

# KANSAS FARMER

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## BREEDERS' DIRECTORY.

Cards will be inserted in the Breeders' Directory as follows: Four line card one year, \$16.00; six lines, \$23.00; ten lines, \$30.00; each additional line \$3.00. A copy of the paper will be sent to the advertiser during the continuance of the card.

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

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## Breeder of Registered Shorthorns,

## COUNCIL GROVE, KANSAS.

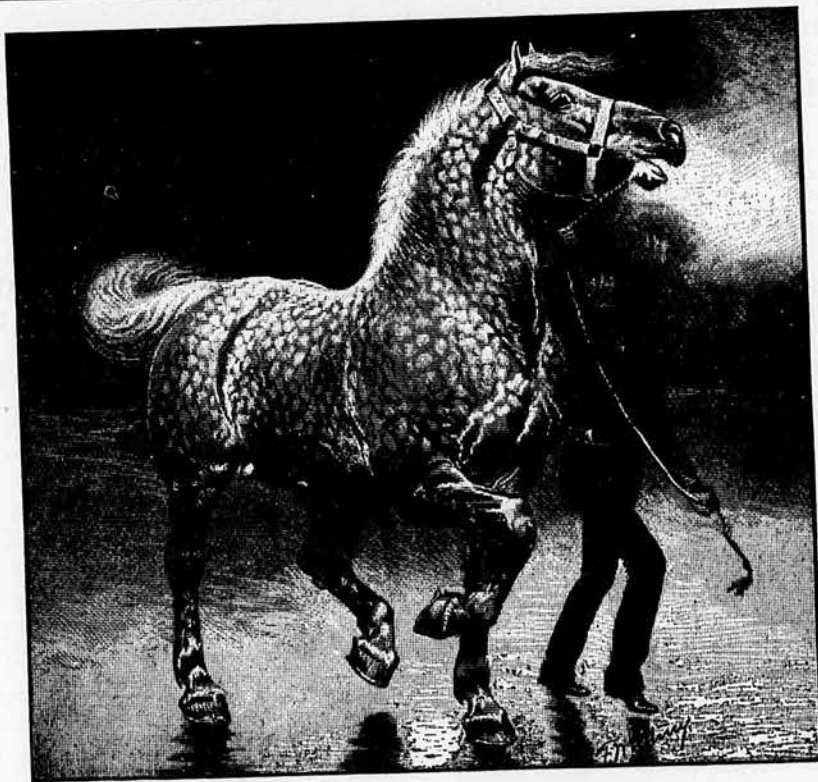
Imp. British Lion 133692 and Imp. Lord Lieutenant 120019 in service. Sixty breeding cows in herd. Lord Lieutenant sired the second prize yearling bull at Texas State Fair, 1898, that also headed the second prize herd of bull and four females, any age, and first prize young herd of bull and four females.

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O. L. THISLER, Chapman, Kas.



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

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

## THOROUGHbred BUFF COCHINS

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

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## REGISTERED POLAND-CHINA SWINE

For sale, King Perfection 4th 18744 S. and Lambing Ideal 14050 S. Also sows bred to above boars or Dandy U. S. by Frazur's U. S. by Frazur's Black U. S., dam Black Beauty by Ben Harrison, sire Charley F., brother to Look Me Over. Write for particulars. Address either W. E. JOHNSON, Colony, Kas. E. A. BRICKER, Westphalia, Kas.

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

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

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## F. L. and C. E. OARD, Proprietors,

## HEDGEWOOD HERD OF POLAND-CHINAS

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For sale, King Perfection 4th 18744 S. and Lambing Ideal 14050 S. Also sows bred to above boars or Dandy U. S. by Frazur's U. S. by Frazur's Black U. S., dam Black Beauty by Ben Harrison, sire Charley F., brother to Look Me Over. Write for particulars. Address either W. E. JOHNSON, Colony, Kas. E. A. BRICKER, Westphalia, Kas.

