; August 22-25. ust 22-25. Stafford County Fair Association: Geo. E. Moore, Secretary, St. John; August E. Moore, Secretary, St. John; August 23-25.
Wilson County—Fredonia Agricultural Association: J. T. Ceoper, Secretary, Fredonia; August 22-25.

The whole secret of remaining young in spite of years, and even of gray hairs, is to cherish enthuisasm in one's self, by poetry, by contemplation, by charity—that is, in fewer words, by the maintenance of harmony in the soul.—Amiel's Journal

# Monthly Payment C % shares, \$3.00 cash, six n ints of \$2.00 each. 250 shar d six monthly payments of offer. monthly ares, \$4.00 s of \$5.00 pay-cash each.

\$590.00: \$2,300.00.

Forty-five more distributing stations will be established in Kannas as the company completes another refinery and increases the capacity of the one at Cherryvale. The refinery and oil lands and oil proflections, owned and controlled by this company, with its franchises, pipe lines and machinery, are worth on a conservant machinery, are worth on a conservant company, with its franchises, pipe lines company, with its franchises, pipe lines and dollars. In addition to the above mentioned property back of this company mentioned property back of this company there are over one hundred and twenty there are over one hundred and twenty there are over one hundred and twenty there have an addition to the above months. This money is for stock that is already alotted and on which two and three payments already have been remitted by the purchasers. There is not a shadow of doubt but that all of this shadow of boubt but that all of this shadow of doubt but that all of this shadow of the paid property Worth Over Five Million Dollars in Less Than a Year.

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### The Houng Folks

CONDUCTED BY RUTH COWGILL.

#### Laugh It Away.

Don't put on your far-off glasses hunting lions in the way;
Don't go probing 'round for troubles—just ignore them, day by day.
Don't go sighing: "Yes, 'tis pleasant just at present, but—ah me!
There's the sorrow of to-morrow—where will all our sunshine be?"
If the worse is in the future and has been there all the while,
We can keep it there by laughing till we make the others smile.

If the worst is in the future, let it stay there; for we know
That to-morrow's always threatening to bring us so-and-so;
But to-morrow with its sorrow never comes within our gaze,
For all time is just a pageant of these busy old to-days.
Let the worst stay in the future, where it has been all the while!
We can keep it there by laughing till the others start to smile. If the worst is in the future, let it stay there: for we know

When we look toward the sunset in the gorgeous afterglow.

Let us thank the blessed Father for the thinge we do not know;

Let us thank Him with all fervency that He has never sent

Any burden quite unbearable; that while our backs have bent

Underneath the load, we've had his arms about us all the while—

Let us laugh away our troubles till the whole world wears a smile!

Let us laugh away the trouble though our eyes are dimmed with tears;
Let us laugh away the heartaces and the worries and the fears;
Just "be good and you'll be happy"—if you're happy, you'll be good;
For the rule's so double-acting that it's seldom understood.
Oh, there is no future coming with a lot of trouble in—
We can fight it off by laughing till the or trouble in—
can fight it off by laughing till the others start to grin!
—T. W. Gillian, in Ex.

#### Gibraltar.

#### ANNA MARIE NELLIS.

From Azores' to Gibraltar the distance is two, three or four days, according to the state of the walking; our steamer required but two days' time, as it loafed about only a little.

The distance in miles, I think, is in the neighborhood of 1,000 and 40 of our 280 cabin passengers were to land at that point, to "do" Spain, in like manner as our own programme specified.

Naturally every one was very busy packing during those two days, saying 'Good-bye" and exchanging addresses. On Saturday evening we had our second "grand ball" on shipboard. The sea was very calm and nearly all of the passengers were fully recovered from their "mal-de-mer" troubles. Our steamer had been fully painted, during the past two days, a brilliant white as to its outside appearance; and as usual I managed with my inimitable art to attach more of the paint to my gown than was really necessary for decorative purposes. There is something strange about this white paint, on ship-board it will come off immediately if the sailors will rub their blue flannel sleeves over it, and I was easily relieved so I did not need to go into "porte" looking like a flag of truce.

Monday morning at 10 o'clock we began to see the outlines of the Spanish coast, and then gradually Africa came into view, both shores appearing so arid and barren that we felt almost a sorrow that we had traveled so far to view them. There were no trees to be seen, only long, endless shores and mounds of sand with bare hills in the background.

At last we came to the narrowest art of the Straits-only twelve miles tween Europe and Africa-Centa on the African side, and Tarpia on the Spanish coast.

The "gateway to the Mediterranean Sea is guarded by the two peaks, the Pillars of Hercules, as my Grecian friends, two thousand years ago called them. On the European side is the Gib-el-Taric, the Moorish name meaning "the peak of Tarik;" and Gib-el--Musa on the African side-meaning the peak of Moses. Both Moses and Tarick seem to have been quite popular with the folks in either country. These peaks appear very grand and massive as one approaches them from the ocean. Old Gib-el-Taric is 1.430 feet high, three miles long and from one-half to three-quarters of a mile

wide, and it resembles a huge lion asleep on a monstrous monolith—a fragment from some shattered world, dropped here by chance,

Gibraltar is joined to Spain by a strip of land one-half mile long, called "Neutral Ground." It is green in the center, but bare at the sides. Approaching from the Straits, a fringe of yellow and white is discernable at the base of the rock and extending part way up the mountain. This is the city of Gibraltar, and further toward the point the barracks appeared.

As we approached the city we saw some British war vessels-six large cruisers, and many small craft. Not far from us we saw a very small boat going swiftly out to sea, towing some thing which looked like a white flag with a black dot in the centre. Soon we heard cannon and other firecrackers, and could see spurts of water around this flag and then we discovered it was a target. I feared they might miss it and accidently hit us, but they did not. A few minutes later we "dropped anchor," and a small boat came out very quickly. It was the commander of the port's boat. This officer examined our ship's papers, and said "All right," and disappeared. We were then fairly hedged in by small boats, which in comparison with the Romanic looked like small ants, but they landed us at the pier in a very few minutes. The dock was crowded with one hundred or more guides, porters, expressmen-all clamoring their different hotels and professions. As soon as we stepped on shore we were fairly besieged by a sunburned, queerly-dressed mob of people. Here the East and the West are combined, but the mob were mostly. Spaniards, dressed as nearly like the Northern Europeans as possible, but each one had a red sash about his waist. There were some stately Moors, with turbans and large white capes which hang very gracefu'ly from their shoulders, showing the red embroidered vest, huge, baggy trousers of another color, and the sandals on their feet

These Moors stand with an air so dignified and appear so like kings, that I felt a huge respect for them; but later I changed my mind when I found how easily they could separate one from the "root of all evil" and do it in such a regal manner that one cannot have the heart to object.

In the fray of the landing, we all became separated, and at least a halfdozen guides had hold of me at onceall jabbering at me, and then swear ing at one another. I feared I might be torn in pieces, but in time remembered one word in Spanish, "Ande," which means "get out," so I gently but firmly "Anded" them all out, and then proceeded to rescue the balance of our party.

At the gate we were stopped by the English Custom House officer, to see if we had any firearms, spirits or tobacco; we had not, so we were each given a little ticket which read: "Permit until first gun fire." Well, that was not very quieting to my worried mind. I could not tell if it meant we were to be shot at first gun fire, or taken prisoners. But I tucked the ticket in my pocketbook, as I have found by experience that it is best to keep what is given you, when abroad, for as a rule it is generally so small that it will not inconvenience any one. Foreigners do not look upon Americans as good subjects for gifts. but as better ones to take from.

Gibraltar is only known here as "Gib." I have not heard the whole word pronounced since I landed. The lazy Spaniards and Moors line the streets, and on every corner can be seen a smart looking "Tommy Atkins" with his absurd little round cap over his left ear, and a thin little stick of a cane in his hands. The handsome English officers on their beautiful horses, are possibly worth look ing at. The ladies on horseback wear white hats, the same as the officers and African travelers wear, and also long white duck coats that at first sight appear quite queer and not really pleasant.

The main street of the town is about as wide as our alleys in Topeka are,

and the side streets are mere passageways. The sidewalks along the main street vary from six inches in width to three feet, so that the most of the walking is done in the middle of the street

I think I never was in so noisy a place; everybody seems to have something to see on the streets, and they insist on telling you about it, too.

#### Training Dogs and Monkeys.

A man who for nearly a quarter of a century has been training almost every kind of animal "from a beetle to an elephant," who is a close friend of that other lover of animals, Ernest Thompson Seton, and who is now the possessor of twenty-seven monkeys, forty-two dogs and three bears, says that animals are just as easy to teach as

Professor V. P. Wormwood, the man who says this, begins by making his animals love him. He says that brains do not work well under fear, and everything can be better and more quickly learned if the learning is a pleasant task. When this man buys a new monkey or a dog, he lets it play around for some days with the other animals, until it feels at home. Then he begins to pet it and get it fond of him, keeping on the lookout all the while for any peculiarity of disposition, any likes and dislikes that would help him to determine what sort of trick it would "take to" most easily.

To the slow, serious animals are given the "heavy" parts in a performance, and to the active, restless ones the more playful parts. Often an animal has learned a trick while he still thinks he is only playing, really without any effort at all. Again an old trickster will be "put through his paces" before a beginner to help him

"I never let an animal get tired practicing his tricks," says this trainer, "a few minutes at a time and often is far better than a long, tedious lesson. The main thing in trick teaching is to get an animal's undivided attention. With a beginner I like a quiet, empty room; then I talk to him just as I would to a child. As nearly as I can I use the same words and tones for the same requirements day after day. Animals quickly understand tones, and in my experience they are almost as quick as children to understand words if a few simple ones are used over and over again in connection with their

'In the animal world, monkeys included, a single sound is made to do duty for a number of related objects. Perhaps this is not so disadvantageous as it at first seems, for you see it leaves room for imagination.

"Animals 'sense' things in a number of ways, and I would not be surprised if they would not one day be found more susceptible to telepathic influence than many human beings. They get to love their work, their different parts in the show, and are miserable if illness or any circumstance keeps them from it. I had a little terrier that was so old she was half blind and almost entirely deaf. But she fretted and fumed so when I began keeping her out of the public entertainments that I had to let her go on for some of the minor parts. Her sense of time was so true that even when she could not hear her cue she rarely made a mistake. Now she is practically helpless. and I'm boarding her where she can have the companionship of other dogs until she dies. Once give them a taste of 'public life,' and four footed animals are as bad as the other sort in their desire for it."

The owner of this decrepit dog was horrified at the suggestion that he should "put it to sleep."

"Why. I would as soon think of killing my father or my mother because they were no longer useful. That dog for years helped me to make my living, and I think such a thing would be a very poor return on my part for all the service she has done me."

Professor Wormwood has the only trained ant-eater in the world. He says it was very quick to learn and does best in the Sherlock Holmes sort of tricks, where it ferrets out details

and plays sly ruses on other animals. The mathematical dog, a big black Newfoundland, named Canso, was two years learning the plus sign. He was only a tiny puppy when his mathematical education was begun. His first lesson, which lasted for nearly six months, consisted in barking once when he saw the figure "1" on the blackboard. His trainer touched him once, struck the floor once and made him give a short, sharp bark whenever he saw the figure "1" or a single block was placed before him. When that was perfectly understood the figure "2" was taken up, and so on up to "10." Then he was taught to add and multiply in the same way, and now, when he is something like eight years old, he is perhaps the most accomplished canine in figures in the coun-

The animals that travel around the country together in this way get fond of one another and show their fondness in many cunning and attractive ways. Sometimes two will only act together, being then bright and alert, and moping and sulking when separated. Once when two "good" monkeys, who had gone through their parts most creditably, were being rewarded with sweet cakes, and two "bad" ones, who had proved most refractory, were left cakeless in their cage, one of the "good" ones carried his portion over and gave it all except the tipiest morsel to his comrades in disgrace. If one of the little company dies there is usually general mourning for the moment if the body is seen by any one of them. They seem to have a way of silently communicating any fact of this sort, but it is soon forgotten and breakfast and dinner and play time and work time interest them as before.

One day while Professor Wormwood was talking to some friends two or three of the monkeys that were free in the room were noticed chattering together and edging up closer toward one woman of the company. Their owner knew they were perfectly harmless and so went on talking and waited to see what they would do. Suddenly they made a dash at the woman in question, pulling her clothes and pinching her gently. Then they ran off chattering and laughing delightedly among themselves. The woman was very much startled and wanted to know why in the world they had selected her to play such a trick on.

'I would be willing to wager a good deal," said Professor Wormwood, "that you are the only one in the room who really dislikes monkeys."

This proved to be true.

"But I didn't act so," protested the woman. "I've not done anything that everybody else in the room has not done. I haven't even said a word about how I felt."

"Oh, that isn't necessary," returned the professor. "Monkeys, and indeed all animals, to a large extent know perfectly well who likes them and who is afraid of them, even when nothing is said or done."-N. Y. Tribune.

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#### For the Little Ones

#### Little Boy Black.

Little Boy Black sat half the day
On the steps of the old red house.
Watching the little white boys at play,
Like a poor little frightened mouse.
He wondered why they passed him by,
With never a kind look back
And why they'd play all a summer day—
But never with Little Boy Black.

Little Boy Black was five years old,
His father and mother were dead;
His granny fought off hunger and cold
And gave him his milk and his bread.
The boys would scan her little man.
As the old fence he peeped through,
And run away as they'd her him say,
"I wish I was Little Boy Blue!"

Little Boy Black's small hands are

On his little white shrouded breast,
And nevermore will his heart be tossed
On the waves of his deep unrest.
His sobs and sighs, his sad, wet eyes
Are silent and calm to-night;
His soyl has flown to a fairer zone,
Where Little Boy Black is white.
—John Ernest McCann, in Judge.

#### An Unwelcome Guest.—A True Fairy Tale.

About a dozen years ago in the country of tulips and windmills, where the swan-necked Wilhelmina holds sway, a tiny brown worm crawled out of her yellow egg, along with about 250 brothers and sisters. Now, this little worm didn't look a bit different from the rest of her family, and yet she was destined for a very strange and adventurous life.

She was scarcely a day old when she decided that an unmixed diet of apple leaves was not to her taste. She would have some variety in her fare; so, without a word to her relatives, off she started on an exploring expedition of her own. Even a baby worm but a day old can cover the ground pretty fast when she has sixteen legs to help her along. In the course of the forenoon she had sampled most of the trees and bushes which grew within the enclosure where she was born. think this one," she said to herself, settling on a bush crowned with splendid crimson roses, "is more to my taste than anything else I'have tried." Up she mounted, higher and higher, until she reached the topmost spray, "Why, why!" she cried in dismay, for already a dozen or more little caterpillars were eating the rose leaves.

"What do you want?" one called to the newcomer. "This is our branch. You can't come here! Begone!'

"Oh, let the baby stay," cried another, and so our little friend, who was really quite exhausted by this time, was glad to creep in among them.

For three weeks they spent all their time eating as fast as possible, but twice each one took a day off to change her gown, for it is not fashionable to wear the same dress long in caterpillar land.

One night early in September, Jack Frost made a flying trip through the garden, and the next morning the caterpillars found themselves suffering from stiff joints. They could scarcely move till the sun had thawed them out. They looked at each other in dismay. Their appetites had failed.

"Now, my friends," said the small stranger who had come from the apple tree, "we must start our winter house at once. It is late already. We should have been snugly tucked away in it before last night. A few more frests like that and there wouldn't be a member of the ancient family of Browntail left in this part of the world."

Ah, how they spun, those little brown worms! They drew the rose leaves down and over, fastening them with strong silk, for the roof and sides of their house. They wove an inner wall so tough and strong that you would have found it almost impossible to tear a hole in it. It was proof against the fiercest winter storms and the bitterest cold.

Well, the weeks sped by, and one day there came to the nurseryman in whose garden the little browntails rocked to and fro an order from America for some of his fine roses. The crimson rose tree was dug up along with the others, carefully sewed in bagging and started on its long voyage over the sea. The worms, of course, being

sound asleep, knew nothing of the strange adventures that were befalling them. If they thought about it at all, they probably imagined that the tossing and pitching of the steamer was only the wind buffeting them about on the tip of their rosebush.

One sunny April morning they woke from their long nap and crawled out on their roof to see how the world looked on this bright spring day and to get a bite to eat, for their appetites were sharp after their seven months'

"Why, how strange it looks here!" remarked our little friend, as she gazed about in all directions, and well it might, for she now found herself in a nurseryman's garden in Somerville, Mass., thousands of miles from the place where she had gone to sleep.

"I don't understand it at all," cried a second caterpillar. "How in the world did we get here? There isn't a leaf out on our bush, and I'm so hun-

"Stupid!" remarked our little browntail, "look up here!" and she waved her tail toward a row of pear trees just pushing out their tender green leaves. "Come on," she cried, "see who'll beat!" A royal table indeed did these luscious pear leaves furnish to the hungry travelers. Here they feasted and grew, week after week, changing their gowns when they found them too small.

When they were fully grown each caterpillar carried on his neck two handsome tufts of orange-red, and there were rows of white hairs down his sides. Each caterpillar was thoroughly armed, the ladies as well as the gentlemen. Indeed, the boldest highwayman does not carry a more complete outfit, and yet, if you had looked these little worms over in the most careful manner, not a weapon could you have spied. But suppose one had crawled across your neck, then indeed you would have believed that he carried terrible arms. When his invisible barbed hairs had worked themselves beneath your tender skin, you would have felt as if a hundred Jersey mosquitoes had been feasting on your blood.

By the end of June not one brown caterpillar was to be found in the nurseryman's garden in Somerville, but on the tips of the branches one could see some oblong cocoons loosely woven of grayish silk. Along toward the middle of July out from each of these cradles crept a snowy moth, the ladies' bodies each ending in a beautiful golden brown pompon—the real brown tail which gave them their name. When the night wind blew strong it carried the white wings along with it, scattering them far and wide. A few days later you might have seen the moths lying dead in many different places, but if you had examined the trees and bushes near you would have found on the leaves what looked like little patches of brown fur, the egg clusters. After laying her two hundred to three hundred eggs, each lady had slipped off her brown tail and glued it over them for protection,

From the tiny colony of less than a score of caterpillars that came to us on the Dutch rosebush, has sprung such an army of browntails that they cover thousands of miles of territory. If you stand beneath an arc light on a fair July night you may see a cloud of white wings, rising, falling, whirling in the breeze, like a veritable midwinter snowstorm.-N. Y. Tribune.



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#### Little Breeches

I don't go much on religion,
I never ain't had no show;
But I've got a midlin' tight grip, sir,
On the handful o' things I know.
I don't pan out on the prophets
And free-will and that sort of thing—
But I believe in God and the angels
Ever since one night last spring.

I came into town with some turnips,
And my little Gabe came along—
No four-year-old in the country
Could beat him for pretty and strong;
Peart and chipper and sassy,
Always ready to swear and fight—
And I'd larn: him ter chaw terbacker,
Jost to keep his milk-teeth white.

The snow came down like a blanket
As I passed by Taggert's store;
I went in for a jug of molasses
And left the team at the door.
They scared at something and started—
I heard one little squall,
And hell-to-split over the prairie
Went team, Little Breeches and all.

Hell-to split over the prairie!

I was almost froze with skeer;
But we roused up some torches
And searched for them far and near;
At last we struck hosses and wagon,
Snowed under a soft, white mound,
Upset, dead beat—but of little Gabe
No hide nor hair was found.

And here all hope soured on me
Of my fellow-critters' aid—
I just flopped down on my marrow-bones,
Crotched-deep in the snow, and prayed.

By this time the torches were played out, And me and Israel Parr Went off for some wood to a sheepfold That he said was somewhar thar.

We found it at last and a little shed Where they shut up the lambs at night, We looked in and seen them huddled thar, So warm and sleepy and white; And there set Little Breeches and chirped As pert as ever you see: "I want a chaw of terbacker, And that's what's the matter of me!"

How did he git thar? Angels.

He could never have walked in that storm.

They jest scooped down and toted him To whar it was safe and warm.

And I think that saving a little child And bringing him to his own, Is a durned sight better business

Than loafing around the Throne.

—By the late John Hay.

Planning of the House:

MISS NELL PAULSEN, WHITING, KANS. There are four things which must be considered in building a house, namely, special needs of the family, funds available for expenditure, location, and soil. The soil is divided into two classes pervious and impervious; the former permitting the water to percolate freely through it while the latter, being of very compact nature, prevents subsurface drainage. Gravel, sand, and soft limestone are of the first class, clays being of an impervious nature. The nature of the soil must be given greatest consideration in deciding upon a location, for health depends largely upon the condition of the soil. Low, poorly drained ground is productive of a great many of the most dreaded diseases, while highly porous soil is freest from germs of diseases. The dry, porous soil is essential to the maintenance of good health. Many soils contain decomposing organic matter, the gases from which if allowed to enter the house are very injurious to the health. Therefore the ground upon which the house is to be built must be as free as possible from such organic substances. The ground-water or subsoil water is the water flowing on the surface of an impervious layer and below the surface of the ground. It passes in two directions, horizontal and vertical. This ground-water must be very far below the surface upon which the house is to be built. The depth at which the water is found, may be determined by boring. If the soil is too wet, it must be thoroughly drained, tile-drainage being the preferable method to

The house should be built on an elevated spot which has a slight slope so as to favor natural drainage. It is best to have the house face south; then the kitchen will be toward the west, making it a cool place in which to work, in the mornings, and the living-rooms will be cool in the afternoons. The house should be so situated that the sun will shine in every room, some time during the day, for sunshine is essential to the maintenance of health. It is well to have

trees near the house, for they oxidize organic impurities, absorb ground-moisture, and make the rooms cooler and more pleasant. However, they must not be so thickly planted that an abundance of sunshine and air can not enter freely. If it is too shady about the house, the soil will be damp and hence a good place for bacteria. It should be situated at least two hundred feet away from any source of contamination, such as opening of any drain, marshy place, etc. In the city, a corner lot is the most desirable place for the house, for then the occupants can obtain more fresh air and can live a more peaceful life, for there will be close neighbors on one side only, hence there will be less noise.

When selecting the location, one should choose a lot which is convenient to market and place of business and is in a pretty part of the town where a good class of people live. The needs of the family and the amount of money which can be expended, determine the size and shape of the house and the materials to be used in its construction. The cost of the house depends upon the nature of the site and the ease with which the building materials and labor may be obtained. Everything should be of the best for the best is none too good.

The cellar should be under the

whole house, for then the house will not be closely connected with the ground and the ground-air will be prevented from entering the house. It is essential that the cellar be constructed so it will be perfectly dry since the ground-air contains many gases greatly diluted, that are very injurious to health. The effect of such air is not soon apparent, but the injury is none the less sure. The best way to prevent the gases from entering the house is to have a thick bed of clay on the cellar floor, and over this a layer of coarsely broken stones, the spaces between the stones being filled with crushed rock and the surface covered with cement. This floor will give a firm support to the cellar walls which should be thick and firm to support the weight of the house and prevent frost and heat from entering. The walls should be cemented to prevent entrance of dampness and soil-air. To avoid dampness, the cellar should be drained; and in order to do this, a trench, slanting slightly, should be dug, in which earthen pipes should be laid. These pipes must be covered with nearly two feet of clay. To protect the walls from moisture, clay should be packed in the space between the rough edges of the ground and the stone wall. The ceiling of the cellar should be lathed and plastered and the walls and ceiling whitewashed. The foundation walls should be built hollow to prevent dampness entering the house and should be high enough above the ground, to allow windows two feet high to be inserted. In order to have the cellar sweet and in the best sanitary condition, it must have plenty of light and fresh air; there must be windows on all sides of the cellar and they must not be situated

#### PLUMBING.

under porches.

The plumbing should be of the best quality and should be in sight so any defects in the pipes may easily be seen and repaired. There must be the least possible horizontal piping so the fixtures, which include water-closets, wash-bowls, etc., on the different floors will be placed over each other. The house-drain receives the contents of the soil and waste-pipes. The continuation of the house-drain outside of the foundation should be about five inches in diameter in order that it may be thoroughly flushed. It should be of iron and have tight joints. A trap should be in the house-drain near the cellar wall to prevent the poisonous sewer air from entering the cellar. This trap must have an opening so it can be reached and thoroughly cleaned. A trap is a bend in the pipe which retains water to prevent the sewer air from passing. The water should stand at least one inch above the bend in the pipe. If it is lower, the foul air is permitted to pass, for a

space is left above the water. If there is too much water in the trap, that is, if the water seal is too deep, the solid materials will not be carried out of the trap. Each water-closet, bath-tub, sink, etc., should have a trap and only one. Siphonage, which is the breaking of water-seals by the formation of a vacuum, must be guarded against by ventilating pipes. The ventilatingpipe should be of cast-iron coated inside and outside with asphalt. It should be four inches in diameter and should extend about two feet in a straight line above the roof. The opening must be protected from falling leaves and other things by a wire screen. This opening must be away from any windows or chimneys. The refrigerator waste-pipe must not have direct connection with the soilpipe on the house-drain.

The kitchen sink should be of iron with porcelain lining and it should have a high porcelain-lined back. This sink will be easily cleaned and it is sanitary. The faucets should be set well up and back of the sink and the sink should be wide to prevent the breaking of dishes when washing them in it. It should have at one end a shelf, grooved and slightly slanting towards the sink, and a broad, smooth shelf at the other end. It should have a fairly fine wire strainer screwed in place over the waste-pipe, and the pipes underneath the sink should not be inclosed with wood-work. Where a sink is inclosed with wood-work, a dark cupboard is formed which is an excellent place for filth to accumulate

and bacteria to multiply. A bath-tub of iron with porcelain lining is sanitary, and that is the kind with which their ideal home is to be supplied. The stationary basins are unsanitary in the sleeping-room or in closets adjoining if without independent ventilation, but when they have waste-pipes of proper size and material and the waste-pipes contain a good trap, they are perfectly sanitary in the bath-rooms. The earthen-ware basins seem preferable. The wash-down water-closet is the best; it should be flushed from a special cistern of wood with metal lining and capable of holding from three to five gallons of water. This cistern should be situated about six feet above the receptacle and have a straight flush-pipe not less than

#### one and a fourth inch in diameter, FURNACE.

There are many reasons which indicate that furnace heat (hot, dry air) is most to be desired. A furnace should be situated towards the northern part of the house. The furnace is really a large stove of cast iron, the joints of which should be horizontal. It is enclosed with galvanized iron. From this enclosed chamber are pipes leading to the various rooms. Cold air is brought into this chamber by means of the cold-air box which is a passage leading from the exterior of the house to the furnace. The hot-air pipes should be so arranged that the air from the cold-air box has to pass around the furnace once before passing into the hot-air pipes. The cold-air box must be perfectly tight so the cellar air and dust can not enter it and thus pass up the hot-air pipes and finally contaminate the air of the rooms. The area of the opening of the cold-air box should be equal to the area of all the registers, less one-sixth. It should be about two feet above the ground and on the side of the house away from the street to prevent much dust from entering. Jt must also be away from any drainventilation, cesspool, or any other source which may make the air impure. The ground beneath the opening must be sloping to aid in removing moisture rapidly. It is necessary to have a wire screen over the opening to prevent leaves and small animals from entering. It is best to have two air-shafts and have them on different sides of the house. The cold-air box, furnace, pipes, and registers should be large enough to supply the house with a large volume of warm air but not heated to a temperature above 120° F. The pipes must be covered with asbestos and they must be at least two inches from any woodwork so there

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Mrs. Pinkham gives free advice to women; address in confidence, Lynn,

will be no danger of fire. The horizontal pipes should not be any longer than fifteen feet, as heat has a tendency to rise; it would be difficult to heat the rooms on the first floor if the horizontal pipes were too long. It is more sanitary to have the registers placed in the wall, for then they do not collect so vast an amount of dust; when they are in the floors, dust is frequently swept into them and this dust is again sent into the air of the room by the rising current. The registers should be so they can be removed and cleaned.

#### VENTILATION.

As pure air is one of the most essential points to consider in maintaining good health, it is necessary to provide some means of ventilation besides the doors and windows. For this purpose, it is desirable to have several fireplaces, one for each bedroom if possible, as well as in sitting-room, hall and dining-room. A fireplace is not only a perfect means of ventilating but it adds beauty and cheerfulness to the room. The woodwork must be protected so there will be no danger of fire and this can be accomplished by surrounding the fire-place with brick. Shallow fireplaces give more heat with less expenditure of fuel than deep fireplaces. The facing and hearth should be of glazed tiles which are easily kept clean and reflect the heat. Another way of providing for ventilation is to have an air-shaft near the chimney. In order to draw well, the chimney must be constructed high enough so the opening will be free from all obstructions.

#### LIGHTING.

The most sanitary method of .ighting the house is by means of electric-

Somethines, as it is when The latest praighting are used. There est to evere bulb in every room in the "The, also in the basement rooms, athrooms, and halls. In the library and sitting-room the bulbs must be provided with ground-glass shades.

The interior woodwork should be of hard-wood finish; by this I mean, hard wood, covered with a filling and varnished. It should be simple and with few creases and carvings, which will collect dust. The exterior of the house should be painted in shades harmonizing with its surroundings.

#### DECORATING.

In selecting wall-paper, there are several points to be considered, namely, size of the room; position of windows; the purpose for which the room is to be used; the flat surface to be decorated, the figures selected to be in accordance with this fact, and that the paper is to serve as a background for the pictures and furniture; and the harmonizing of color between paper and carpet. The paper should not have large designs nor should it be colored too highly. Paper with small figures and in warm, somber colors, makes the best background for pictures. If the room is dark, light colors should be used on the walls, as they reflect the light and make the room more cheerful. But if the windows are large and the room is light, dark colors may be used. The paper on the walls should always be darker than the ceiling paper and the color of the carpet should be darker than the walls.

This gives a general idea of the various points to be considered in planning a house. The house has a great effect upon the character and health of its inmates and as they make the Nation, it should be as nearly perfect as possible. A home that has no conveniences nor beauty mars the character of those who live in it, for beauty and artistic taste in the home, enobles and enriches the character. It is true that 'the house is the expression of the human soul that planned it."

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#### OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

#### Our Club Roll.

Mutual Improvement Club, Carbondale, Osage County (1895). Give and Get Good Club, Berryton, Shawnee County (1903). Women's Literary Club, Osborne, Osborne Coun-

Women's Literary Club, Osborne, Osborne County (1902).
Women's Club, Logan, Phillips County (1902).
Domestic Edence Club, Osage, Osage County (1902).
Ladies' Orescent Club, Tully, Rawlins County (1902).
Ladies' Social Society No. 1, Minneapolis, Ottawa ounty (1888). Chalitso Club, Highland Park, Shawnee County,

Ciso2).

Oultus Club, Phillipsburg, Phillips County (1902).

Literature Club, Ford, Ford County (1908).

Sabean Club, Mission Center, Shawnee County,
Route 2, (1999).

Star Valley Women's Club, Iola, Allen County

(1902).
West Side Forestry Club, Topeka, Shawnee County, Route 8, (1908).
Fortnight Club, Grant Township, Reno County (1908).

(1908).
Progressive Society, Rosalia, Butler County (1908).
Pleasant Hour Club, Wakarusa Township, Douglas County (1809).
The Lady Farmers' Institute, Marysville, Marshall County (1803).
Woman's Country Club, Anthony, Harper County Taka Embroidery Club, Madison, Greenwood County (1903).
Mutual Improvement Club, Vermillion, Marshall County (1803).
Presits Reading Club, Cawker City, Mitchell

ity (1908). smos Club, Russel, Kans. [All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.]

#### Miscellaneous Program,

Civic Improvement in the Country. Roll-call-Current events.

I. Dooryard improvement.

II. Good roads.

Cemetaries, churches, schools.

IV. Nature study in the schools. Every year the subject of civic improvement receives more attention. To make one's own small corner of

the world a more beautiful place to live in is indeed a matter worthy the attention of both high and low.

I. Charity begins at home and so should other good works. The first

asider then, is the improvement of our own dooryards. This topic includes the subject of lawns, flowers, shrubs, trees, as well as the general cleanliness and neatness which go so far toward making beauty on any premises.

II. Kansas as a State is beginning to devote more attention to that most important of matters, good roads. Public sentiment still needs further arousing, however, and the one best way to successfully accomplish that is to talk about it.

III. How often our cemetaries and schools and churches are left bare and abandoned! Yet those public places are the very ones upon which a community can work together to bring about improvement. This topic should be taken up in a way which will be practical. It should deal with actual conditions in the community and should be full of suggestions and enthusiasm.

IV. The study of nature at first hand is a distinctly modern idea. Yet there is no better education than nature herself can give, and the movement to make this a part of the regular work of the school children is a good

#### Mutual Improvement Club.

Our club is progressing very nicely. It is two years old, has eighteen members and meets every alternate Wednesday afternoon from half past two till half past four from October till in April. All members are interested in the work. One of the objects of our organization is to establish and maintain a public library, which consists now of 362 volumes and is being well patronized. I am desirous of correspondence with some club having a printed program. We are preparing one for next year's use and will be glad to exchange programs, The study to run through the year is America, North and South, her possessions, people, etc. The papers on social science, household, current events, interspersed with music make up the rest of the program for the year. ELLA C. AKER, President.

#### Woman's Part in the Coming State Fairs.

The managers of the State Fair Association have been especially anxious to interest the women for this year. The woman whom they have chosen for General Superintendent of the woman's department insures their success, it being no other than Mrs. May Bellville Brown, President of the State Federation of Women's Clubs; who brings to her task not only experience, energy, and ability, but also a wide acquaintance with the women of the State. It is expected that there will be enthusiastic assistance lent her from country women from all over the State. Prizes are offered for every kind of work which belongs to women, from bread-making to china-painting.

Following are the rules which are to govern the exhibit:

- 1. No entry fee. Each exhibitor is required to purchase an exhibitor's ticket.
- 2. Exhibitors will be expected to have their exhibits in place not later than Monday, September 11, 1905.
- 3. No article of like nature will be llowed to compete for more premium except for displays or collections.
- 3. Collections must comprise articles named in the lot in which a premium
- 5. Prizes offered for collective exhibits competed for by clubs or womens' organizations may include any women's club, whether a member of the Kansas Federation of Women's Clubs or not, and may include, grange, church, fraternal or any local women's organization.

Note.—In special premiums where no cash prizes are offered, the management of the Women's Department will have the cooperation of enterprising merchants and citizens of Topeka and the State, who will offer very attractive prizes more valuable than the Association can afford.



#### Simpson-Eddystone Silver Greys

are as good as they are beautiful. Dresses made from these materials are as charming as they are durable.

A:k your dealer for Simpson Eddystone Silver Greys. Sold by thousands of dealers for over half a century. Three generations of Simpsons have made Simpson Prints.

PRINTS The Eddystone Mfg Co (Sole Makers) Philadelphia

# **Vacation Time** in the Rockies



No Colorado visit is complete without a trip to the mountains.

The best hunting, camping and fishing places are found along the Colorado Midland Railway. Cripple Creek, Leadville, Glenwood Springs and Salt Lake City are best reached by the Midland. Latest design of observation cars. Send for booklets and illustrated literature for 1905 convention visitors.

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C. H. SPEERS, G. P. A. Denver, Colo



SPREADS all kinds of manure, straw stack bottoms and commercial fertilizer regardlargest load in 2 to 4 minutes. Makes the same amount of manure go three times as far and produce better results; makes all manure fine and immediately available for plant food.

NON-BUNCHABLE RAKE with beater until thoroughly pulverized.

ENDLESS APRON is one continous apron, (not a ½ apron) therefore always ready to load. You don't have to drive a certain distance to pull it back into position after each load or wind it back by hand; it is a great advaitage in making long hands. THERE IS NO GEARING about our Endless Apros to break and cause trouble, does not extend below axle. Spreads evenly from start to finish and cleans out perfectly clean. HOOD AND END GATE keeps manure away from beater while loading; pre-while is motion to spread thick or thin, 3 to 25 loads per acre.

LIGHT DRAFT because the load is nearly equally balanced on front and rear axles. LIGHT DRAFT because the load is nearly equally balanced on front and rear axles. LIGHT DRAFT because the load is nearly equally balanced on front and rear axles. SIMPLIGITY There are only two levers on our machine. One which raises the hood, SIMPLIGITY There are only two levers on our machine. One which raises the hood, SIMPLIGITY There are only two levers on our machine. One which raises the hood, SIMPLIGITY There are only two levers on our machine. One which raises the hood, SIMPLIGITY There are only two levers on our machine. One which raises the hood, SIMPLIGITY There are only two levers on our machine. One which raises the hood, SIMPLIGITY There are only two levers on our machine. One which raises the hood, SIMPLIGITY There are only two levers on our machine. One which raises the hood, SIMPLIGITY There are only two levers on our machine. One which raises the hood, SIMPLIGITY There are only two levers on our machine. One which raises the hood, SIMPLIGITY There are only two levers on our machine. One which raises the hood, SIMPLIGITY There are only two levers on our machine, on

SMITH MANUFACTURING CO. - CHICAGO, ILL 158-164 East Harrison St.,

# **Grand Closing Out Sale**



August I, 1905 at Newton, Kansas

Entire herd of bred sows and gilts and young boars. Everything goes. Must have room. Choice breeding and individuality. A great opportunity to get some of the famous Silver blood from Cleveland,

Sale begins at 1 o'clock sharp. Every convenience for buyers. For catalogue address,

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# CHORORO COND

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#### FOLK ENFORCES THE LAWS.

(Continued from page 763.)

The laws against liquor-selling and gambling on Surday have always been openly violated in the larger cities of Missouri. Folk said these violations of law must cease. With indignant scorn the law-breakers replied that these laws never had been and never could be enforced. They were and are enforced and are likely to be enforced as long as Joseph Folk shall be Governor of Missouri. But the law-breakers of the city of St. Louis reinforced those just beyond the corporate limits and defled the Governor. Folk directed the Sheriff to raid them and bring them to justice. A few feeble pretences were made and the Sheriff refused to do more. A great amount of exultation was indulged on the supposition that the Governor had met his Waterloc. There was talk of using the malitia, talk of an extra session of the Legislature, etc. Governor Folk said the law would be enforced in the county as well as in the city. The law-breakers explained that the Governor had special powers through the appointment of police commissioners and therefore control of the situation in the cities, but that he could not get around the Sheriff's refusal to act in the country. Last Sunday the test came. Under Governor Folk's orders, fifty St. Louis policemen raided the law-breakers outside the city and arrested little and big. The consternation was great.

At this writing it has not been stated under what law the Governor was authorized to employ the city police in this way, but the fact remains that he did employ them and made a success of it. Evidently it is rather precarious for Missouri law-breakers to "monkey" with Folk's buz-saw when it is in motion. Moreover it is generally in motion.

In this connection it is suggested that the Governor of Missouri open a school for the instruction of chief executives in the art of "The Execution of the Law," and in the science of "Strengthening the Back-bone."

#### KANSAS FARMER SPECIAL CLUB LIST.

For New Subscribers Only.

The Kansas Farmer Company is determined to secure 50,000 new subscribers and in order to make quick work, we are offering tremendous inducements to that end. We have selected the most valuable publications in America to join us in this great enterprise for the expansion of the circulations of interesting, practical, reliable, and up-to-date publications. This subscription campaign represents a big investment to the publishers, consequently this offer is only for a limited time. Therefore we advise you to act promptly. Do 'it to-day. Address all orders to Kansas Farmer Company, Topeka, Kans.

Our Club Offer No. 1, \$1.00.—Kansas Farmer, Western Fruit Grower, Vick's Family Magazine, Woman's Magazine, regular price, \$2.50.

Our Club Offer No. 2, \$1.00.—Kansas Farmer and the American Boy, regular price, \$2.00.

Our Club Offer No. 3, \$1,25.—Kansas Farmer and the Semi-Weekly Capital, regular price, \$2.00.

Our Club Offer No. 4, \$1.45.—Kansas Farmer, The Commoner, the Woman's Magazine, and Western Fruit Grower, regular price, \$3.00.

Our Club Offer No. 5, \$1.70.—Kansas Farmer, Hoard's Dairyman, Semi-Weekly Capital, Woman's Magazine, regular price, \$3.50.