### Agricultural Matters.

#### INDIAN CORN.

The American Maize [corn] Propaganda is preparing to bring before the world at the coming Paris Exposition the merits of the great American cereal. The purpose is to attract universal attention to the value of corn as a food for mankind and thus to widen the markets and, it is assumed, increase the price of corn to the farmer. The secretary of the Propaganda has collated statements of importance on several aspects of the corn question, as follows:

Yield of certain crops in the five greatest producing countries of the world, in 1896, in bushels:

Country	United States	Russia	Germany	France	Austria-Hungary
Wheat	427,684,000	440,148,000	106,140,000	337,823,000	204,701,000
Maize	2,283,875,000	13,543,000	570,300,000	1,190,000,000	156,000,000
Oats	707,346,000	640,300,000	301,150,000	1,190,000,000	186,300,000
Rye	34,389,000	719,143,000	351,423,000	85,714,000	136,000,000
Barley	69,685,000	167,516,000	119,654,000	49,512,000	109,752,000

Total Corn Crop and Amount of it Exported (in bushels:)

Year	Crop	Exports	Left for home use	Average price
1890	1,490,000,000	32,000,000	1,458,000,000	\$0.51
1891	2,060,000,000	77,000,000	1,983,000,000	.41
1892	1,628,000,000	47,000,000	1,581,000,000	.39
1893	1,619,000,000	66,000,000	1,553,000,000	.37
1894	1,213,000,000	29,000,000	1,184,000,000	.46
Av.	1,602,000,000	50,000,000	1,552,000,000	\$.42
1895	2,151,000,000	101,000,000	2,050,000,000	.35
1896	2,284,000,000	179,000,000	2,105,000,000	.32
1897	1,902,000,000	212,000,000	1,690,000,000	.26
Av.	2,112,000,000	164,000,000	1,948,000,000	.24

Note that in years when the average quantity left for home requirements was only 1,500,000,000 bushels the average farm value of the corn was 42 cents, while when the amount thus left over was nearly 2,000,000,000 bushels, the farm price was only 24 cents. To make corn-growing again profitable we must either have more foreign markets or else grow less corn.

#### EXPORTS OF CORN MEAL FROM UNITED STATES.

Prior to the last three years the bulk of our corn meal exports were to Canada and the West Indies. Now half that we sell goes to Europe; the limited work done under Secretary Rusk to introduce it as food in United Kingdom, Denmark and Germany is bearing fruit. The exports to these three countries, and the total export since 1890 has been as follows (in barrels).

Year	United Kingdom	Denmark	Germany	Grand Total
1890	14,041	.....	.....	361,243
1891	19,990	.....	.....	2,318,329
1892	50,027	53	320	287,602
1893	38,984	.....	137	271,155
1894	35,648	86	183	291,172
1895	59,545	.....	2,128	223,597
1896	58,846	2,840	7	276,885
1897	215,240	3,880	8,632	475,293
*1898	.....	.....	.....	827,651

\*1898 not yet available in detail.

Note that in past two years the whole increase in our total exports has been to these countries.

#### EXAMPLES OF INTRODUCTION OF NEW FOOD.

Prior to the Civil war oatmeal, important as a food in Scotland, was unknown in this country. During the war it was used for gruel for convalescents, and its first sale was in drug stores on physicians' prescription. From that beginning, when all used was imported, it has become a staple food, and it is now not only used on every table but we manufacture it for the world and last year exported it to the value of \$1,750,000.

Potatoes were introduced into England three hundred years ago, but it is only

within the last one hundred years that they have been used in Ireland, where they are now the staple food.

Within the memory of persons now living tomatoes were grown as ornamental plants and their food use unknown.

Tea and coffee have been introduced over the world, and Japan is now spending \$400,000 in advertising the superiority of her teas.

#### CORN AS FOOD, FROM THE SCIENTIFIC STANDPOINT.

Prof. E. Davenport, professor of agriculture, University of Illinois, says: "We are often told that corn flour is deficient in protein, and that the consumer must increase his ration or else suffer for nitrogen with which to repair his body. As a matter of fact, there is but slight difference in the amount of nitrogen as between wheat and corn, and from the best calculations that can be made it would seem that a diet of clear corn furnishes something like twice the amount of digestible nitrogen that the body actually makes use of. The difference between the protein of wheat and that of corn is more of character than of amount. Wheat is not the one standard food that God made purposely according to a definite formula as food for his people. It is one of the best food grains and corn is another. Rice is another, and though it contains less than half the protein of corn, it has proved an acceptable food to many races."