Our Club Offer No. 6, \$1.90.—Kansas Farmer and Dr. Mayo's new book, "The Care of Animals," regular price,

\$2.25. Our Club Offer No. 7, \$2.00.—Kansas Farmer, Youth's Companion (new), and Western Fruit Grower, regular price, \$3,25.

Our Club Offer No. 8, \$2.00,-Kansas Farmer and the Breeders' Gazette, regular price, \$3.00.

Our Club Offer No. 9, \$5.20.-Kansas Farmer, Kansas City Daily Morning Times and Kansas City Daily Evening Star, 15 papers each week, regular price, \$6,20.

#### WEEKLY WEATHER CROP BULLETIN

Topeka, Kans., July 25, 1905. GENERAL CONDITIONS.

A warm week, the average temperature for the week being very nearly normal. Fine rains occurred in the northern tier of counties, and from Rawlins, Decatur and Norton Counties, southeastward to Hodgeman, Pawnee and Barton Counties, and thence south to the Territory line, and southeast through Reno into Harvey. Showers fell, generally, over the rest of the State.

#### RESULTS.

EASTERN DIVISION.

EASTERN DIVISION.

Corn is in fine condition and good color, but in the southern counties is beginning to need rain; the late corn is tasseling in the central and beginning to tassel in the northern counties. Wheat harvest is over, and stacking is now progressing. Thrashing from the shock is nearly finished; the yield is fair but the quality of the wheat is very good. Spelt is a good crop in Atchison County. Oats are all cut, and much thrashing has been done; the yield is fair and the quality good. Tame haying is about finished, but the crop was not as heavy as usual. Prairie haying is

to gardens; late corn tasseling and prom-ising well; blackberries ripe, with good crop of hardy varieties; others were win-ter-killed.

Woodson.—Good week for haying: thrashing still in progress; corn needing rain and beginning to fire on thin land.

#### MIDDLE DIVISION.

Corn is generally in good condition but is now beginning to need rain; inBarber and Barton some corn has been injured by dry weather. Wheat harvest is finished, except in Cloud and Washington Counties, and stacking is progressing; thrashing from shock is in full progress showing a fair to good yield and very good quality. Oats are cut, and are being thrashed, showing a fair yield of good quality. Spelt gave a fair yield of good quality. Prairie grass is good and pastures are fine. Alfalfa is in good condition; in the northern counties the second crop is mostly cut and stacked, in the southern counties the third crop is being cut.

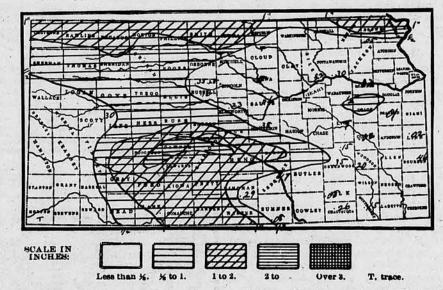
Early apples are plentiful in the south-

ties the third crop is being cut.

Early apples are plentiful in the southern counties. Potatoes are a short crop in Russell and are small in Washington County. Forage crops are generally in good condition. Gardens have been improved by the rains. Plowing for fall sowing is progressing in many counties.

Barber.—Corn and cane experienced injury during the past two weeks on account of dry weather, but towards end of last week rain relieved the situation and crops are now improving.

#### Rainfall for Week Ending July 22, 1905.



progressing in the central and southern counties and the crop is good, though not as heavy as last year. Alfalfa is in fine condition. Grass is good and pastures are fine. Late potatoes look well and give good promise. Apples give good promise; the early varieties are ripe and abundant. Sweet potatoes are doing well in Pottawatomie. Blackberries and plums are ripe and are good crops in Riley and Shawnee. Fall plowing is progressing in the southern and central counties.

Anderson.—Weather very dry and warm; corn beginning to need rain, but doing well; wheat thrashing progressing well and yield is good; oats only fair and straw very short; hay harvest nearing completion.

Atchison.—Tame hay all made and yield fair corp not so large as in two pre-

tion.

Atchison.—Tame hay all made and yield fair; crop not so large as in two previous years; wheat thrashing progressing and yield fair; good yield of oats and spelt; corn making good growth; potatoes looking well.

Brown.—All crops in very good condition; wheat thrashing and stacking in progress; wheat has good quality and yield is fair to good; tame hay about all cut; corn needing rain.

Chase.—Crops all in good condition; shock wheat about all thrashed; alfalfa doing well.

doing well.

Chautauqua.—Corn suffering in a few places from lack of rain; otherwise crops are doing well.

Coffey.—Favorable weather for farm work; stacking and thrashing wheat, haying and plowing making good progress, with weather condition good.

Douglas.—Wheat nearly all thrashed or stacked, with yield and quality good; corn in fine condition and growing rapidly.

Elk.—Rain needed to mature corn crop; prairie grass in very good condition. Franklin.—Good weather for haying;

Franklin.—Good weather for haying; crops doing well.

Greenwood.—All growing crops need rain; corn doing well but beginning to need rain; alfalfa looking well; prairie hav being cut; fairly good crop but lighter yield than last year.

Jefferson.—Good week for all farm work; wheat and oats being thrashed, with yield good and quality very good; corn in fine condition; late potatoes promise good yield; stock in fine condition.

Linn.—Good week for thrashing and haying; corn beginning to need a good rain.

Linn.—Good week for thrashing and haying; corn beginning to need a good rain.

Lyon.—Wheat has good quality and yield; corn and alfalfa doing very well.

Marshall.—Wheat thrashing about completed and yield and quality of the crop is good; corn doing well and promises large crop; fair crop of apples expected and market well supplied at present with harvest varieties.

Montgomery.—Corn still doing well but needs a good general rain.

Osage.—Good week for growing crops; corn looking well.

Pottawatomie.—Wheat thrashing well advanced; with yield good and quality very good; oats good yield and quality; oorn looking well; sweet potatoes doing well; except in places where damage has been done by web worm.

Riley.—Weather conditions favorable for farm work; oats and barley giving very good yield; pastures in good conditino and stock doing well; good crop of blackberries and plums being marketed; abundance of early apples and good crop of late ones.

Shawnee.—A good rain would be benedal a specially to early upland corn and

Shawnee.—A good rain would be bene-ficial, especially to early upland corn and

Barton.—Hot, dry, week with rain in latter half which improved condition of crops; corn was suffering especially on account of lack of moisture; much plowing for fall wheat accomplished.

Butler.—Corn doing very well but needing rain; oats good, but not much planted; alfalfa doing well; beginning to cut third crop; poor prospect for hay crop unless there is more rainfall; small crop of apples.

Clay.—Thrashing making good progress; yield of wheat fair and quality good; fair yield of oats; quality good; corn making good growth but beginning to need rain.

Cloud.—Harvesting about completed; thrashing continues and quality of wheat is very good; corn looking well but needs rain.

Ellsworth.—Wheat thrashing in progress and yield better than expected; corn in very good condition; pastures and cattle doing well.

Cowley.—Good week for thrashing and stacking wheat; corn needing rain; third crop of alfalfa hay mostly harvested; apples and plums plentiful; much wheat ground being plowed.

Harper.—Timely rains have greatly improved condition of corn crop, which was beginning to suffer greatly on account of insufficient moisture; wheat thrashing from stack well advanced; plowing for fall wheat in progress.

Jewell.—Wheat thrashing making good progress; corn doing well and improved by recent timely rains; second crop of alfalfa nearly all stacked, but was damaged to some extent by web worms; plowing in progress, with quality very good and yield fair; corn and forage crops doing well thus far but beginning to need rain; summer apples on market; quality but crop is not large.

Lincoln.—Thrashing of small grain making rapid progress, with quality very good and yield fair; corn and forage crops doing well thus far but beginning to need rain; shat thrashing in progress.

McPherson.—Wheat thrashing progressing well, with moderate yield and grain of fine quality; corn doing well but beginning to need rain.

Marion.—Corn improved by recent rains; what thrashing in progress and yield good; yield of oats above average; pastures in g

Marion.—Corn improved by recent rains; what thrashing in progress and yield good; yield of oats above average; pastures in good condition.

Ottawa.—Thrashing from shock about completed; yield and quality of wheat both exceptionally good; corn doing well but will need rain soon; oats and spelt giving fair yield; forage crops good; plowing still in progress but ground becoming dry.

ing still in progress but ground becoming dry.

Pawnee.—Wheat thrashing delayed by heavy rain; yield and quality good; corn suffered some damage before the rain.

Reno.—Thrashing still in progress; corn still looking well but needs rain; cane and Kafir corn doing well; some plowing being done but ground too dry for good work.

Republic.—Thrashing begun; corn needing rain.

ing rain.

Rooks.—Thrashing making good progress; quality of wheat good and yield fair;
corn doing well and prospect good; plowing for fall crops making good progress.

Rush.—Corn suffered some injury from
dry weather but recent rains will improve the late crop; not much thrashing
being done on account of wheat being in
the sweat.

Russell, Thrashing and ploying for

Russell.—Thrashing and plowing for wheat in progress; corn tasseling, but needing rain in many places; pastures in

who is farming on Irrigated land and he will tell you that nothing would induce him to farm any other way.

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# MACHINE OIL

\$3.50 A BARREL

You will find it a better machine oil than anything you have been buying for 35 cents to 45 cents per gallon. Premium oil is a natural oil, greenish black in color. There is no made oil that is superior to Premium oil for engines, shafting, shops, elevators, thrashing machines and farm machinery. It will not GUM, has good body, is not affected by hot and could weather as most oils are. If a farmer, you say you won't need as much as a barrel. Get your neighbor to take half of it. But remember \$3.50 for a 50-gallon barrel, and the empty barrel is worth at least one dollar; gives you oil at less than 6 cents per gallon at your railroad station. If within 300 miles in Kansas freight will not be over 75 cents per barrel. Sample sent on request.

K. C. DAILEY & CO., Benedict, Ks.

good condition; rather short crop of po-

good condition; rather short crop of potatoes.

Saline.—A good rain would be beneficial although corn is not suffering thus far.

Sedgwick.—Growing corn and gardens greatly benefited by recent rains, for they were beginning to suffer on account of insufficient moisture; wheat and oats being thrashed; good yield of wheat and quality very good; fair yield of oats.

Stafford.—Thrashing still in progress, with yield light but quality good; ground in good condition for plowing.

Sumner.—Greater part of thrashing completed; very light crop; corn in good condition but needing rain; plowing for fall crop progressing well.

Washington.—Thrashing and stacking well advanced; wheat has good quality but yield is light; corn making rapid growth and has good color generally; potatoes drying up and rather small; second crop of alfalfa mostly cut; prairie grass good and stock doing well.

WESTERN DIVISION.

WESTERN DIVISION.

WESTERN DIVISION.

Corn is tasseling and earing in the northern counties, but needs rain in the central counties. Wheat harvest is about over and thrashing is progressing; the yield and quality are both good. Oats and barley are about cut and in Finney County the crops are fine. Alfalfa is doing well, except that the grasshoppers have damaged it some in Lane County. Forage crops are needing rain, and in Ness County are being cut. All crops are needing rain in the southwestern counties. Plowing for fall seeding is in progress.

Decatur.—Harvesting practically completed and thrashing in progress; wheat

cies. Flowing for fall seeding is in progress.

Decatur.—Harvesting practically completed and thrashing in progress; wheat has fine quality; corn tasseling and earing; conditions favorable for large crop. Finney.—Wheat giving fair to good yield; fine yield of oats and barley; much plowing being done for fall sowing.

Lane.—Corn and forage crops needing rain; second crop of alfalfa being cut; grasshoppers have damaged this crop to some extent and yield is very light.

Morton.—Dry and hot weather; rain needed to start the fodder crops and save the early planted; good crop of wheat in shock.

Ness.—Corn suffering for rain; plowing

Ness.—Corn suffering for rain; plowing for fall crops in progress; feed cutting

begun.

Norton.—Corn making good growth but late; thrashing in progress and quality of wheat good; plowing for fall wheat in progress.

T. B. JENNINGS. Section Director, Topeka, Kane.

#### Something New.

The latest publication of special interest to every progressive housekeeper is, "The Gist of Domestic Science," by Elizabeth Gist. This book gives a brief explanation of domestic science and essential information about various classes of foods used. It also contains the latest official tables showing the constituent elements of food plants and vegetable food products, cereals, beverages, fruits, condiments and of other food material. With domestic animals, we have almost an exact science regarding a balanced ration, but with mankind this matter has been sadly neglected.

"The Gist of Domestic Science" also contains a lot of tried recipes of every description, and is a very valuable hand book for the housekeeper. Price 75c, or we will send it postpaid with the Kansas Farmer one year for \$1.25. Address, Kansas Farmer Company, Topeka, Kans.

#### Opportunities for Mechanics,

Digging wells is a most profitable business when the new shaft-sinking machines are used. Williams Brothers, Ithaca, N. Y., have published an illustrated catalogue of more than seventy kinds of well digging machines, operated by either horse-power or steam. This catalogue will be sent free to any one contemplating this profitable business. These machines are so simple any person of ordinary mechanical skill can erect them, keep them in order and operate them either in the softest soil or through soild rock. They are mounted for traveling from field to field, so that the owner's territory is only limited by his orders. Many industrious mechanics tired of shop work or long factory hours, have gone into this business with marked success. A competence is in sight for the man who takes hold of well-digging and pushes the business. Good water is in demand everywhere; the well-digger will find hearty welcome in any rural community and get orders from the wealthier class of city residents.

#### Do You Want to Learn About Irrigation? If so, Read This.

tion? If so, Read This.

The Irrigation Age is the pioneer and leading magazine of its class in the world. It is finely illustrated and contains a lot of valuable matter concerning irrigation develonment in the West and will tell you all about the possibilities of obtaining a farm home in the West under irrigation where the climate is healthy, the days bright and sunny, and where several crops may be harvested each year without possibility of failure from drouth and storms. During the coming year a series of finely illustrated articles will appear in its columns giving full information as to cost of land, crops, what to plant, markets, and general information about what will be necessary in the way of money to insure a good start on an irrigated farm. This journal contains many interesting features and will give information concerning the work now being done by the Government to open up new tracts of land. All this may be secured by you if you will send \$1.00 for one year's subscription to The Irrigation, Age. If you wish The Primer of Irrigation, a 300 page finely illustrated cloth-bound book telling all about how to irrigate, how to lay out land and the cultivation of all crops under irrigation, send \$2.00 and it will be mailed to you postpaid. If you wish the Irrigation, Age and The Primer of Irrigation, send \$2.50, or The Irrigation Age and Kansas Farmer Co., Topeka, Kans.

#### Grange Ideals

The order of Patrons of Husbandry is the only association whose teachings accompany the farmer in his daily life. It does not call him from his work to put his mind on any other subject, but furnishes recreation in daily duties, and by cheerful instruction lightens and elevates his most stringent hours of labor. Its teachings are lofty. Honesty is inculcated, education nurtured, temperance supported, brotherly love cultivated, and charity made an essential characteristic. The order thus binds us together in fraternity. But we must advance to a higher state of perfection. Farmers should rally to its standard and all unite to greater development of social, intellectual, moral, and political power in securing just rights and the recognition of the law-making power.—Selected.

Avarice iz one ov the curses ov welth, az profuseness iz ov poverty; they ought, perhaps, to change places. -Josh Billings.

#### Official Grades of Grain in Kansas. STATE GRAIN-INSPECTION DEPT.

STATE GRAIN-INSPECTION DEPT.

Topeka, Kan., July 12th, 1905.
Under the provision of an act to establish grades by the Grain Inspection Commission appointed by the Governor of Kansas, passed and approved by the session of the Legislature of 1903, the Commission has established the following grades for grain in the State of Kansas, to be in effect on and after the 1st day of August, 1904.

G. W. GLICK, Chairman.
J. M. CORY.
J. T. WHITE, Clerk,
Grain-inspection Commission.

RULE 1.

WHEAT. Wheat which has been subjected to

"scouring" or to some process equiva-lent thereto, shall not be graded higher than number "3."

#### KANSAS HARD WINTER WHEAT,

KANSAS HARD WINTER WHEAT.

No. 1. Hard.—Shall be pure, hard winter wheat, sound, plump, and well cleaned, and shall weigh not less than sixty pounds to the bushel.

No. 2 Hard.—Shall be sound, dry and reasonably clean hard winter wheat, and shall weigh not less than fifty-nine pounds to the bushel.

No. 3 Hard.—Shall be hard winter wheat, sound, reasonably and some bleached, but not clean or plump enough for No. 2, and shall weigh not less than fifty-six pounds to the bushel.

No. 4 Hard.—Shall be hard winter wheat, tough, or from any cause so badly damaged as to render it unfit for No. 3 Hard.

Batental Hard.—All very damaged as years.

No. 1 Red.—To be bright, sound, plump, dry and well-cleaned red winter wheat, weighing not less than sixty-one pounds to the measured bushel.

No. 2 Red.—Shall be sound, dry and reasonably clean red winter wheat, and shall weigh not less than fifty-nine pounds to the bushel.

No. 3 Red.—Shall be red winter wheat, sound, and some bleached, but not clean or plump enough for No. 2, and shall weigh not less than fifty-six pounds to the bushel.

No. 4 Red.—To be thin, bleached or tough red winter wheat, reasonably sound, and unfit to grade No. 3 Red.

Rejected Red.—All very damp, very tough, very smutty, very musty, trashy, dirty, damaged, stack-burned, or thin wheat, falling below No. 4 Red.

WHITE WINTER WHEAT.

#### WHITE WINTER WHEAT.

No. 1 White.—To be bright, sound, dry, plump and well-cleaned pure white winter

wheat.

No. 2 White.—To be sound, dry, well-cleaned, pure white winter wheat.

No. 3 White.—To be sound, dry, white winter wheat, reasonably clean.

#### CALIFORNIA, COLORADO, WASHINGTON. IDAHO AND UTAH WHEAT.

No. 2.—To be sound, dry, well-cleaned, pure white wheat, free from smut, grown in Colorado, Utah, Washington, or Idaho, No. 3.—To be sound, dry, reasonably cleaned white wheat, grown in Colorado, Utah, California, Washington, or Idaho. Wheat of above description of lower-grades to be classed on its merits as regular No. 4 or rejected.

#### SPRING WHEAT.

No. 1.—To be bright, sound and well-cleaned spring wheat.

No. 2.—To be bright, sound spring wheat, reasonably cleaned, and weigh not less than fifty-seven pounds to the bushel.

wheat, reasonably cleaned, and weigh not less than fifty-seven pounds to the bushel.

No. 3.—To be dry and reasonably sound spring wheat, not equal to No. 2, and weigh not less than fifty-five pounds to the bushel.

No. 4.—To be thin, bleached or tough spring wheat, reasonably sound, and unfit to grade No. 3 spring.

#### WHITE SPRING WHEAT.

WHITE SPRING WHEAT.

No. 1 White.—To be bright, sound and well-cleaned white spring wheat.

No. 2 White.—To be bright and sound white spring wheat, reasonably cleaned, and weigh not less than fifty-seven pounds to the bushel.

No. 3 White.—To be dry and reasonably sound white spring wheat, not equal to No. 2, and weigh not less than fifty-five pounds to the bushel.

No. 4 White.—To be thin, bleached or tough white spring wheat, reasonably sound, but unfit to grade No. 3.

Rejected Spring Wheat.—All very damp, very dough, very musty, very smutty, trashy, dirty, damaged, stack-burned or thin wheat, falling below No. 4.

MIXED WHEAT.

#### MIXED WHEAT.

MIXED WHEAT.

All mixtures of spring soft and hard winter wheat shall be classed as mixed wheat, and graded as follows:

No. 2 Mixed Wheat.—To be sound, dry, and reasonably clean, and not weigh less than fifty-nine pounds to the bushel.

No. 3 Mixed Wheat.—Shall be sound, reasonably clean and may be some bleached, but not clean or plump enough for No. 2, and shall weigh not less than 56 pounds to the bushel.

No. 4 Mixed Wheat.—Shall include mixed winter wheat that from any cause is so badly damaged as to render it unfit for No. 3 Mixed.

Rejected Mixed Wheat.—All very damp, very tough, very musty, very smutty.

very tough, very musty, very smutty, badly stack-burned, damaged or thin mixed spring and winter wheat falling below No. 4 Mixed wheat shall be graded as Rejected Mixed wheat.

#### MARCARONI WHEAT.

MARCARONI WHEAT.

No. 1 Marcaroni Wheat.—Shall be bright, sound, well-cleaned, and be composed of what is known as rice or goose wheat.

No. 2 Marcaroni Wheat.—Shall be inferior to No. 1, but sound, and be composed of what is known as rice or goose wheat, and may include wheat that is bleached and shrunken.

No. 3 Marcaroni Wheat.—Shall include all wheat badly bleached or smutty, or for any other cause unfit for No. 2.

Rejected Marcaroni Wheat.—Rejected Marcaroni Wheat shall include all wheat that is very smutty, badly bleached and grown, or for any cause unfor for No. 3.

RULE 2.

#### RULE 2.

#### CORN.

No. 1 Yellow.—Shall be pure yellow corn, sound, dry, and well cleaned.
No. 2 Yellow.—Shall be three-fourths yellow, sound, dry, and reasonably clean.
No. 3 Yellow.—Shall be three-fourths yellow, reasonably dry and reasonably clean, but not sound enough for No. 2.
No. 4 Yellow.—Shall be three-fourths yellow, and unfit to grade No. 3 Yellow.
Rejected Yellow.—Shall be very badly dataged.
No. 1 White—Shall be pure white corn, sound, dry, and well cleaned.
No. 2 White.—Shall be fifteen-sixteenths white, sound, dry, and reasonably clean.
No. 3 White.—Shall be fifteen-sixteenths

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reasonably dry and reasonably but not sound enough for No. 2

clean, but not sound enough for No. 2 White.
No. 4 White.—Shall be fifteen-sixteenths white, but unfit to grade No. 3 White.
Rejected White Corn Shall be very badly damaged.
No. 1 Corn.—Shall be mixed corn, of choice quality sound dry and well

No. 1 Corn.—Shall be mixed corn, of choice quality, sound, dry, and well cleaned.
No. 2 Corn.—Shall be mixed corn, sound,

No. 2 Corn.—Shall be mixed corn, sound, dry, and reasonably clean.

No. 3 Corn.—Shall be mixed corn, reasonably dry and reasonably clean, but not suffl inetly sound for No. 2.

No. 4 Corn.—Shall include mixed corn that is unfit to grade No. 3.

#### KAFIR-CORN.

Rejected Mixed Corn.-Shall be very

Rejected Mixed Corn.—Shall be very badly damaged.

No. 1 White.—Shall be pure white Kafircorn, of choice quality, sound, dry and well cleaned.

No. 2 White.—Shall be seven-eighths white Kafir-corn, reasonably dry and reasonably clean.

No. 3 White.—Shall be seven-eighths white Kafir-corn, sound, dry and reasonably clean, but not sufficiently sound for No. 2.

No. 1 Red.—Shall be pure red Kafir-corn, of choice quality sound dry and reasonably clean, but not sufficiently sound for No. 2.

io. 1 Red.—Shall be pure red Kafir-corn, choice quality, sound, dry, and well

cleaned. No. 2 Red.—Shall be seven-eights red Kafir-corn, sound, dry, and reasonably No. 3 Red.—Shall be seven-eighths red Kafir-corn, reasonable dry and reasonably clean, but not sufficiently sound for No.

No. 1 Kafir-corn.—Shall be mixed Kafir-corn, of choice quality, sound, dry, and well cleaned.

No. 2 Kafir-corn.—Shall be mixed Kafir-corn, sound, dry, and reasonably clean.

No. 3 Kafir-corn.—Shall be mixed Kafir-corn, reasonably dry and reasonably clean, but not sufficiently sound for No. 2.

No. 4 Kafir-corn.—Shall include all mixed Kafir-corn, not wet or in a heating condition, that is unfit to grade No. 3. RULE 3.

#### OATS.

No. 1 Oats.—Shall be mixed oats, sound, clean, and free from other grain.
No. 2 Oats.—Shall be mixed oats, sweet, reasonably clean, and reasonably free from other grain.
No. 3 Oats.—Shall be mixed oats that are slightly damp, unsound, slightly musty, dirty, or from any other cause unfit to grade No. 2.
No. 4 Oats.—Shall be mixed oats that are from any other cause unfit to grade No. 3.

1 White Oats.—Shall be pure white,

No. 1 White Oats.—Shall be pure white, sound, clean, and free from other grain, No. 2 White Oats.—Shall be seven-eights white, sound, reasonably clean, and reasonably free from other grain.

No. 3 White Oats.—Shall be seven-eighths white, but not sufficiently sound and clean for No. 2.

No. 4 White Oats.—Shall be seven-eighths white, badly stained, or from any other cause unfit to grade No. 3 White.

No. 1 Red Oats.—Shall be pure red, sound, clean, and free from any other grain.

sound, clean, and free from any other grain.

No. 2 Red Ooats.—Shall be seven-eighths red, sound, reasonably clean, and reasonably free from other grain.

No. 3 Red Oats.—Shall be seven-eighths red, but not sufficiently sound and clean for No. 2.

No. 4 Red Oats.—Shall be seven-eighths red, badly stained, or from any other cause unfit to grade No. 3 Red.

No. 2 Oats Color.—Shall be three-

fourths white, and in condition the same as No. 2. No. 3 Oats Color.—Shall be three-fourths white, and in condition the same as No. 3.

RULE 4.

#### RYE.

No. 1.—To be plump, sound, bright, and well cleaned.
No. 2.—To be sound, plump, and resonably clean.
No. 3.—To be reasonably sound and reasonably clean, unfit for No. 2.
No. 4.—To include all damp, musty, dirty rye, unfit for No. 3.
RULE 5.

#### BARLEY

No. 1.—To be plump, bright, sound, and free from other grain.
No. 2.—To be sound and reasonably clean.
No. 3.—To be reasonably clean and merchantable.
Rejected.—To include all unsound and damaged barley.

#### RULE 6.

SPELT.

No. 1.—To be plump, bright, sound, and free from other grain.

No. 2.—To be sound and reasonably clean.

No. 3.—To be reasonably clean and merchantable.

Rejected.—To include all unsound and damaged spelt.

#### RULE 7.

NO-GRADE GRAIN.

All grain that is wet or hot, or in heating condition, shall be classed as "No Grade." RULE 8.

#### REASONS FOR

All inspectors shall make their reasons for grading below No. 2 fully known by notation on their books. The weight alone shall not determine the grade. RULE 9.

#### TEST WEIGHT.

Each inspector shall ascertain as near as practical the weight per measured bushel of every lot of wheat inspected by him and note the same on his report, but he shall not be held responsible for variations in weights that may occur on resultant the properties unless rections of resultant and case. inspection, unless negli be shown against him. egligence or fraud car RULE 10.

#### THE WORD "NEW."

The word "new" shall be inserted in each certificate of inspection of newly harvested wheat until September 1 each

#### CLAIMS.

All claims for damages against the inspectors or weighmaster should be filed in this office before the grain has left the jurisdiction of this Department. RULE 12.

#### LIVE WEEVIL.

Wheat containing live weevil shall not be graded, but the inspector shall give the variety of wheat and test weight, and note "live weevil."

#### RULE 13.

#### "PLUGGED" CARS.

All inspectors inspecting grain shall in no case make the grade of grain above that of the poorest quality found in any lot of grain inspected, where it has evidently been "plugged" or otherwise improperly loaded for the purpose of deception.

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### In the Dairy

Intensifying Dairy and Fruit Farming.

A dairy and fruit farmer in Tennesee states his case to T. B. Terry of the Practical Farmer, and receives reply as follows:

'My farm is one mile from the city. I keep 25 cows, selling milk at 20 cents a gallon in summer, 25 cents in winter. Use separator for night's milk, selling about half the cream at \$1 a gallon at retail; churn the other half and get 20 to 25 cents a pound for butter. An acre of strawberries brings from \$200 to \$400 under intensive culture. I want to put out an acre of black raspberries as soon as I can get the land rich enough to grow fine berries. There is money in them, if choice. I have 25 acres of good clay plow-land, but run so continuously in corn and sorghum for cow-feed that the soil lacks humus, is hard and only yields 30 bushels of corn per acre. It, takes all the manure for the 5-acre fruit and vegetable garden. I pay out yearly over \$1,200 for hay, straw and bran. They cost so much my profit is too small. We have 40 acres of rocky pasture which helps out from 2 to 4 months. Cows are stabled night for 6 months. Peas do well in corn. A clover catch is very uncertain now, owing to dry weather and condition of land. Labor is so high and scarce and unreliable that I wish to avoid the care and expense of a silo and tools to fill it. I can handle hay more easily. Shall I put the entire 25 acres down to grass and fertilize heavily? It should produce enough hay for cows and horses. Three hands do the farm work and deliver milk. I superintend and do buying, selling and collecting; am 56 years old, spent 20 years behind the counter and 16 years ago came here with health broken down; but have raised and educated a large family. I love the farm; so does my brave wife. It is all right, only the income is not large enough KAN and the land is not gaining in fertility. Give us a safe plan for making it richer and increasing the profits."

> My good brother, let one who has had long experience tell you frankly just how your case looks to him. You have been putting all the manure from 25 acres of crops, and purchased feed, on 5 other acres. The 25 acres of farm land hasn't received any, and, of course, will slowly run down, fertilize all you may with chemicals, unless you can in some way add more vegetable matter. I do not know, but suspect that you lose the liquid manure in the stables; that you have not got watertight floors. If you had, the manure from the stock you keep all saved except when the pasture furnished feed, it ought to be so handled as to enrich more than the 5 acres. Land that can be crowded to \$400 worth of berries per acre is well able to pay for some fertilizer. I can see a chance to put in cement floors, feed and water stock so as to save all liquid and solid manure, except when cows are eating pasture grass, and manure half of the 25

acres and all of the 5 yearly with about TUBULAR CREAM SEPARATORS WHICH DO YOU WANT?

Tubular or Bucket Bowl?
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10 tons of rich manure per acre. Supplemented by fertilizers, and catchcrops of peas, etc., that you can readily grow, you can certainly increase the fertility of this land decidedly in this way. It will not help you out much to grow grass continuously instead of corn by the use of fertilizers. You will still be robbing that land of vegetable matter, taking it off to go on the 5 acres. You can do better.

Suppose you put on 10 tons per acre of good manure, liquid all in it, that hasn't leaked out or sent ammonia into the air, on half of the 25 acres each year and then supplement with needed fertilizers and plant corn. Sow cow-peas in the corn. Let them die down on the land. Plow under in the spring and grow Hungarian grass. Follow the same season with peas for hay. Sow rye after peas to plow under for corn the next spring. Why, my dear sir, you can soon grow as much corn on half of the 25 acres as you do now on all the field. And at the same time, when land has been made rich enough for this increased corn crop, you can get more tons of hay from the other half, part Hungarian, part pea, than you could get from the whole field kept in permanent grass without manure. I am stating the facts moderately as I believe. And in addition to the above the peas would get you about all the nitrogen your land would need, for nothing. I have been all through this fertility question from the bottom up, and seen it worked out time and again. You can, practically, double the fertility of that land in a few years, if you treat it rightly. You can do it quicker than we can up here. You can grow two crops like Hungarian and peas in a season and start a third, the rye; we can only grow one. The plowing in of the rye sod and 10 tons of manure and the one pea crop, all in two years, supplemented with fertilizers needed, will bring your land up rapidly, provided it does not suffer for lack of drainage and that the tillage is thorough. Hungarian makes excellent cow hay if cut early. The crop grows in 60 days from sowing, and yields from 2 to 3 tons of hay per acre on fertile land. The pea hay will be richer in protein and save some of your bran bill. Of course, you can grow crimson clover or winter oats, or wheat instead of rye-whatever is best for you. The object is to grow a thick sod and as much top as possible during the winter.

Now the best way to save that corncrop for cows is in a silo, no question about that. But you can get along without one. Cut the corn early, secure the stalks very carefully, then cut them up for feeding so finely that, moistened and with grain mixed, the cows will eat the most of them. But really I would advise you to go a little further and put up the silo. I understand well that you have got to an age where you rather dislike changes and new departures. But to keep up with the times is the best way to keep from growing old. When we stop growing we begin to decay. Avoid heavy work; just manage. If you haven't the money to spare it will pay you to get it. You can not get the food value out of corn so well or cheaply any other way. As for the help, be brains for the men. One must not expect expert labor at the price they receive. Pay good prices and get the best you can. Overcome the high wages by handling the men to advantage, thus getting more out of them, and having your farm run on the most paying basis-silo, cement floor, rotation, etc. You are getting good prices for your products. I have showed you how to buy less hay by making your land richer, so it will produce twice as much, and then the silo will enable you to get about all the feeding-value out of your corn-stalks into your cows.

Of course, it would be possible to rotate hay crops and get along without the corn. With grass mown two years, then Hungarian and cow-peas, you can raise somewhere near the same value of cow feed, but the corn plan is better. You can bring your land up faster. You keep help enough to carry it out. except at silo-filling time. You can also plow the sod after two or three years mowing and re-seed at once, but I canThe Best Summer Investment Any Dairy Farmer Ever Made Is a

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Of course, I do not know what Hungarian will do with you. It is a good dairy crop here on clay farms, and I know of no reason why it will not do for you. It is a hot-weather crop, but requires abundance of fertility, as it grows so quickly. If clover were sure with you, my advice would be different. There is one chance for you to get along without growing corn and succeed grandly. It is to raise alfalfa on the 25 acres, mow what is needed for soiling and make hay of the rest. You should be able to cut four crops in a season, and with a good stand, well established, 5 tons or more of cured hay might be grown per acre. This would end your buying wheat bran, mostly, as the alsalfa hay has almost as much protein in it, pound for pound, as the bran. There may be great possibilities for you along this line, but start in a small way if you decide to try it, and feel your way up slowly and safely. The only trouble probably will be to spare the manure to put your land in condition to start alfalfa. It will not grow on as poor land as cowpeas will. I think perhaps a good crop of peas, well fertilized with mineral matter to make them grow thriftly, and then turned under when dead, might enable you to start the alfalfa successfully. We admire your management that is making the fruit garden a success. We want to encourage you to manage the farming land so as to make that as profitable in its way. But, alas, you can never do it to make the few acres boom. By the way, being only one mile from the city, can not you buy some manure cheaply? This would add vegetable matter to your fields. Using proper fertilizers with it you should get good results. I cannot close without extending congratulations on your success, held back as you have been by ill health, and

Selling Milk and Cream,

particularly that you are surrounded

by a large family of well-educated chil-

dren. We can read between the lines

something of what that word "brave"

applied to your wife means.

In a recent issue of "Hoard's Dairyman" Professor Farrington of the Wis consin Experiment Station figures out

not advise it as being the best way. the comparative profit of crelling cream. He bases his figurat on the assumption that when the mippres sold the creamery makes it intollimeter for 4 cents per pound during st ...onths of the winter season and a: uring the six months of sum-In the case of the cream mer. separated on the farm and to the creamery, the latte: wkes the butter for the overrun, paring butter price for the fat in the cream. Professor Farrington figures it out as fol-

We will assume that a cow gives 4,000 pounds of milk in a year and that it tests 4 per cent fat. If a creamery charges 4 cents per pound for making butter during six months and 31/2 cents during the other half of the year, the 4,000 pounds of milk 4 75 be divided into two parts of 2,000 pounds each. Assuming, then, 4 at 2,000 pounds of milk test 4 per cent fat, this will make eighty pounds butterfat, which, with the overrun of 10 per cent, will make eighty-eight pounds of butter; multiplying this by 25 cents a pound gives \$22 as the gross receipts for the butter. If 4 cents a pound is charged for making, this would amount to 88 times 4, of \$3.52, which, subtracted from the \$22, leaves \$18.48, the money that will be received when the overrun is 10 per cent.

With an overrun of 15 per cent, the amount of butter made from the eighty pounds fat will be ninety-two pounds. Multiplying this by 25 cents gives \$23; subtracting the cost of making, or 22 plus 4, gives \$3.68, and the amount of money received by the patron for this butter is \$19.32. If the overrun is 15 per cent and 31/2 cents per pound is charged for making, the net receipts by the patron will be \$19.78, so that from the whole-milk creamery standpoint the 2,000 pounds of milk will yield the patron \$18,48, \$19.32, or \$19.78, according to the conditions named.

If the patron separates his milk at the farm and takes the cream to the factory where the butter is made for the overrun, the receipts may be figured out in the following way: The same weight of butter can be made from the cream skimmed from the 2,000 pounds of milk as from the milk. There should not be much difference

in the weights of the butter obtained at either the separator creamery or The the gathered-cream factory. eighty pounds of butter-fat from the 2,000 pounds of milk will not, however, all be delivered to the creamery because some of it is left in the skimmilk at the farm. Assuming this loss of skimmilk to be 3 per cent, then the book and delivered to the gathit is the factory from the 2,000 it is the will be 80 times 97, or 77.6 pounds patter-fat; multiplying this by er pound, gives \$19.40. This und don ount that will be received by r sending his cream to the has an as is paid for the butter-fat in u. shoot; that is, when the butter is made for the overrun.

These figures show that there is very little difference between the receipts milk when sent to a separadiery which charges 4 cents for making butter and the receipts from cream when the milk is separated on the farm and the cream sent to a gathered-cream factory where the overrun covers the cost of making the butter. This calculation assumes that the overrun at the separator creamery of 15 per cent is obtained. The farmer in this case received a the separator creamery \$19.32, and at the gathered-cream factory \$19.40, so that making butter for the overlun amounts to about 4 cents per pound when the price of butter is 25 cents and the overrun is 15 per cent.

A gallon of cream weighs eight pounds. Then a gallon of cream testing 20 per cent will contain 1.6 pounds of butter fat; adding one-fifth to this gives 1.92 pounds butter. A gallon of cream testing 45 per cent will contain 3.6 pounds butter-fat; adding one-fifth to this makes 4.32 pounds butter. Hence ir agallon of cream testing 20 per cent at the amount of butter that may be obtained is 1.92 pounds and from ting 45 per cent the weight is 4.32 pounds. These numbers are a figures and show what may be the med under average conditions.

# Sustaining the Milk Flow in Dry Summers.

In this etion of Southwest Missouri dro h usually comes about three seasons out of five. I am obliged to make provision for the protection of summer pastures, writes W. N. Love in Orange Judd Farmer. Dairymen in general are prone to overstock the pastures in the early part of the season and when drouth comes they are already short and consequently suffer greatly. After a hard winter I hire a summer pasture and leave the home supply mon than ample for the dairy cows. The next provision is to see that the ami ie land is not used for pasture until late in the season, unless drouth makes it necessary. If the pasture is not byerstocked and ordinary growth of mowed land untouched I am pretty safe until the middle of September for an ordinary herd of cat-

The next provision I usually make is to sow some cow-peas and plant some late corn of the early ripening variety, or of the Evergreen sweet variety on wheat land, immediately after the wheat is cut. This ground is plowed or disked, if conditions for disking are proper, while I plant about llons of peas and one gallon of corn per acre in the row. If only peas are to be planted, I use about. 20 pounds, or one-third of a bushel to the acre, and go over the ground twice, making the rows about 22 inches apart. The only cultivation given this crop is one or two harrowings just after they have appeared above the ground.

Putting in this crop requires little extra labor, although it comes at a time when there is much other important work on the farm, but the results more than pay for the extra work, if the season proves to be very dry. In any case, we have an excellent amount of extra feed and have

benefitted the soil.

If the mixed crop is not needed during a drouth period, then wait until they begin to ripen and shock for hay.

A ton of this pea hay will be worth almost as much as a ton of wheat bran. I have grown cow-peas continuously for 16 years, and during this time I have experimented with millets, sorghum, Kafir-corn, etc., but have found nothing that equals an early variety of corn planted late with peas, peas alone as feed paying, to say nothing of the benefits to the soil.

I think, however, that alfalfa is better than corn and peas to carry the dairy cows over the drouth period without diminishing the flow of milk, but up to the present time my experience with alfalfa has been in learning how to sow it, though with the use of inoculating bacteria I hope to be able to have some success. My experience has been that other grasses tend to crowd out alfalfa. In one case, with a heavy application of barnyard manure, I had as fine a pasture of timothy and red clover as I ever wish to see, and the alfalfa completely disappeared.