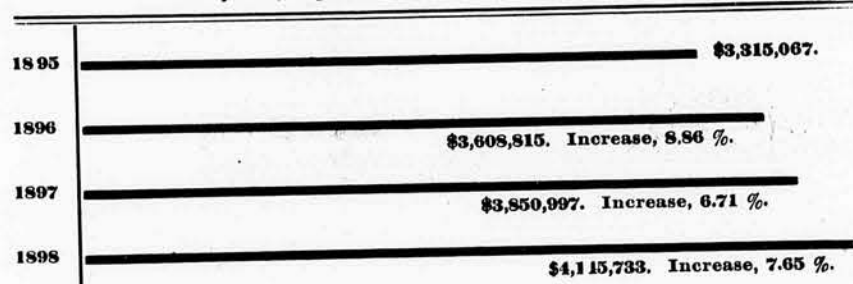
#### RANK OF UNITED STATES IN WORLD CROPS OF CORN AND WHEAT.

The following statement, from official sources, shows the percentage of the wheat crop and of the corn crop of the world grown in the United States:

	Wheat, bushels	Corn, bushels
The world	2,500,000,000	2,400,000,000
United States	500,000,000	2,000,000,000
Per cent. grown in United States	20	83

### THE HELPFUL HEN IN KANSAS.

Diagram showing the comparative home values of poultry and eggs sold annually for four years, beginning with 1895 and ending with 1898.



J. C. Coburn  
Secretary State Board of Agriculture.

Farmers of Russia, Argentine and India share in any advance in price of wheat. Increased food use and consequent advance in price of corn inures almost entirely to our benefit alone.

#### EFFECT OF COST UPON CONSUMPTION.

Europe grows more rye than wheat. Rye is the staple bread grain of the masses because of its relative cheapness.

The new milling processes, which remove the germ of the corn and then reduce the balance of the grain to a flour equally as finely granulated as wheat flour, makes it possible to blend corn with the other cereals in making bread. With the old style of corn meal this could not be successfully done. To-day, bakers in Chicago, Decatur and Rockford, Ill., Cleveland, Ohio, and other places are turning out a superior article of bread of which corn flour constitutes from 20 to 33 1/2 per cent. This bread is sold as cereal bread, in loaves the ordinary size, at a price considerably below the price of straight wheat bread. In Chicago full-sized loaves are retailed at 2 for 5 cents, against 4 and 5 cents for the wheat loaf.

When the European consumer is taught that he can get a palatable white bread at less than the cost of his rye loaf a larger consumption both of corn and wheat flour will follow.

#### WHAT AN ADVANCE IN CORN MEANS.

On our present acreage a normal corn crop means at least 2,000,000,000 bushels. An advance of 1 cent a bushel means \$20,000,000 a year added to the income of American corn growers. On the basis of the crop of 1897, 1 cent a bushel means an increase in the earning capacity of the corn lands of the surplus States, as follows:

Ohio	\$ 921,000
Indiana	1,098,000
Illinois	2,329,000
Iowa	2,220,000
Missouri	1,719,000
Kansas	1,624,000
Nebraska	2,413,000

#### FOREIGN TESTIMONY.

The German farmers are said to be "objecting" to the proposed American Corn Kitchen at the Paris Exposition, on the ground that if the common people of Germany find out what a wholesome and cheap food corn is they will eat less German rye.—American Elevator and Grain Trade, January 15, 1899.

#### WHAT A PENNY WILL DO.

Why should there be starvation or hunger in the world when 1 cent will buy more of a palatable and healthful food than the hungriest man can eat at one meal. A bushel of white corn can be laid down in Europe for 50 cents. With a little ashes, an iron kettle and a fire it will make 100 quarts of lye hominy. The cost per quart of this food would be less than 1 cent, and it is palatable and nutritious with no other condiments than a little salt.