Silage will fully meet the emergency of a dry period, but hitherto I have never had enough to last until past the first of May, and but few dairy farms are equipped with large enough silos to be able to have this feed the year around. In conclusion will say that if no other provision has been made for the drouth period, it will pay to feed dairy cows bran or cottonseedmeal and green corn from the field, in order to sustain the milk-flow.

# The Farmer in Politics,

It is indeed a privilege to be an American citizen—a privilege that carries with it duties and responsibilities. Throughout the ages history does not record an instance of a single Nation in which the individual citizen was accorded anything like the rights and immunities enjoyed by citizens of the United States.

In our Government each citizen is a sovereign and possesses sovereign powers. Public honors and emoluments are alike open to all and come neither through the medium of the bended knee nor through skillful flattering of some shallow-minded individual whom the accident of birth has made the executive head of a Nation. The will of the people is the law of the land

But in the destiny of the world our Nation has been given a mission to perform-an important mission, if we are capable of forming a true estimate of its nature. We are as the immortal Lincoln said, "A nation conceived in liberty and dedicated to the proposition that all men are created free and equal." That we may discharge faithfully and well the duties thus devolving upon us as citizens of a Nation with such a destiny as ours, it is the duty of every citizen to take a deep and abiding interest in the actions of our Government as a whole. Washington left as a noble legacy to a free people a political maxim that should find an echo in the heart of every patriotic citizen: "The ballot in the hands of an ignorant voter is more dangerous to the safety of the republic than a musket in the hands of a foreign soldier." Let every man then be prepared to cast an intelligent bal-

No other class of citizens of our land has a deeper or more vital interest in the preservation of our liberties and the promotion of general prosperity than the farming class. The agricultural element of a Nation has long been recognized as the most stable of the elements that constitute a Nation. Goldsmith spoke with true prophetic insight when he said:

"Ill fares the land, to hastening ills a prey, Where wealth accumulates and men decay, Princes or lords may flourish, or may fade; A breath can make them, as a breath has made."

But a bold peasantry, their country's pride, When once destroyed, can never be supplied."

In our country by virtue of our rights as sovereign citizens, we are responsible for our political condition. In the past the agricultural element has played an important part in the upbuilding of our Nation. The great founders of our Nation were almost without exception agriculturists. Wash-

of the American Continent: Yellowstone National Park; The Great Shoshone Falls: The Columbia River;
Mount Hood; The Big Trees of Callfornia; The Yosemite; Euc'a "Cut-Off"
across Great Salt Eake

Can all Be Seen on a Trip Over the

UNION PACIFIC

AND CONNECTIONS

TO THE

LEWIS & GLARK EXPOSITION

Portland, Oregon, June 1 to Oct. 15, 1905.

ington, Jefferson, and a host of others who aided in the founding of our republic were farmers. That they builded wisely and well when they laid the foundation of our Nation is evident. When he considers the precedents set by his predecessors the farmer of the present should be stimulated and encouraged to take a leading part in governmental affairs.

The farmer of the present has even a greater opportunity and responsibility for the guidance of public affairs than had the farmer of the past. The opportunity lies in the fact that through the advances of agricultural education he is on the whole more intelligent, or at least has the opportunity to secure a broader education than had his predecessors. "Knowledge is power" has long been a recognized truth, hence with increased knowledge the farmer's power should increase. Again, the circumstances of his vocation render him more independent than any other element. His salary and his position do not depend upon the will of an employer; he may think, talk, and vote as he sees fit, without danger of losing his position and his living. This privilege alone is sufficient to place the farmer above the machinations of the corrupt politician. By virtue of this privilege he has a responsibility that he will not shirk if he be a true lover of his country. By virtue of this position, also, he can take a higher stand for public moral and official conduct than can one who is less independent; he is free to demand the highest qualifications as a requisite for official position; he may act without fear or favor.

The farmer of the future, at least the educated farmer, (and we hope all farmers will be educated), will take even a more active interest in politics and questions of governmental policy than has either the farmer of the past or of the present. He will be in a position to judge what is best for his Nation and to labor effectively in carrying out his ideas. Living close to the great heart of Nature the farmer will ever be found to be honorable and upright—the foe to all manner of official misconduct or dishonesty, and the reins of government will ever be safe in his hands.

#### Crop Conditions on July 1.

Preliminary returns to the Chief of the Bureau of Statistics of the Department of Agriculture show the acreage of corn planted to be about 94,011,000 acres, an increase of about 2,080,000 acres, or 2.3 per cent, on the area planted last year.

The average condition of the growing crop on July 1 was 87.3, as com-

pared with 86.4 on July 1, 1904, 79.4 at the corresponding date in 1903, and a ten-year average of 87.6.

The average condition of winter wheat on July 1 was 82.7, as compared with 85.5 last month, 78.7 on July 1, 1904, 78.8 at the corresponding date in 1903, and a ten-year average of 77.8.

The average condition of spring wheat on July 1 was 91.0, as compared with 93.7 last month, 93.7 on July 1, 1904, 82.5 at the corresponding date in 1903, and a ten-year average of 89.3.

The average condition on July 1 of spring and winter wheat combined was 85.8, as compered with 84.5 on July 1, 1904, and 80 at the corresponding date in 1903.

The amount of wheat remaining in the hands of farmers on July 1 is estimated at about 24,257,000 bushels, equivalent to about 4.4 per cent of the crop of last year.

The average condition of the oat crop on July 1 was 92.1, as compared with 92.9 last month, 89.8 on July 1, 1904, 84.3 at the corresponding date in 1903, and a ten-year average of 88.5.

The average condition of barley on July 1 was 91.5, against 93.7 one month ago, 88.5 on July 1, 1904, 86.8 at a corresponding date in 1903, and a ten-year average of 88.3.

The average condition of winter rye on July 1 was 92.7, as compared with 88 on July 1, 1904, 90.2 at the corresponding date in 1903, and a ten-year average of 89.1.

The average condition of spring rye on July 1 was 93, as compared with 90.8 on July 1, 1904, 88.3 at the corresponding date in 1903, and a ten-year average of 88.4.

The acreage of flax is greater than that of last year by about 128,800 acres, or 6.7 per cent; and the condition on July 1 was 92.7.

The acreage of rice is less than that of last year by about 172,000 acres, or 26 per cent; and the condition on July 1 was 88, against 88.2 one year ago.

The acreage of potatoes, excluding sweet potatoes, is less than that of last year by about 19,000 acres, or 0.6 per cent. The average condition on July 1 was 91.2, as compared with 93.9 on July 1, 1904, 88.1 at the corresponding date in 1903, and a ten-year average of 92.1.

The acreage of tobacco is less than that of last year by about 54,000 acres, or 6.7 per cent. The average condition on July 1 was 87.4, against 85.3 one year ago.

"Companionship can only afford happiness by mutual soul adaptation. The great law of affinity, which is seen everywhere in nature, holds with the same unalterable, unmeasured force in the spiritual world. Every shade of mind draws its like, or is attracted by kindred minds." N

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### The Poultry Hard

Bioroscoccoccoccoccoccoccoccoccocc CONDUCTED BY THOMAS OWEN.

Bees and Poultry on a Fruit Farm.

[This paper was read by Thos. Owen before the Shawnee County Horticultural Society, and by unanimous vote requested for publication.—EDITOR KANSAS FARMER.]

I has often been asked whether bees, poultry and fruit go well together. Nothing is plainer. The bees bite the fruit, which falls to the ground, the chickens eat the fruit, and you eat the chickens; and here you have at one serving the combined product of the trees, the bees and the chickens, without the trouble of cooking each separately; and no one who has eaten fried chicken will gainsay the fact that it is very good.

But assuming that there is a stray

Democrat here to-day who is not used to mixed drinks but accustomed to taking his "straight," we will endeavor to prove that the products of a fruit, bee and poultry farm will pay in severalty as well as in combination. The old cry was that "bees spoiled the blessoms and punctured the fruit;" but that is all over now, and producers of fruit are urging apiarists to establish colonies of these on their grounds so that they may get the benefit of the bees in pollenization of the fruit blossom. Then why not keep a few colonies of the bees yourselves and derive a goodly revenue and great pleasure and profit in the study of one of God's most marvelous creatures? They are the only live stock that you do not have to feed and water. They not only provide for their own living during summer and winter, but leave a generous surplus for yourselves of the most healthful of nature's sweets. It costs but a trifle to get a start in bees and after you once get used to them it will prove a very profitable and instructive occupation. There has been a little prejudice against the bee because both ends of him were not alike, or rather because the rear end was not like the front end, for they do not fight according to the Marquis of Queenberry's rules, face to face, but come at you with a back-handed strike, so to speak. But nowaday's with beegloves, and bee-veils and bee-smokers, you so mystify the poor creatures that a bee can hardly tell one end from the other and is as harmless as the Russian navy.

But my experience with bees has been limited, and a thorough beeman will speak to you exclusively on bees at a future meeting. The text of my article was not of my own choosing or it would have been confined to poultry, in which I am supposed to be an expert. Having been writing chicken for twenty years and eating it for fifty, I ought to know something about the

POULTRY AND FRUIT-FARMING.

There are quite a number of reasons why poultry and fruit farming make a good combination. First, the chickens destroy so many insects that are injurious to the fruit that it would pay to keep them for that, if for no other reason. For all of your spraying the insects will escape you, but if you everal hens with their young broods in the orchard not many of them will escape their mouths. Hens like fruit that drops from the trees and will eat the immature that drops, and in so doing kill off the worms that made this fruit fall prematurely. The hens will destroy the root enemies of the trees. Just dig up the sod under a fruit-tree, 'scatter a little millet-seed there and see how thoroughly the hens will harrow that ground, and rid it of worms. Again, the poultry enrich the ground. It has been estimated that each barrel of droppings is worth atleast one dollar compared to commercial fertilizers. But outside of these reasons is the more important one of additional revenue. That poultry pays goes without saying. The common theory is that it costs 50 cents per year to feed a hen, and that you can

realize from \$1.00 to \$1.50 profit above her board. But it is no longer necessary to guess at these things for we have facts at our hands. At the Utah Experiment Station the average of seven years' experiments show that Leghorn pullets consumed in a year 63 cents worth of food per fowl and laid 167 eggs which cost 41/2 per dozen, and which brought \$1.84. The profit per hen was \$1.20, or 180 per cent on food consumed, counting the feed at full market prices. If you take into consideration the large amount of feed that the ordinary hen picks up, the cost of eggs should not be over 2 cents per dozen. With eggs in Topeka selling this spring at 35 cents per dozen and even now bringing 15 cents, there certainly is a good margin of profit. Besides, after laying all these eggs you have the hen left. If a young one, you can dress and cook her for your own table. If an old one, you can sell her to some boarding-house keeper. To raise brollers it is necessary to have incubators and brooders and other necessary apparatus; also substantial buildings; but even after paying for all necessary appliances there is big money in the broiler business. You can raise broilers to two pounds weight for 6 cents per pound and sell them for 25 cents per pound. That it is a profitable business is evidenced by the great number of large poultry plants, costing thousands of dollars each near every big city in the East. That there is a corresponding profit for the fruit farmer in this same business is certain.

FACTS. Several instances of the successful combination of fruit and poultry can be given, such as Gardners & Dumming of Auburn, N. Y., who have twenty acres in fruits which pay them handsomely, the income of which is augumented considerably by cash coming in for poultry and eggs during the dull season in fruit. White & Rice, Yorktown, N. Y., formerly devoted most of their time to truck- and fruit-farming. Some years ago they began keeping a few hens and found them so helpful in the fruit business that gradually they have been reducing the truck farming and increasing the poultry. Now they raise thousands of chicks annually. They market most of the cockerals as broilers and keep the pullets for early fall and winter layers. Their best fruit-customers in New York City have become their best egg-customers and the price they realize on fresh eggs sent in twice a week would be esteemed fabulous by most Western people, E. S. Grable of Canton, Ohio, is another man who has successfully combined poultry and fruit. He lives three miles from town on a four-acre tract, and began the growing of small fruits. Being a natural fancier of fine fowls he at once started a flock of Plymouth Rocks. The results have been most satisfactory and the combination a complete success. Mr. Gable claims that the fowls are as great a benefit to the fruits as the shade of the latter is to the fowls in summer. He gradually established a high-grade retail trade in the city of Canton for his berries and other fruits and soon found these same people anxious to purchase his fresh eggs and nicely fatted fowls at the highest price. Mr. Gable has a small and growing family helping in his work. He hires the heavy plowing d one as he keeps but one horse and a delivery wagon. He does not pay over \$50 a year for needed help and his profits from his four acres average \$1,000 a year from his fruits and \$1,200 from his poultry. Mr. Gable was a photographer broken in health when he took the place.

RAISE PURE BIRDS.

If you embark in the chicken business, our advice is to start right by having pure-bred poultry. The extra cost is only at the commencement. It costs no more to take care of a purebred fowl than it does a scrub. But the profit will be much more, besides having the satisfaction of having something uniform and handsome on your place in the shape of fowls. Have a definite object in view as to whether you mean to cater to the egg trade or the broiler business, and have but one

variety of fowls. The multiplicity of breeds is the rock whereon hundreds of poultrymen have made shipwreck of their enterprices. You can make just as much money with one breed as you can with a half dozen. It saves much in fencing and precludes the possibility of missing breeds. If you want eggs, you can get them from the Leghorns and Minorcas. If you want flesh, you have it in profusion in the large Asiatic breeds. If you prefer a combination of eggs and flesh, it is at hand in the American varieties or Plymouth Rocks and Wyandottes. Of colors in fowls there is no end and every taste can be accommodated. While some poultrymen have certain fads and fancies in color and shape, the aim of all true fanciers is better poultry and more of it, and one constant aim is a more prolific egg-production and a better grade of meat.

A good start in pure-bred poultry can be gotten with small expense. For \$20 you can buy a good breeding pen of one rooster and ten hens. From these in one season you can raise at least 100 chickens that will sell at from \$1 to \$5 each, besides selling twenty sittings of eggs from \$1 to \$2 per sitting. You can get a still cheaper start by buying eggs from pure-bred stock, though you will lose a year's time by that process.

NO NEED OF CHOLERA.

A number of people are deterred from embarking in the poultry business because they fear cholera or some other contagious disease will sweep away their flocks. Though an extensive breeder of poultry for twenty-five years we have never had an epidemic in our flock or lost any great number at one time. We are convinced that the two great causes of disease among fowls is over-crowding and filth. In colonies of over fifty, chickens will not thrive and to do well they should be colonized in different parts of the orchard. We are satisfied that cholera can be traced to the fact of feeding soft feed on the ground among the fowl's own filth which they are forced to eat with their food. And by the bye, we think that hog-cholera can be traced to the same cause, filth. We' have seen hogs, not only up to their knees in filth but up to their loins, and when the slop was poured into their trough it wasn't five minutes before their feed was as black as the filth of their pen; for with their dirty feet and legs in the trough they soon defiled the whole mess. President Roosevelt has observed this same phenenoma, and hogs and chickens as well as the big trusts should be made to "keep their feet out of the trough." We feed our fowls their soft feed in the hall-way of the poultry-house with slats between them and the feed and the water, so that they can not get their feet in either. Some of the lords of creation

have a notion that the chicken industry is small business, fit only for women and children, but that is because they do not know as much as the women and children. They cannot realize that ten dimes will buy as much bread as a big, round dollar. A hen bringing in 25 cents per month income does not amount to much, but let him feed a hog for 6 months with 40 bushels of 50-cent corn and then sell the hog for less than the corn would have brought, and he has performed a great fe once for \$20 worth of corn. We have seen men who were actually ashamed to own that they were in the chicken business. If asked if they were raising chickens they would say, "No, my wife attends to the chickens." But as treasurer of the State Poultry Association for twelve years, I have noticed that though the chickens were entered in his wife's name, the man invariably came around and wanted the premium check made out in his name. You have seen a rooster on finding a big fat worm make a great flourish and splutter and call his biddies up to him, but just as they would get there he would gobble up the tidbit himself. As an Irishman would say, there are a good many two-legged roosters in this world. We found the following item in last Monday's Jourde a mone de esc

NOFTZGER STANDS BY CHICKENS. Senator T. A. Noftzger, who was in Topeka Saturday, is a firm believer in chickens. He says:

"The people out in my country have made their money out of chickens and butter. Wheat and corn are all right in their place, but their place is magnified. The misfortune to the State if an entire wreat chop should be destroyed is not to be compared to the disaster which would be wrought if all the chickens should die.

"Wheat and corn may be a good crop this year and they may not. Rav the chickens you can depend upon. They are a good crop every year. You know pust what you are going to get. We send hundreds of carloads of

#### POULTRY BREEDERS' DIRECTORY

CHOICE B. P. ROCK cockerels and pullets—Collic pups; send for circular, W. B. Williams, Stella, Neb

S. C. B. LEGHORNS EXCLUSIVELY—Some fine young cockerels and prilets for sale cheap if taken early. J. A. Kauffman, Abilene, Kans.

EGGS FOR SALE—S. C.V. Leghorns, W. Wyan-dottes; \$1 per 15. W.H. tu.ke, s. \$1.50 per 9. Emden geese, 20c each. W. African guiness, \$1 per 17. All guaranteed pure-brec. A. F., Hattey, Route 2, Maple Hill, Kans,

BUFF LEGHORNS EXCLUSIVELY - Eggs \$1.75 per 50; \$3 per 100. J. A. Reed, Route 3 Wake field, Kans.

R. C. W. LEGHORN: TGGF ner sitting; \$1.50 per two sittings; \$5 per hund; .... Stock excellent, Mrs. A. D. Corning, Route'l, Delphos, Kans.

MAPLE HILL Standard-b. ed S. C. B. Leghorns champion layers, none better; cockerels from State prise-winners. \$1 per sitting; \$4 per 100. Mrs. D W. Evans, Edgerton, Kans.

STANDARD BRED SING. OMB BUFF LEGHORNS—Headed by dim. —e pen Chicago Show 1908 and took six first prices and first pen at Newton 1904. Eggs, \$3 for 15. S. Perkins, \$01 East First Street, Newton, Kans.

S. C. W. Leghorns and Buff Rocks. Winners at State Fairs. Eggs. \$1 per sitting. J. W. Cook, Boute 3, Hutchinson, Kans.

TO GIVE AWAY—50 Buff Orpingtons and 50 Buff Leghorns to Shawnee county farmers. Will buy the chicks and eggs. Write me. W. H. Maxwell, 921 Topeka Ave., Topeka, Kans.

BARRED AND WHITE PLYMOUTH ROCK Eggs, \$2 per 15; \$5 per 45. Hawkins and Bradley strains, scoring \$8% to 94%. Mr. & Mrs. Chris Bearman Ottawa, Kans.

## Golden Wyandottes

inners at Topeka Poultry Show, January 1905, hen, 3 pullet, 2 cock, 2 cockerel. A few birds for Eggs, \$2 per 15. J. D. MOORE, Route 2, Blue Mound, Kans,

"A NINE TIMES WINNER" Sates Pedigreed Strain of White Plymouth Rocks we been shown in nine poultry shows the past

won in Every One of Them.
Won in Every One of Them. If they win for us, their offspring ought to win for you, Eggs, \$1.50 per 15. Elmwood strain of white Wyandottes also hold their own in the show-room. Eggs, \$1 per 15. W. L. BATES, Topeka, Kansas.

# White Plymouth Rocks

EXCLUSIVELY.

Good for Eggs, Good to Eat, and Good to Look at W. P. Books hold the record for egg-laying over every other variety of fowle; eight pullets averaging 289 eggs each in one year. I have bred them excitatively for twelve years and have them scoring 24 to 26%, and as good as can be found anywhere. Eggs only \$2 per 18; \$5 per 46, and I prepay expressage to any express office in the United Etates. Yards at residence, adjoining Washburn College. Address THOMAS OWEN, Sta. B, Topeka, Kams.

# POULTRY SUPPLIES

hanolice (lice powder)..... Oreo-carbo (lice killer)...... 600 STURTEVART'S Poultry Oure......250 Conkey's Roup Cure..... 