#### THE CORN PROPAGANDA.

The corn-growing States of the West would be justified in lending a helping hand to this enterprise. The exhibit at Paris, in order to be effective, must be thorough. It will not do to merely tack up ears of corn for the people to look at. They must be appealed to in another way besides. Europe needs to be convinced that corn is a healthful and cheap food for human beings.—Sioux City Tribune.

#### OPENINGS IN THE ORIENT.

Changing conditions in China are opening up the way for a vast export trade in cheap breadstuffs with that vast country. The following extract from a letter dated December 19, 1898, from Rev. Hunter Corbett, head of the Presbyterian Mission at Chefoo, China, points out the present opportunity in that province which has a population of 30,000,000 people.

"The eastern portion of the Shantung province has for many years de-

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

**ELECTRIC Steel Wheels**

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

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like clover, puts none back, and an acre of the best timothy is not any superior to an acre of corn stover, and one can have the shelled corn left to pay a handsome profit for the labor of raising it. If on a 160-acre farm there are 80 acres in pasture and 80 acres under tillage, there should be 20 acres of clover raised each year, and I greatly prefer the mammoth variety; but 20 acres of clover cut once, say 40 to 50 tons of hay, will not be enough roughness for all the stock that 80 acres will pasture, and now we come to the key-note of these articles, and that is, "The economy of cutting corn and feeding the fodder," and the best methods employed in handling it. Every farmer who has fed corn fodder knows what a valuable feed it is, and it is a great shame the farmer will simply pick off the ear and allow the rest to go to waste, for pasturing a stalk field is very poor feed as compared to well-prepared corn fodder. In Kansas, and this year especially, the ground is greatly injured by the tramping of stock, and the winds have blown away to the nearest hedge all the fodder but the bleached husks, and to send the cattle out in the bleak, cold wind to feed on husks is not economy in feeding, but the well-cured fodder should be fed in a suitable way where the stock is sheltered from the icy blast of zero weather. It is a fact that the farmer who allows any of his stock to glean in his plowed fields does himself a greater injury than the stock receives benefit from the bleached husks, as in cold weather the exposure offsets any good derived, and when the ground is soft the small clods made by the cattle's feet will be turned under to the bottom of the furrows when the land is again plowed, and will prove a great bane to the root growth of the next crop, as roots will not thrive near a clod and the air spaces that always accompany them.

We all know how well all kinds of stock love the green corn stalk, also how they will eat up silage, yet all authorities agree ensilage should never be cut until the corn is just right to be cut up and put in the shock. Now well-cured corn fodder end ensilage taken from the same field at the same time differ only in the fact that one is sun-cured and the other is the same as canned goods are to us. Of course, the canned goods, or corn silage, is the most palatable in winter, yet the chemical analysis shows that 100 pounds of well-cured corn fodder contains fuel value to the amount of 71,554 calories, while 100 pounds of corn silage contains only about one-third as much, or 25,714 calories. Of course, the shrink of dry corn fodder as compared with corn silage is great, yet it is not so great as 1 to 3, but is really as follows: Corn fodder contains 57 per cent of dry matter, while corn silage has only 20 per cent. Now, as silage is well known to be a good winter feed, why should not corn fodder be of equal value if it contains all the benefits of silage, provided the corn fodder is placed before the stock in as palatable a condition? The great question is, how to handle corn fodder easily and to feed it economically. The experiments that have thus far been reported by experiment stations of different States quite generally agree in making the observed losses in preserving and feeding corn silage and corn fodder very nearly equal, and the results as summarized in the station report of Pennsylvania for 1890 are as follows:

Twelve trials. Corn silage.	Corn fodder.
Greatest loss. 37.63 per cent.	36.61 per cent.
Average loss. 20.36 per cent.	19.87 per cent.

Now, the average cost of handling an acre of ensilage is \$7.20 to put it in the silo, and the cost of feeding it from the silo is fully as great as that of feeding threshed corn stover. In filling the silo, outside help must be employed, while, if the corn is cut and shocked by machine, no outside labor is needed to put the entire corn crop of a farm in the shock. There is made in Iowa a ma-

chine that, with three horses and one man, cuts, sets up, and ties a shock of corn, two rows at a time, and it is claimed that an acre is put in the shock in an hour. I am not acquainted with this machine but wish to point out the possible. CLARANCE J. NORTON.  
Marantown, Kans.