#### OWEN & COMPANY 520 Kansas Ave., Topoka, Kans.

SCOTCH COLLIES.

A NICE LITTER of farm-raised, eligible Scotch Collie pupples at low prices for immediate accept-ance. Colors sable. Males, \$4. Females, \$3. Pair, \$6. O. A. Rhoads, Columbus, Kans.

FOR SALE—Pure-bred Scotch Collies; forty head pure-bred Shropshire ewes; registered Guernsey bulls. G. C. Wheeler, Mgr. Perkin's Farm, Harlem,

SCOTCH COLLIE PUPS—Four more litters of those high-bred Collies, from 1 to 2 weeks old, for sale. Booking orders now. Wainut Grove Farm, H. D. Nutting, Prop., Emporia, Kans,

Largest Optical Mail Order
House in the West

Eyes examined free accurately by mail.
Any style glasses, \$1. Write for free examination
shees and illustrated casalog, Satisfaction guaranteed

dressed chickens out of my county every year, and millions of eggs. The rich farmers have not been made rich by their wheat and corn, but by their chickens, eggs and butter."

Mr. Noftzger is right. Taken in the aggregate, the poultry industry is of immense proportions, ahead of horses, cattle, wheat or corn. We could name several poultrymen who earn from 5 to 15 thousand dollars a year from their poultry, and we know several women in Kansas who make more out of their chickens than their husbands can out of their farms.

Now this is not a pipe-dream that we have been giving you. We have been conservative in our statements. We do not advise you to throw up your present pursuits and rush into the poultry business exclusively, but this we say: That if thou add poultry to thy fruit farming, thou wilt put money in thy purse, wisdom into thy brain and pleasure into thy consciousness.

You do not always have a good crop of fruit. Whan with early frosts, and hail and bugs and vermin you occasionally have a failure; but the hen crop never fails. Drouth does not affect hens. Even during grasshopper year the hen throve on the very things that caused ruin to everything else. The corn crop may fail and the wheat may not thrive, the breesmay be blighted in the bud or withered in the fruit, but the laying of the hen endureth for-ever. 1960, 1933.

#### The Stock Interest

THOROUGUBRED STOCK SALES

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

September 1, 1905—Poland-Chinas at Bennington, Kans., C. N. White. September 7, 1906—Aberdeen-Angus Cattle, E. J. Hewett, Eddorado, Kans. Sept. 12, 1905—Shorthorns at Kansas City, T. J. Wornall, Liberty, Mo. October 3, 1905—S. J. Marcum, Council Grove, Kans., Poland-Chinas. October 5, 1905—W. H. Lawler and N. N. Ruff, Marshall, Mo., Shorthorns, Red Polls and Polled Durhams.

October 9, 1905-Kland-Chinas, E. E. Axline, Oak

October 18, 1905—Poland-Chinas, W. B. Van Horn, Overbrook, Kans.
October 19, 1905—Poland-Chinas and Duroc-Jerseys at Coffeyville, Kans. H. E. Bachelder, manager, Fredonia, Kans.
October 19, 1905—Chris Huber, Eldorado, Kans. October 20, 1905—Shorthorns and Herefords at Coffeyville, Kans. H. E. Bachelder, manager, Fre-donia, Kans.

Coffeyville, Kans. H. E. Bacheiger, manager, donia, Kans, Oct. 24, 1905—Jno. W. Jones & Son, Delphos,

Oct. 24, 1905—Jno. W. Jones & Son, Delpho, Duroc-Jerseys. October 26, 1905—Herman Arndt, Alta Vista, Kans. November 9 and 10, 1905—Poland-Chinas, Duroc-Jerseys, Shorthorns and Herefords at Fredonia, Kans. H. E. Bachelder, manager, Fredonia, Kans. November 11, 1905—Shorthorns and Herefords at Blackwell, Okla. J. P. Cornelius, manager, Bra-man Okla.

Nov. 14, 1905—S. H. Lenhert, Hope, Kansas Poland-Chinas, Nov. 15, 1905—S. H. Lenhert, Dispersion Sale of Shorthorus.

Nov. 15, 1905—S. H. Lennert, Dispersion Sale of Shorthorns.
Nov. 16-18, 1905—Registered stock at Arkansas Nov. 16-18, 1905—Registered stock Breeders' Association of the Wheat Beit. Chas. M. Johnson, See'y, Caldwell, Kans. December 5, 1905—Marshall Brosk, and J. F. Stodder, Burden, Kans., Shorthorn cattle.
December 6, 1905—Marshall Brosk, and J. F. Stodder, Burden, Kans., Duroc-Jerseys.
December 7, 1905—Marshall Brosk, and Harry E. Lunt, Burden, Kans., Poland-Chinas, December 7, 1905—American Aberdeen-Angus Breeders' Association, Aberdeen-Angus, Chicago, Ill., W. C. McGavock, Manager.
December 7 and 8, 1905—Poland-Chinas, Duroc-Jerseys, Shorthorns and Herefords at Wichita, Kans. H. E. Bachelder, manager, Fredonia, Kans.
Dec. 8, 1905—American Galloway Breeders' Association sale, Chicago, Ill.
Dec. 12 and 13, 1906—Imported and American Herefords. Armour-Funkhouser sale at Kansas City, Mo. J. H. Goodwin, Manager.
December 21, 1905—Poland-Chinas. A. P. Wright, Veleccher 21, 1905—Poland-Chinas. A. P. Wright,

City, Mo. J. H. Goodwin, Manager.

December 21, 1905—Poland-Chinas. A. P. Wright,
Valley Center, Kans.

February 15-17, 1906—Third Annual Sale of the
Improved Stock Breeders Association of the Wheat
Belt at Caldwell, Kans., Chas. M. Johnson, Sec'y.

February 21-23, 1906—Percherons, Shorthorns,
Herefords and Poland-Chinas at Wichita, Kans.

J. C. Robison, Manager, Towanda, Kans.

Report on Carcass and Cooking Demonstration at St. Louis Exposition. BEEF.

Four classes of steers were slaughtered for a comparison of carcasses, representing the following grades: (1) the over-fat class, (2) the prime class, (3) the under-fat class, and (4) the common or range class. The steers were furnished by agricultural colleges. Kansas supplied 12 steers, Minnesota 2, Illinois 2, and Iowa 1. They were fasted twenty-four hours before slaughtering. After slaughtering they remained in the refrigerator for five days, at the end of which time the car-

# MYSTERIOUS WONDER WORKER PERFORMS MIRACLES OF HEALING

Restores Health to Hopeless Invalids Given Up to Die by Doctors.

# STRANGE STORY OF WOMAN

Says Phenomenal Power of Panopathic Professor Brought Her Back to Life When Body Felt Dead and Lifeless.

# HEART MADE TO BEAT AGAIN

Hundreds Healed by This Man, Who Has Discarded Useless Drugs and Medicines Since He Has Made Wonderful Discovery of Life's Law.

# NO DISEASE HE MAY NOT CURE

Yet He Offers Services Free of Charge to All Who Are Sick and Afflicted - Cures Them in Their Own Homes - Believes It His Duty to God and Man to Help All Who Stand in Need.

NEW YORK, July 22 .- (Special Correspondence.)—The seeming miracles of healing performed by that famous scientist and panopath of this city, Dr. Wallace Hadley, his startling cures of men and women given up to die by doctors, have been so wonderful in both method and results that they have awakened universal praise, astonishment and mystery among professional men and the general public alike. In the face of doctors' verdicts and apparent impossibilities this man has taken invalids pronounced hopelessly incurable and restored them to life and health when all other means had

Considerable curiosity has been aroused by these phenomenal cures, both because they are ba wonderful in themselves and also that this worker of wonders proclaims the fact that he has discarded the useless drugs and medicines usually prescribed by physicians. In partial explannation he states that he has discovered the greatest of life's laws, that apparently has been overlooked by previous searchers after the secret of nature. And it is evident beyond doubt that this discovery gives him a power over disease and death not possessed by ordinary mortals. So certain is he of his ability that he claims and offers to prove that there is no disease he may not cure. Astounding as that assertion appears to be, there is plenty of evidence to support it. In one case, if not in more, by means of the mysterious power he possesses, he is stated to have made the human heart beat again, reviving the flickering spark of life when all but extinguished, and curing diseases that baffled the skill of the best doctors and specialists. He appears to have complete control and mastery over the hydraheaded monster, Disease, under whatever form or name

it may be known. Yet, strange as it may seem in this day and age, with all the supreme power and command over the ills that human flesh is heir to, he does not use his discovery to fill his own pockets at the expense of the thousands of suffering men and women who appeal to him for the aid he gives so gladly and so freely, as he might easily do, saying during a recent interview: "I believe it is my duty to God and man to help all who stand in need without regard to any reward. I believe this power was given to me that I might be an instrument to cure the sick and afflicted. This being my earnest belief, I feel that I must give freely of my services to all who are ill. I do not want to pose as a philanthropist, but I have my own ideas as to the best use to make of the money I have, and I know of no better way to spend it than to make life easier for those who are in the grasp of pain and disease. I have made both my money and my discovery unaided, and if I choose to use both in laboring for the health of mankind I am sure that it is nobody's business how or why I do it. True, there is almost no limit to the money I could make if I chose to keep this wonderful secret to myself, as you can readily understand, but I feel that it belongs to humanity as much as it does to me. What right have I to grow wealthy out of my fellowmen's miseries? Just think of what it means when I am able

to say that there is no disease I may not

cure! Just think of what a message of hope and salvation that is to hundreds. and thousands of invalids throughout the length and breadth of the land who have given up hope of ever being well again! "I do not care what doctors may say;

I do not care what the disease is called.

I am just as ready to make the deaf hear,

the lame walk, to cure consumption, cancers, tumors, paralysis, locomotor ataxia, Bright's disease, organic weakness, or any one of the so-called incurable diseases, as I am to cure stomach trouble, blood disorders, rheumatism, catarrh or any other ill that human flesh is heir to. I do not care or want to know how much or how little money a man has, but only that he has been attacked by disease in any one of its many forms. No matter what it may cost me, I mean to go on curing any one who asks me of any disease they may have, just as long as I am power to save life and restore health I could not let men and women, human beings like myself, go on suffering and dying for the want of that which I have to give. I know what I can do, because my power has been tested in thousands of cases. One case, a 'miraculous cure,' as the patient himself called it, was that of Mr. Harry Williams of Traverse City, Mich. He had a terrible disease that threatened to rot his bones, make his teeth and hair fall out, destroy sight, taste, smell and hearing and cover the body with ulcerous sores; a disease that makes a man a living corpse, like leprosy. He also failed to get help from his home doctors, and was in such misery of mind and body that he looked upon suicide as his only chance of escaping a more frightful death, was actually thinking of killing himself, when, luckily for him, his case was brought to my attention. I saved his life, I cured him. My treatment drove the poison out of his body, cleansed his blood of the very root of the disease and restored the man to perfect health. And another was that of Mr. B. R. Hall of Snowville, Va. His physicians pronounced him beyond medical aid and wanted to saw an opening through the skull as a last chance. Pieces of bone as big as my finger and half an inch long came out from above his eye. His agony was abandoned all hope and thought nothing but the grave awaited him. All he expected was to have his last dying hours made as comfortable as possible, but I saved his life and cured him completely. Sometimes I myself would be inclined to doubt the reports that come from my patients if I did not know the facts in each case. It is not long ago that I received a letter from one of them, a Mrs. J. G. Whitfield of Norfolk, Va., in which she says: 'I was so near crossing the Great Valley that my body felt dead and lifeless, but you made my heart beat again and my blood flow through my veins once more. I was very despondent when you came to my rescue. My stomach, liver and kidneys were in such a bad state I was afraid I couldn't ever be cured, and, in addition, I was afflicted with varicose veins and ulcers that I thought I could not be cured. I was in despair when I wrote to you, feeling that it was a chance for life and health. I suffered untold miseary, but now I can shout for joy over my restoration to life and health. I don't feel like the same person. I do feel so

thankful to you. May God bless you.' These are only random examples, but you see that they prove my power to cure even in the face of what seems certain death. But these and the other so-called miracles that I am credited with performing are not miracles in the same way as those described in the Bible. They may seem just as wonderful to the witnesses and to the men and women whose lives are saved, but they are, in truth, simply scientific phenomena that demonstrate and prove the power given me by the discovery I have made of life's law, the secret of what creates and maintains life, and overcomes disease and death."

"But how do you find time to visit patients all over the country and yet treat so many thousands?"

"While it is true that I have patients

"While it is true that I have patients in every State of the Union, in Canada, Mexico, and foreign countries, I do not have to visit them in order to cure them. One of the peculiarities of my power is that as surely as if I went to them or they came to me."

Then how-"

"Then how—"
"Then how—"
"All that any one who is ill in any way and wants to be cured has to do is to write to me, addressing Wallace Hadley, M. D., office267-D No. 2255 Broadway, New York, telling me the name of the disease they suffer from most, their principal symptons, age and sex, and I will send them a course of home treatment absolutely free of charge. A letter does just as much good as a personal visit."
"Surely you do not mean that any one who is sick can write to you and be cured without paying you any money?"
"But I do mean just that. Both my services and the treatment I send are entirely free to any one who needs treatment. And I am especially anxious to cure those who think, or have been told, that their case is incurable, that there is no hope for them to regain their lost health and strength. If they will write to me there is not only hope, but an almost absolute certainty that they need be sick no longer."

casses were cut up: The weights and shrinkages recorded during that time appear in the following report.

The open or left-hand side of the carcass was cut into joints as indicated below, and carefully weighed to obtain the relative percentages that





NEW BOOK

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tion and Propagation of Fruits.

By SAMUEL T. MAYNARD, Formerly Professor of Horticulture at the Mass achusetts Agricultural College.

achusetts Agricultural College.

This book is written from the standpoint of the practical fruit grower; it is up to date in every particular, and covers the entire practice of fruit culture, it gives in plain, practical language, descriptions of such varieties as are most in demand in our markets, and the methods practiced by the most successful cultivators of many sections of the country. Separate chapters are devoted to the apple, pear, peach, apricot and nectarine, plum, cherry, quince, mulberry, grape, blackberry, rappberry, cranberry, strawberry, blueberry, huckleborry, subtropical fruits, propagation of fruit trees and plants, fruit growing under glass, insect pests and fungous diseases. The chapter on the apple is particularly comprehensive and complete, forming a monograph in itself. The chapter on forcing peaches, grapes, strawberries, and other fruits, describes the most successful methods of the present day, and is the most recent practical treatise on this important industry.

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each part bore to the cold carcass, so that a comparison could be made between the live steers and their carcasses. For the cooking test with the over-fat, prime, and slightly under-fat steers, the sixth and seventh ribs were taken, and in the common range steer the sixth, seventh and eighth ribs. These were cut alike, except that the common steer carcass was so much lighter than the others that an extra rib was included to make the cuts comparable in weight. The results of this work are shown in the following tabulated report:

particularly strong and heavy in the loin, as shown by the table, without the superflous fat found on the others (which would need to be removed before the meat was served on the table). It is evident that the under-fat steers furnished quite the superior carcass of the list of stock in the trial-not only in the loins but in the prime ribs, which cuts constitute the most valuable portion of the carcass.

The over-fat steer was light in his round, which can be seen by examining the cutting record. The common steers seem to have been less strong in the

Steers.	Over fat steers.	Prime fat steers.	Slightly under fat steers.	Common or range steers
Round Loin. Prime rib. Kid, suet. Flank Sq. chunk Cross rib Plate Shank	19.48	21.85	21.35	25.61
	18.95	17.44	19.60	15.88
	9.92	9.60	9.45	8.75
	2.06	3.09	2.56	1.31
	6.43	4.85	3.22	4.26
	21.45	21.09	20.46	25.12
	3.75	5.58	4.78	3.27
	16.26	14.85	14.57	12.49
	2.06	2.47	2.89	3.27

PER CENT OF CARCASS TO JOINTS OF GROSS MEAT.

#### SLAUGHTERING, SHRINKAGE. AND YIELD RECORDS.

	Over fat steers.	Prime steers.	range stee	
Live weight Warm weight of carcass Per cent shrinkage of carcass Yield of carcass Yield int. fat lbs. Perc't'g of inter. fat to carcass Cold weight of carcass	1700.00	1526.00	1360.00	2060.00
	1131.00	936.00	888.00	613.50
	1.94	1.60	.50	2.20
	65.23	60.22	64.02	56.60
	61.00	74.50	57.60	18.50
	5.50	8.10	6.50	3.00
	1109.00	919.00	883.50	600.00

Comparison of the slaughter records show, first, that the over-fat and prime carcasses were exceedingly heavy and rather fat, and it is natural that the results would show a heavy yield of dressed carcass from each of them. The over-fat steer yielded 65.23 per cent of carcass to live weight. The results show that only a moderate amount of fat was deposited upon his internal organs (61 pounds), and the rest was laid over the carcass. The prime steer dressed out 60.22 per cent of carcass to live weight. It will be noticed that 74.5 pounds of tallow was deposited internally, and as his carcass was not so fat as that of the over-fat steers, they would necessarily dress out a smaller percentage of carcass to live weight. In the case of the slightly under-fat steers, which dressed 64.02 per cent of carcass, the yield, strictly speaking, is not a fair one, and it is not due to superior fleshing or fattening, but rather to the fact that these paunches contained less material than those of other steers. The common or range steers dressed about the normal percentage for those fattened only to the degree that their class represents.

The shrinkage in weight of the dressed carcass usually varies from 1 to 21/2 per cent of the warm carcass. A watery carcass usually shrinks most heavily. Such was the case with the common or range steers but the slightly under-fat steers did not, for some unexplained reason, shrink as much as might naturally be expected.

The results of the comparison of cuts of meat will need numerous explanations. The comparison might better have been made had the carcasses been divided into the retail cuts of beef. The cuts made and listed above may be described as follows:

The round includes the rump, round steak pot-roast below the buttock, and the hind shank. The round was separated from the loin by cutting through the joint of the femoral bone and the pelvic arch.

The loin included the portion of the carcass between the round and the twelfth rib, after removing the kidney fat and the flank. The prime rib included the portion extending from the sixth to the thirteenth rib, or seven prime ribs, cut the normal length, which is about 12 to 13 inches from the spinal cord to the outer end at the posterior portion of the rib. The square chuck includes the five chuck ribs, the shoulder, and the neck. The shank was cut off at the elbow joint. The plate included the regular cut, and in addition the portion of the brisket between the shanks.

The cross rib is the piece between the shank and the square chuck. It was about six inches wide in these specimens.

The slightly under-fat steers were

round cut of beef. The high percentage is probably due to the fact that the leg muscles of a western steer are hard and well-developed. They are nearly as heavy when lean as when fat; therefore, to get a heavy percentage it is necessary to expand and fill the muscle in that part to make it heavy, and this is especially true when the entire carcass is lean and light in weight while these parts or cuts are heavy. This will also be noticed by comparing the shank, cross-ribs, and the square chuck of the common steer with the percentages of similar cuts from the other steers in the trial.

The percentage of flank and plate cuts in the over-fat steer were high, and he was followed close in these points by the prime steer. This is usually the case with cattle which are very fat. There is a thickening of the parts represented by these cuts, and the fat seems to gather excessively in these regions. By reason of the above fat, it is common for stockmen to examine these parts in live animals to determine their degree of fatness.

The square chuck and cross-ribs cut out heavily in the common steer, as the audience has been lead to expect from the demonstration upon cattle when they were living, at which time attention was called to the fact that he was unusually heavy in the region of the shoulder and upper arm. The other steers resembled each other in this respect, and it is not a surprise to those who examined them closely while on foot to find the percentages very much alike.

The kidney fat, contrary to the expectations of many stockmen who examined them on floor, was proportionately lighter in the over-fat steer than in the prime, and also lighter than in the under-fat steers. This may possibly be explained by the fact that this steer seems to have laid his fat on the body rather than internally, in further evidence of which the results show that the internal fat ran light in this

urally rather square in this respect. It was generally concluded that the slightly under-fat steers were the most economical, or cut up to the most advantage. It was not generally believed, however, by those who examined the carcasses that in the quality of the meat of these steers would be placed first, as the marbling was not as good as in either the over-fat or the prime steers.

A cooking test was made to clear up this point. A special committee of three, in addition to the audience, was permitted to pass judgment upon it by testing small warm pieces with bread as sandwiches. The judgment of the committee, and also that of the majority of the audience, was that the slightly under-fat steers ranked first; that from the prime steers, second;

# CROPS ARE SURE

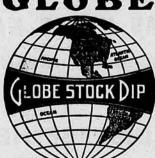
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that from the common steers, third; and that from the over-fat steer, fourth. One member of the committee, who is used to testing fine, rich meats, was strongly in favor of the beef from the prime steer, but generally such a rich flavor was not considered so favorably-as shown by their report. The flesh from the over-fat steer had a stringiness, peculiar to over-fatted beef, which does not please the meat-eating public. The flesh of the over-fat steer was extremely rich, but the flavor and texture of it were undesirable. The flesh of the common steers was very tender, reasonably juicy and fairly well flavored, but not rich. This meat was given preference over the richer (some what tougher) meat from the over-fat steer. The meat was not so nice as it would have been had rich pieces been used, as fat lacking in the carcass of the common steer and the meat was a

little watery. The following table shows two different methods of cutting rounds and loins. The two hind quarters of a carcass were used in making this com-

	Butcher eut Pounds.	Regular cut. Pounds.
Total weight	55 1/2	127 ½ 48 ½
Weight of round Per cent of hind quarter	s:	79 61.96
To loin		38.04

The regular cut shows a loss of 6.19 per cent of loin over that secured by the butcher's method.

In a 200-pounds hind quarter or a 400-pounds hind carcass, 6.19 per cent or 24.76 pounds may be thrown into the loin or round, and when the round sells at 6 cents and the loin at 18 cents it represents a difference in money value of \$1.48 which can be made by the manipulator.

#### PUBLICATION NOTICE.

#### IN THE DISTRICT COURT IN AND FOR SHAWNEE COUNTY, KANSAS.

FOR SHAWNEE COUNTY, KANSAS.

J. H. Skinner, Plaintiff, vs. T. F. Frawley, Enterprise Land, Loan and Investment Company, Security Company, a Corporation of Connecticut, William B. Rankine, H. D. Booge, Nellie J. Rankine, William Stout, Mary F. Carey, Mrs. Jeffle Wickine, Defendants.

The defendants in the above entitled action are hereby notified that they have been sued by said plaintiff in said court to quiet his title as against them to the south ½ of the south ½ of the north ½ of the southwest quarter of Section 12, Township 12, Range 15, in Shawnee County, Kansas, and to exclude them from all interest therein. And said defendants are further notified that they must answer the petition filed by said plaintiff in said court on or before the 7th day of September, 1905, or said petition will be taken as true and judgment rendered accordingly.

M. T. CAMPBELL.

Attorney for Plaintiff

T. CAMPBELL, Attorney for Plaintin. M. T.

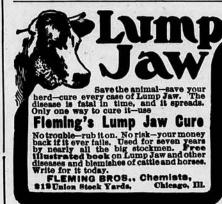
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NASHVILLE, TENN., OR OMAHA, NEB.

#### The Markets

#### Kansas City Grain Market.

Kansas City Grain Market.

Wheat receipts were 827 cars, the largest of the month. At generally 2c to 3c lower prices there was a fairly good demand. Samples came up late and few sales were made before noon. A fairly good clearance was finally made.

The railroads reported 827 cars of wheat received, compared with 578 cars a week ago and 195 cars a year ago.

Sales of car lots by sample on track, Kansas City:
Hard wheat—No. 1, 1 car 85c, 2 cars 83c, 3 cars 82½c, 4 cars 82c.
No. 2 hard, 8 cars 83c. 6 cars 84½c, 3 cars 84¢, 5 cars 83½c, 67 cars 83c, 1 car 82½c, 40 cars 82½c, 1 car 82½c, 10 cars 82½c, 1 car 82½c, 2 cars 80c.

No. 4 hard, 1 car 81c, 4 cars 80c, 1 car 82c, 1 car 70c, 1 car 76c, 2 cars 82c, No grade hard, 1 car 76c, 2 cars 82c, 2 cars 82c, 2 cars 83c, 3 cars 82½c, 2 cars 82c, 2 cars 81½c, 3 cars 81½c, 9 cars 81c, No. 4 red, 1 car 83c, 3 cars 82½c, 2 cars 82c, 1 car 78½c, 1 car 78c, Rejected red, 1 car 83c, 1 car 80½c, 2 cars 80c, 1 car 79½c, 1 car 78½c, 1 car 78c.

Rejected red, 1 car 81c, 1 car 80½c, 4 cars 80c, 1 car 79½c, 1 car 78½c, 1 car 78c.

Rejected red, 1 car 70c, 1 car 65c.

No. 2 mixed wheat, 1 car 83c, 1 car white 82c.

A moderate increase in receipts resulted in %c to 1½c decline in price. The

Rejected red. 1 car 70c, 1 car 65c.

No. 2 mixed wheat, 1 car 83c, 1 car white 82c.

A moderate increase in receipts resulted in %c to 1½c decline in price. The demand was fair.

The railroads reorted 140 cars of corn received, compared with 90 cars a week ago and 83 cars a year ago.

Sales of car lots by sample on track, Kansas City:

Mixed corn—No. 2, 1 car yellow 52c, 6 cars 51c, 24 cars 50½c; No. 3, 7 cars 50½c, 1 car 50½c, 2 cars 50½c; No. 4, 1 car 49½c, 1 cars 49c; no grade, 1 car 47c.

No. 2 white corn—12 cars 52½c, 3 cars 52c; No. 3, 2 cars 52½c, 2 cars 52c; No. 4. 1 car 50c; no grade, 1 car 46c.

Oats were in fair demand. Prices were unchanged to 1c lower.

The railroads reported 34 cars of oats received, compared with 3 cars a week ago and 19 cars a year ago.

Sales of car lots by sample on track, Kansas City:

Mixed oats—No. 2, 3 cars old 31c, 1 car 28c, 1 car 27½c, 2 cars 27c; No. 3, 1 car red 27½c, 1 car 27c; 2 cars 26½c; No. 4, 2 cars 26c; no grade, 2 cars 25½c.

No. 2 white oats—1 car 34c, 3 cars 33c, 2 cars 22c, 3 cars color 32c; No. 3, 1 car 33½c, 1 car color 31c.

Rye—No. 2, nominally 67c.

Timothy—Nominally \$3.00 per 100 lbs.

Flaxseed—Nominally \$1.12½c.

Bran—2 cars 64c, 1 bulkhead car 64c, 1 car 63½c.

Shorts—1 bulkhead car 65c.

Millet—Nominally \$1.00@1.05 per cwt.

Red clover and alfalfa—\$9.00@11.50 per 100 lbs.

Cane-seed—Nominally \$1.00@1.05.

Kafir-corn—Nominally \$1.00@1.05.

Kafir-corn—Nominally \$1.00@1.05.

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Kafir-corn—Nominally \$1.00@1.05.

Rye—No. 2, nominally \$1.00@1.05.

Kafir-corn—Nominally \$1.00@1.05.

Kafir-corn—Nominally \$1.00@1.05.

Rye—No. 2, nominally \$1.00@1.05.

Rye—No. 2, nomina

lots. Barley-No. 3, nominally 37@38c.

#### Kansas City Live-Stock Market.

Gossip About Stock.

F. A. Snow, druggist, 523 Kansas Avenue, Topeka, who has been so long with the firm of Rowley & Snow, recently purchased the Swift & Holliday Drug Company business from B. F. Sim and will make a specialty of the farmer trade and well known and reliable live-stock preparations. He also is the sole manufacturer of Fly-Flea, a preparation for keeping files away from cattle and horses. It is a combination of oils and antiseptics that are antagonistic to files and fleas, It is easy of application and can be applied with sprayer, brush or sponge, and each application will last several days. Notice his ad in this issue of the Kansas Farmer.

J. P. Sands & Son, Walton, Kans., have one of the good Berkshire herds and have on hand an excellent lot of pigs of either sex and some choice boars ready for service, that they are offering the trade. They are the kind that please buyers and are priced at their value. Messrs. Sands also feed Herefords, and have the honor of topping the last year's combination sale at Wichita with a choice yearling bull fitted by the junior member of the firm. Write Messrs. Sands and mention the Kansas Farmer.

J. D. Marshall, Walton, Kans., whose herd of Poland-Chinas have been so much talked of as the big useful kind, and also as always landing a good share of the blues at the leading Kansas fairs in recent years, will not be out with a herd this year, although he has shown material in plenty. He has about the usual number on hand and they are up to standard in size and quality. Mr. Marshall has enjoyed an excellent trade in Shropshire sheep and could have sold a great many more had he had them to spare. When you need anything in Mr. Marshall's line write him or call and see the station at Walton.

Publisher's Paragraphs.

The Ohio Feed and Ensilage Cutter catalogue is a highly illustrated and instructive book. The descriptions of the machines are full, while the illustrations—evidently made from photographs—show a great variety of barns and silos in process of being filled. This catalogue is sent free on request. Address the Silver Mfg. Co., Salem. O.

It is gratifying to note the success achieved by Kansas manufacturers. A notable success in this particular is the Green Corn Cutter Co., of Topeka, Kans.,

station at Walton.

sas Farmer.

Kansas City Live-Stock Market.

Kansas City, Mo., Monday, July 24, 1905. The cattle supply here last week was 44,600 head, not quite as heavy as previous week, but altogether too heavy for prices to be sustained. All kinds declined, 10 to 20 cents on desirable kinds, 15 to 35 cents on the common ones. The best beef steers sold at \$5.30, against a top of \$5.65 previous week. More grass cattle appeared, of course, and the market last week was just such a market as comes with the first advent of large numbers of grass cattle every year. The supply from below the quarantine line was extra heavy, while the movement from Kansas pastures, from Oklahoma and the Panhandle has commenced in earnest.

The run of cattle to-day is 11,000 head here, and not much more than half as heavy as on last Monday at other markets, so that prices are strong to 10 cents higher on all kinds. Stockers and feeders closed last week in bad shape, and a good many were held over at the end of the week. The unsatisfactory way that fat cattle are selling is discouraging to feeders, notwithstanding the excellent prospects for corn. The best beef steers sell at \$4.75@\$5.30. top to-day \$5.45, straight grass steers \$3.75@4.50, cows and heifers on up to \$5.00. The canning season is not yet on in full force, and they are selling at \$1.50@2.50, bulls \$2.25@3.75, veals @4.75@5.75, stockers and feeders \$2.50@4.25.

The hog market reached the highest point of the year on Wednesday of last week, since when it has been gradually declining, on more liberal receipts. More green hogs have appeared lately, and salesmen have had to sell them 30 to 50 cents below top prices. Market is about steady to-day, with a top of \$5.65, bulk of sales \$5.55@6.52½, with a four prices.

The sheep market got a bad jolt after the middle of last week, total loss amounting to 30 to 50 cents. Still further reductions are expected, market 10 to 15 lower to-day. Fat native yearlings sell at \$5.25 @5.50, wethers \$4.75@5.00, ewes \$4.55@4.50, lambs \$6.25@7.00. Stock and feeding sheep are

#### South St. Joseph Live-Stock Market,

So. St. Joseph, Mo., July 24, 1905. A better tone pervaded the cattle trade today because receipts at the five leading markets only aggregated 35,300, as against 59,800 for last Monday. This supply was pretty well distributed at the different markets, receipts at South So. Joseph showing a decrease of about 1,800 and other markets showing a corresponding decrease. Considering the number of cat-

Special Hant Column

steers was rather small try of which was fair to good. The work was fair to good. The steers was rather small which was fair to good. The steer was made. Prices generally ruled steady to strong, but on some lots of the better dressed beef grades which met the most competition, prices looked loc higher than the close of last week. Some medium lots also received the full strength of the market, but the bulk of the styles selling from \$4.75 down were right at steady. Indications point to increased marketing from \$4.75 down were right at steady. Indications point to increased marketing towards the middle of the week, and as cressed meat channels in the east are still in a congested condition, heavy receipts east would have the effect of the country losing the little prestige gained by the moderate marketing to-day. There was a fairly large supply of cows and helfers, but offerings were largely common to medium grassers, good to choice grassers and fed natives being very scarce. Buying orders appeared to be more liberal than a the close of the week and trading was fairly active at about steady prices, although some of the traders who unloaded early thought they disposed of their hoidings to a little better advantage than late last week. Bulls were in a little larger supply than late last week, but there was especial demand for the good kinds and trading was adult and draggy. Veals met a good demand and sold fully steady with the high close of last week. The largest supply of stock and feeding cattle to arrive for sometime was on the yards to-day, and they comprised a very good grade of native and range yearlings, and twos, and a very good sprinkling of feeding steers and country cows. The largest supply of stock and feeding cattle to arrive for sometime was on the yards to-day, and they comprised a very good grade of native and range yearlings, and those were generally on a basis of 10c to 15c lower than the close of last week, and the movement was fairly active until a clearance was made. There was some demand for "Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

#### CATTLE.

FOR SALE—One 5-year-old registered Jersey buil, will be sold cheap. Inquire at Aug. Beutel Alma, Kans.

SIX SHORTHORN BULLS—13 to 16 months old, eligible to registry, mostly reds, all sired by British Lion 133692 and out of the finest breeding—mixed Bates, Booth and Crulckshank. Price, \$40 each if taken soon. Address D. P. Norton, Dunlap, Morris County, Kans.

HOLSTEINS—Bull calves cheap while they are little. H. B. Cowles, Topeka. Kans.

FOR SALE—10 Registered Galloway bulls, cheap, J. A. Darrow, Route 3, Miltonvale, Kans.

FOR SALE—Eight good, registered Shorthorn bulls, four straight Cruickshank, good ones, and prices right. H. W. McAfee, Station C, Topeka, Kansas.

FOR SALE—A 3-year old Shorthorn bull, sired by Royal Rates. Address Dr. N. J. Taylor, Berryton, Kans.

#### SWINE.

FOR SALE—Say! I have some fine, big-boned, broad-backed Berkshires, brood sows or pigs. Want some? Write me; turkeys all sold. E. M. Mel-ville, Eudors, Kans.

#### SEEDS AND PLANTS.

WANTED—English blue-grass or meadow feacue seed. Correspond with us. Kansas Seed House, F. Barteldes & Co., Lawrence, Kans.

PLANTS FOR SALE—Strawberry, blackberry, dewberry, rhubarb, grape-vines. Write for special prices. Address J. C. Banta. Topeka. Kans.

FOR SALE—Seed Sweet potatoes: 6 kinds; write for prices to I. P. Myers, Hayesville, Kans.

SEED CORN—Both white and yellow at 90 cents per bushel; cane, millet and Kafir-corn seeds. Prices and sample on application. Adams & Walton, Osage City, Kans.

CELERY PLANTS \$2 per M, by A. G. Landis, Lawrence, Kans.

which manufactures a sled cutter at about one-tenth the cost of the regulation corn binder. This machine rune easily, and cuts and gathers corn, cane Kafircorn, or anything which is planted in rows. For five years this has been manufactured with greatly increasing sales from year to year. In fact it has been a popular machine with the farmer as well as the dealer. Notice the ad in this issue and for further particulars address Green Corn Cutter Co., Topeka, Kansas.

Recently the announcement of the death of Thos. H. Mastin of Kansas City, President of the Oakwood Farm and Livestock Co., formerly of the firm of Winn & Mastin, Mastin, Kans., was made in the Kansas Farmer. The company has decided to hold a series of sales for the dispersion of the famous herd of Poland-Chinas, about 900 head in all: The first sale will be held at Mastin, Kans., August 19, at which time the show-herds in fitting for the fall fairs will be sold, as well as a number of the famous brood sows including Darkness Lady. Louise, and other well-known great producers of prize-winners. Further announcements will appear in this paper.

#### The Perfection Separator.

The Perfection Separator.

The Perfection Cleaner and separator of seeds and grain, advertised by the Lewis-Tuttle Mfg. Co., Topeka, Kans., is an indesponsible and valuable adjunct to every well regulated farm.

Hon. G. W. Glick, President of the Kansas Grain Commission, said to the Kansas Farmer that it was the most necessary investment a farmer could have, as it insured for him perfect seed and greater results from all kinds of seed used on the farm, besides helping to raise the grade of all the grain sold in the market, and would pay for itself several times over. For detailed information write the manufacturers. write the manufacturers.

#### The Workman and His Tools.

All work done with tools depends on the skill of the workman and the quality of the tools. No matter how good the workman, if his tools are poor his work will not be the best, so that naturally the matter of selecting tools is a most impor-tant one.

matter of sections tant one.

People inexperienced in buying tools have one certain sure road to tool satisfaction. It is the path that has been worn deep and broad for thirty-six years by carpenters, builders, workers with tools of carpenters, builders, workers with tools of

deep and broad for thirty-six years by carpenters, builders, workers with tools of all kinds, men who know. It is the Keen Kutter road.

For every kind of tool is made under the Keen Kutter brand and all Keen Kutter Tools are tested and guaranteed.

When you get a tool bearing the Keen Kutter trade mark, all guess-work and risk passes away, for you know you have the best that can be made. Keen Kutter Tools were awarded the grand prize at the World's Fair, St. Louis; this prize being the only award ever given a complete line of tools at a great exposition.

Some of the kinds of Keen Kutter tools are: Axes, Adzes, Hammers, Hatchets, Chisels, Screw-Drivers, Auger-Bits, Files, Planes, Draw-Knives, Saws, Tool Cabinets, Scythes, Hay-Knives, Grass-Hooks, Brush-Hooks, Corn Knives, Eye Hoes, Trowels, Pruning Shears, Tinners' Snips, Scissors, Shears, Hair-Clippers, Horse Shears, Razors, etc., and Knives of all kinds.

kinds.

Every Keen Kutter Tool is made and sold under the trade mark and motto: "The recollection of quality remains long after the price is forgotten."

If your dealer does not keep Keen Kutter tools, write to the Simmons Hardware Company, St. Louis. or 298 Broadway, New York, and they will see that you are supplied.

#### FARMS AND RANCHES

MARION COUNTY BARGAINS—160 acres, 1 mile from county seat, fair improvements, good young orchard, 50 acres pasture, 7 acres alfalfa, balance in cultivation. If you are looking for a good home where you can send your children to city school, this is it. Price, \$4.200. A. S. Quisenberry, Marion, Kans.

CHEAP HOMES—80 acres, 60 acres second bottom good alfalfa land, \$1,800; 80 acres, 40 acres cuttivated, \$1,000; 80 acres, 5-room house, level land, \$1,200; 160 acres nice smooth land, near town, \$2,000; 160 acres, 5-room house, all smooth, \$3,200; 160 acres, 00 acres outtwated, balance pasture, partly rough, \$2,000. We have all sizes cheap. Try us at Florence, Minneapolis or Salina, Kans. Garrison & Studebaker.

FOR SALE—The best fruit and dairy farm of 80 acres in Kans. 40 minutes drive from Topeka, finely improved, large barn, 7-room house, 3 chicken houses, large young orchard, hanging full of choice varieties of apples, 400 peach trees, 2 acres grapes, 1 acre blackberries, 50 cherry trees and other fruit in smaller quantities, 10 acres alfalfa, 8 acres clover and timothy, 25 acres tame grass, pastured, 2 acres Kaw bottom in potatoes, 15 acres conr., 5 acres in cane and millet, enough timber for fuel and poets. The above is a very pretty and picturesque place on rural free delivery and telephone; cannot be beat for a home. Also sell the cows and horses, implements, etc. My health will not permit me to farm, the reason for selling. Can give terms on part, equal to or better than rent at 5 per cent. Will give possession as soon as a deal is made. Address R. F. D., care Kansas Farmer, Topeka, Kans.

FOR SALE—In Osborne, Russell, and Rooks Counties, improved farms, pasture lands, two twelve hundred acre ranches, mercantile stocks. Will trade one ranch for good stock hardware and implements. We can please you, write to-day, Otla & Smith, Natoma, Osborne Co. Kans.

200 ACRE WELL IMPROVED FARM for \$3,200, to close an estate. Address Hurley & Jennings, Emporia, Kans.

WANTED TO TRADE—Good Topeka city property for 180 acre or 80 acre farm within 8 miles of Topeka, Osage or Salina. Frank Johnson, 1121 West 3d Street, Topeka, Kans.

FOR SALE—200 acres fine pasture land, 175 acres of it mow land, two miles from Alma, living water that never fails, all fenced. This is a bargain if taken soon. Call on or address Mrs. M. A. Watte, Alma, Kans.

FOR SALE—Good farm and pleasant home, one-half mile from county high-school and city public school, three-fourths of a mile from several churches and stores, 2 grain elevators and stationa. Farm consists of 800 acres, adapted to farming and stock raising, good 9-room house, with water, bathroom and good cellar, ice-house, tool-house, barns and sheds sufficient to hold 40 tons of hay and 150 head of cattle and horses, affaifs, shade and fruit trees. Farm can be devided. Price, \$15 per acre. Call on or address the owner, Box 192. Wakeeney, Kans.

FIFTY farms in Southern Kansas, from \$15 to \$70 per acre; can suit you in grain, stock or fruit farms. I have farms in Oklahoma, Missourt and Arkansas for sale or exchange. If you want city property, I have it. Write me. I can fix you out Wm. Green, P. O. Box 565, Wichita, Kans.

LAND FOR SALE in Western part of the great wheat State. H. V Gilbert, Wallace, Kans.

FARMS FOR SALE—640 acres in a body, 160 level wheat land, 200 creek bottom hay land, irrigated, half of it good alfalfa land, 60 acres alfalfa, ½ mile creek; alf fenced and cross-fenced; 9-room house, 22x28 stable, granery, sheds, corrells; a first-class home; \$25 per acre. 640 acres, fenced, no improvements; 160 of it creek bottom hay land, half of it good alfalfa land, 100 acres level wheat land, balance pasture; one mile of creek; \$4,000. 320 acres, 200 level wheat land, fenced, 180 ready for wheat this fall; \$10 per acre. E. H. Boyer, Meade, Kans., Meade County.

MEXICO Greatest field in the world for profitable investment. Booklets free for the askday. Cecil Rhodes said-read what he said.

Manual Gold and Power Company.

Mapiri Gold and Power Company, Box 107. - Rock Island, Illinois.

## FARM LOANS

Made direct to farmers in Shawnes and adjoining counties at a low rate of interest. Money ready . No delay in closing loan when a good title is fur-nished and security is satisfactory. Please write

DAVIS, WELLCOME & CO., Stormont Bidg., 107 West 6th, Topeka, Ks

AGENTS WANTED.

AGENTS WANTED Sellel bottle Sarsaparilla for 35c; best seller; 200 per cent profit. Write today for terms. F. R. Greene, 115 Lake St., Chicago

#### MISCELLANEOUS.

FREE—Belles Delight is an exquisite preparation for the complexion. It does not cover up, but positively removes in every case, Freckles, Tan. Pimples and Liver Spots. Write us and learn how to obtain a bottle free. Geo. T. Brandon Co., Department N, Bellefontaine, Ohio.

POSITION WANTED by a middle-age man as manager of a ranch; has twenty years experience in this country and six years in two of the State Agricultural Colleges in Sweden. Understand farming and stock-raising thoroughly. Reference. Address J. C. Severin, Hallowell, Kans.

SEA SHELLS from Long Island Sound; 25 assorted for 15 cents. stamps or silver. Alice L. Crampton, Madison, Conn.

HONEY New Crop about July 1. Ask for prices. A. S. PARSON, 403 S 7th Street, Rocky Ford, Colo.

WANTED—Middle aged woman with no incum-brances to do house work in a family of three. R. J. Linscott, Holton, Kans.

FOR SALE—Second-hand engines, all kinds and all prices; also separators for farmers' own use. Address the Geiser Mfg. Co., Kansas City, Mo.

# Stray List

Week Enging July 13.

Montgomery County—Samuel McMurtry, Clerk PONY—Taken up by J. C. Wyrich, in Louisburg tp., June 12, 1905, one sorrel pony mare, blind in left eye, branded on left shoulder and bar X on left hip; valued at \$20.

a train

#### Sunday Excursions.

There are some railroads which do not run Sunday excursions and there are a number which do. If we knew the names of all roads which refuse to run these excursions we would publish them, because they deserve this "honorable mention." Sunday excursions are almost invariably marked by debauchery. Of course the railroads are not responsible for the conduct of their passengars as a rule; but they have some measure of responsibility in this case because they offer and advertise the opportunity for immorality, and they do this knowing what the nature of Sunday excursion crowds is. For the sake of morality and their own good name railroads should cease to give the vicious this opportunity to carouse and to debauch others .- National Stockman and Farmer.

#### Highland Park College.

We have just received from President Longwell of Highland Park College, Des Moines, Iowa, a copy of the commencement program. It is one of the most unique and elaborate souvenir programs we have ever received. The class this year consists of 212 graduates. These graduates come from all parts of the United States and have completed a great variety of courses, among which are the classical course, scientific course, the normal, civil enelectrical engineering, gineering, pharmacy, business, music and ora-

President Longwell writes that the school has been unusually prosperous this year; 1,954 students have been in attendance in the various departments of the college.

We are also in receipt of the annual announcement for the coming year. Highland Park College, undoubtedly is beautifully located and well provided with buildings and equipments and faculties. It is one of the largest, most prosperous colleges or universities in the West. We congratulate President Longwell on the college

management and upon the success of this great institution.

#### Characteristics of Clams.

Persons who have seen soft-shelled clams as they lay in a pan in the kitchen preparatory to being cooked scarcely recognize them in their natural state. Many of us who have seen clams know that they have "necks," but are ignorant of the purpose and characteristics of this attachment. As they lie on the ground they are far from close-mouthed. In fact, they are seldom seen with the shell closed. From one end projects the "neck," which may be three times as long as the shell when fully extended. This fact, in case the "neck" is stretched out, makes one wonder how such a length can be contracted into so small a space and how much remains in the shell after the "neck" has been elongated. This is the astonishing characteristic of the soft-shell clam, and the one which makes him unrecognizable to so many people. One of the claims, for instance, is three inches long. His "neck" when extended is possibly eight or nine inches long and as large around as a man's middle fin-

As every one knows, the clam, when in his native haunts, is to be found several inches below the surface in the sand. He has to be dug up, when discovered by the little spurts of water which the clam beneath throws up when disturbed.

The "neck" connects the clam with his food supply in the water above. In it are parallel tubes. Through one tube the clam sucks in a quantity of water. From the water he absorbs whatever nourishment it may contain, and then expels the water through the other tube.

One may wonder how the clam gets into the sand or mud. At the end opposite the "neck" may be seen an appendage resembling a turtle's tail in shape and called a foot. It is with this foot that he digs his way downward,-Exchange.

"Ohio" Monarch Self-Feed Blower Ensilage Cutters.

The Monarch Ensilage Cutter, which is manufactured by The Silver Manufacturing Company, Salem, O., is similar to other types of ensilage cutters manufactured by the second statement of the second st factured by them, yet in many respects it is made on greatly improved lines. The feed throat is as wide as the knife

cylinder is long, 17 inches, and the feed rolls open a third higher, 4 inches, which makes large throat and as the cutter is a self-feed machine, it feeds the corn through as rapidly as it can be gotten to

The knife cylinder is 2 inches larger diameter, 11 inches, which provides ample clearance for the cut corn to pass through it.

The conveyor under the cylinder aided by the suction of air carries the cut corn immediately into the fan case, which car-

immediately into the fan case, which carries it into the silo.

The self feed on the "Ohio" Ensilage Cutter is very valuable, as it feeds the corn through the machine with little or no effort from the feeder and it also increases the capacity materially on account of the steady power feed.

This machine is made strong throughout, the knife heads being made on particularly good lines and thus delays on account of breakage are reduced to a minimum. Experiment and practical experience have demonstrated that it does not require as much power to drive these machines as had been figured, hence, the power now scheduled, 8 to 12-horse for the three sizes, Nos. 14, 17 and 19, comes within the range of engines used for other work on the farm and is ample to drive these sizes up to capacity.

All machines made by this company are put out under a broad guarantee that they will do the work for which tney are recommended.

The new catalogue illustrates and minutely describes all of the feed and ensilage cutters manufactured by them and also shows a selected lot of silos which are being filled by the "Ohio" Ensilage Cutters, with letters from users, commenting upon the merits of the machines, appended thereto. This catalogue will be sent free to any address upon request.

They also publish a valuable book, entitled "Modern Silage Methods," which treats this interesting subject thoroughly from planting the seed, harvesting the crop, building the silo, and the results of feeding silage in comparison with other foods and is sold at a minimum price of ten cents.

Dairymen have been feeding ensilage in

Darymen have been feeding ensilage in this country for the past twenty years and have conclusively proven that they can produce more milk at a lower cost with this food than by any other known foods.

Foods.

Experiment stations and certain producers of beef cattle have demonstrated that they can winter their stock more cheaply by silage, a small grain ration and clover hay and can produce 40 per cent more beef by this means than by other foods. Not only this, but the stock comes out in better condition in the spring than when fed on grain and other dry foods.

In conclusion, "Ohio" Monarch Cutters will cut more corn into ½-inch lengths and elevate it into the silo with a given amount of power than other machines.

The manufacturers invite correspond-

The manufacturers invite correspondence.



Bales Sell Better.

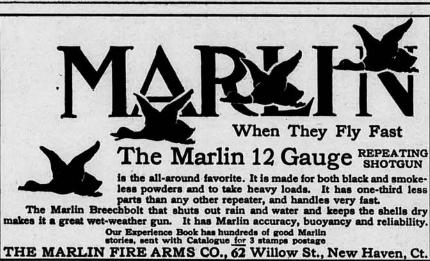
Admiral three-stroke self-feed hay press is the best I have ever used. I have worked ifferent kinds, but the Admiral beats them all for light draft and fast work. The self-easy working, the bales are smooth and even and tfley sell better on the market than any e.

GEO. O. GIPE, Perry, Ok.

WRITE TO-DAY FOR PRICES AND CATALOGUE.

Admiral Hay Press Co., Box 25, Kansas City, Mo.









The Only Machine Made ThatWill Successfully Head and Elevate Kaffir Corn Write for Prices and Agency and Mention The Kansas Farmer EAGLE MFG. CO., Kansas City, Mo., and Dallas, Texas.

THE "PERECTION" Cleaner, Separator and Grader of Seeds and Gr Grader of Seeds and Grain

You Can Sow 20% Less of Seed And Can Reap 20%

More of Grain

It is useless to plant foul and undeveloped seeds or grains. The prosperous farmer plants only the best of seed and saves the small undeveloped grain for his chicken feed. Bilong to that class and clean, separate and grade your seed to sow and grain to sell on a "Perfection." Because: It is the only machine that will make three grades and will separate: Wheat from rye, wheat from oats, wheat from barley, wheat from cheat, wheat from cockle, wheat from mustard, weeds from alfalfa, barley from rye, barley from oats, barley from cheat, oats from rye, oats from dock, buckwheat from dock, flax from all grain, clover from millet, clover from mustard, clover from throothy, clover from red top, clover from blue grass, ripple from clover, pigeon grass from clover, all buckhorn from the first grade of clover, alfalfa, millet, etc. And because: The grain which was awarded first prize at the St. Louis Exposition was cleaned and graded by a "Perfection." Manufactured by

LEWIS-TUTTLE MFG. CO., Topoka, Kans Write Us for Farther Information.

#### INTERNATIONAL SUNDAY-SCHOOL LESSON.

(Copyright, Davis W. Clark.) Third Quarter, Lesson V. 2 Chronicles 33:1-13. July 30, 1905.

#### Manasseh's Sin and Repentance,

If the son had reigned like the father Jewish history would have to be rewritten. Hezekiah blended piety and patriotism. He threw the exemplary power incident to high position entirely on the side of a pure faith. He did more; he broke down and swept away the symbols and shrines of a base and corrupt religion. He did not waver from this high stand during a reign which extended over nearly a third of a century.

Instead of perpetuating this admirable policy, Manasseh reversed it. He went through the whole catalogue of pagan vices. He was not content to go through it alone; he led his people and forced those who were unwilling. From augury and sorcery he went on to human sacrifice. He did not hesitate to throw his own children into the flery embrace of Moloch. The chronicler says he caused the people to do worse than the heathen. These perverts rivaled and surpassed those who had been born and reared in their dark faith. Theirs was the greater condemnation, for they sinned against light; and when God spoke to them in terms of warning and entreaty they would not hear Him, but were defiant.

The depths of this apostasy can scarcely be fathomed. Cults never practiced on Jewish soil were now introduced. Putrid streams of lasciviouswas reached when what was perhaps a phallic emblem was set up within the very courts of the temple of the God who had said to His people, Be ye holy, for I am holy. The bitterness of it was that the worst king of Judah reigned the longest. He had more than half a century in which to unmake his nation. A complete recovery was never made from this dreadful lapse.

Persecution naturally attended this apostasy. Tongues were raised in protest. There were knees that would not bend. Even royal patronage of idolatry was without weight with some pious souls. Manasseh made a short shift of such. He hurled the recalcitrant nobles from the cliffs, filled Jerusalem with innocent blood, and introduced a Jewish reign of terror.

But it is a long lane that has no turning. Mannasseh was warned before he was struck; but he was insolent and defiant. He sinned against light and grace; and he was obstinate and inveterate in his sin. The turn was sharp when it came. The haughty king was brought to the dust. Under the barbaric customs of the day, a heavy double chain, bound hand and foot, and with a ring through his nose, he was led captive to Babylon.

The glory of divine justice is, that its penalties are not inflicted as matter of vengeance, but are intended to be reformatory as well as exemplary. The moment the exiled and suffering king came to himself, the God of his fathers heard his supplication and restored him to his country and to his throne.

#### The Teacher's Lantern.

Heathenism smoldered during Hezekiah's reign. Only a spark of it remained at his death. Manasseh might have quenched it forever. Instead, he fanned and fed it.

For nations as well as individuals ascent is always difficult. Descent is easy. Moral heights are reached by the pains of self-denial. They are held by continuous watchfulness.

There is a moral gravitation which accelerates the descent of man or nation which turns to the nether way. Power of resistance diminishes.

These conditions call for a moral garnestness on the part of both natamper with or allow the beginnings

The caumpary power of the divine

clemency in the case of Manasseh can hardly be estimated. In a brutal and unforgiving age, when the conqueror delighted in torturing his prisoners to death inch by inch, the Lord set His prisoner free the moment he was genuinely penitent. His punishment was reformatory, not vindictive.

But Manasseh's past could not be effaced. He could no more stop the course of evil example of half a century, than he could call back the sons he had devoted to Moloch. Sin is a fire that leaves its scar.

History affords many parallels to the lapse under Manasseh. Witness the English Restoration after the Commonwealth, and the Florentine reaction after Savonarola.

#### The Beterinarian

Mare Having Bots.—I have a valuable mare that is troubled with bots. She is now suckling a colt and is supposed to be with foal. Can this mare be cured from bots without injury to C. F. M. colt?

Girard, Kan.

Answer.-We send out medicine direct from the Veterinary Department of the Kansas State Agricultural College which is much more satisfactory than prescribing. We can send you treatment for the mare which I-think will not injure the colt.

Mare With Bruised Leg.-My white 10-year-old mare got her hind leg in the doubletrees of a harrow about five weeks ago and bruised it at the pastern joint. It swelled up until it has double the diameter of a natural leg from the crown of the hoof to the hock. She also has a small wound about the size of a dime about five inches above the small pastern joint and on the outside, but I think it is no more than a skin wound. For a while we treated it by smearing it with fresh cow dung, and recently we used a 50-cent bottle of Dr. Kay's Kentucky Liniment, but without any visible relief. The leg has never seemed to have much fever, but seems to be getting harder. She also holds her leg up when standing but can bear part of her weight when walking. What can be done for her? Anness, Kans.

Answer.-You had better wash the wound twice daily with any good disinfectant you may have at hand. To the inflamed leg apply the following liniment: 6 oz. Tincture of Arnica, 4 oz. Tincture of Camphor, 4 oz. tincture of Belladonna. Mix, and shake well before using. Use on enlarged leg with considerable rubbing, three times

In Regard to Alkali Water.—Should alkali water be used for stock, or is it injurious. W. H. T.

Emporia, Kans.

Answer.—Alkali water is injurious to stock.

Alling Horse.—My large sorrel horse 9 years old has a cough, breathes somewhat hard and at time has running at the nose.

Larned, Kans.

Answer.—Your horse evidently has a hard cold. I would advise poulticing the throat with linseen meal or bran and then steaming the nose with hot water to which has been added 4 ounces of creolin to a bucket of water. Attach a sack to the horse's nose, the other end of the sack being tied over the pail, in this way conducting fumes from the creolin to the horse's nose.

Mark the place of our poor prayers-it is the mediating place between need and supply. Surely the Lord knew that the harvest was plenteous, that the laborers were few. Yet the plain implication is that more laborers would not enter the harvest without human prayers. I can not understand this. It seems to be, however, the constant Scriptural teaching as to the high place our prayers really hold. -Wayland Hoyt,

# To the Lakes of Wisconsin and Michigan

There are hundreds of ideal lake resorts in Wisconsin and Michigan easily and quickly reached from Kansas City by the

# Chicago, Milwaukee & St. Paul Railway

Books descriptive of these resorts, with rates for railroad tickets and board, mailed free to those interested.

The best train to summer resorts. East and North, is The Southwest Limited. Leaves Kansas City, Union Station, 5.55 p. m., Grand Avenue Station, 6:07 p. m. Arrives Chicago, Union Station, 8,20 a. m. the next day. Connections in Union Station. Chicago, with trains to principal lake re-

G. L. COBB,

Southwestern Passenger Agent,

907 Main Street.

Kansas City, Mo.



# PARADISE FOR THE HOMESEEKER

# ANSAS

Best Agricultural and Stock Raising Region Soil deep, rich and productive in the growing of Wheat, Corn and Alfalfa. Purchase price from \$5 to \$30 per acre, which equals the returns of the \$50 to \$150 per acre lands of other States.

# CLIMATE IDEAL, AMPLE RAINFALL.

# LOW SETTLERS' RATES.

M. C. TOWNSEND, General Passenger and Ticket Agent, ST. LOUIS, MO.



To California, Oregon, Washington, and Points East this Summer.

Homeseekers rates to points in Arizona, Colorado, New Mexico, Texas, lindian Territory and Oklahoma, on 1st and 3rd Tuesdays of each month.

STEAMSHIP TICKETS To and from all parts of the world. Lowest rates and best lines represented.

T. L. KING.

C. P. Q. T. A.

TOPEKA, KAN.

#### **DUROC-JERSEYS.**

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

COUNTY SEAT HERD DUROC-JERSEY SWINE Geo. Briggs & Son, Clay Center, Neb, Young stock for sale.

DUROC-JERSEYS - Large-boned and long-bodied kind. A fine lot of bred gilts for sale. E. S. COWEE, R. F. D. 2, Scranton, wans.

Duroc-Jerseys

J. U. Howe,
Wichita, Kansas
Farm two miles west of
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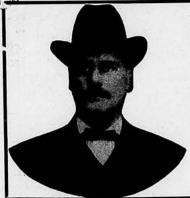
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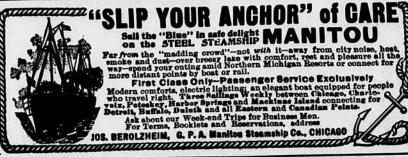
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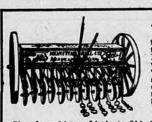
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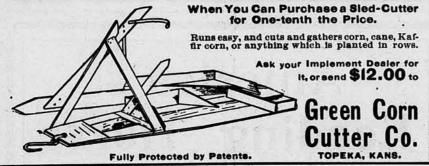


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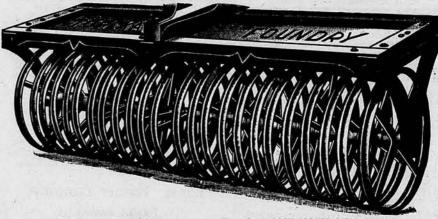
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