(To be continued.)

#### Cane for Poor Land.

Editor Kansas Farmer:—In reply to my question, in Farmer of December 29, you said that older farmers should give their opinion of treatment for poor land, but none seem to have experimented along this line, or they would rather keep such knowledge as they have for their own benefit. You said that cane plowed under green would add quickly to the quantity of vegetable mold in the soil if it shall decay rapidly enough to become thoroughly incorporated by the time the next crop is to use the soil. Would you, or some one else that has had experience in this line, be kind enough to tell me and others how long you would let cane grow before turning it under green to get the most value from it for the next crop? In other words, if turned under the latter part of next July, and the ground harrowed good, would it be in good condition for wheat by the 15th of September, or would it be of more value to let it grow till fall and turn it under for corn the next spring? Now, farmers, I am a young farmer without much experience to give, and am not much of a writer, but the publishers of the Kansas Farmer seem to be willing to aid us in giving advice to one another through these pages, as much as our experience will permit, so let us take more interest in helping one another in this way, and not expect the editor to give all the advice. Has the

these extra good cows and dairying experiments. One gentleman who feeds pretty stiffly and is troubled with his cows' udders, should, a month or so before their calving, reduce their rich diet to a plainer one and supplement bran with rather poor roughness, such as straw or ordinary prairie hay, something that will keep them just as they are, or a little off if possible, so they do not gain in condition, and use a little saltpeter now and then with some salt in their bran, and for their first feed after calving give a warm bran mash with a small lump of saltpeter dissolved in it. Don't be in too big a hurry to get her on full feed for a week or two. Also rub her udder with lard and turpentine pretty often just before and after calving. A good plan, also, is to let that "wobbly calf" suck and pinch around for a week or so. Its pinching will help knead and soften up the udder. Of course, the cow must be thoroughly milked. I have found lard and turpentine to be very useful amongst ewes, as well as cows, when any inflammation or garget in the udder is threatened, together with a big dose of physic; for with garget and milk fever it is often that this big dose of physic is the means of fetching them around, and preventing a kind of kill or cure business when let run too long.

Dairying with a dual-purpose cow is and always has been, in my opinion, the correct thing, and the animal that has always been my favorite is the Shorthorn. I have seen and used to know something of Shorthorns. The finest and best-handled herd of milk cows I ever saw were pure-bred Shorthorns, big cows and fat, always ready for the butcher as soon as their milk fell below such a quantity. I consider they will fat as well and easily as a Hereford or any other beef breed, which breeds are poor milk-

muskmelon. Be sure and include it in your order. Packet 5 cents, ounce 10 cents, one-fourth pound 30 cents, one pound \$1.

For further information write F. Barteldes & Co., Kansas Seed House, Lawrence, Kans.

#### Saving Kaffir Corn.

Editor Kansas Farmer:—I was interested in the article on "Heading and Threshing Kaffir Corn," by Albert Rogler, having threshed 15,000 bushels this fall, which yielded from 20 to 62½ bushels per acre. The best way to head is by hand; the next best way and the cheapest except by hand, is a one-row header made only when ordered, at Stafford, Kans. It threshes best when headed out of the shock, as there is more or less foliage with it. As far as cracking by the thrasher is concerned, take out teeth until it does not crack. For myself, it does not crack enough. It would make better feed if it were all cracked. The best results I have seen were when the grain was headed and the stock turned into the fields. They eat the fodder all up but the stubs. Where I fed the fodder the stock ate the leaves, tramped the stalks underfoot, and wasted more than they ate. R. W. WALLACE.  
Byron, Okla.

#### Heading and Threshing Kaffir Corn.

Editor Kansas Farmer:—Under the above heading, in the Farmer of January 26, Mr. Albert Rogler makes some very good suggestions, but, in addition to his, I want to add one more. When we head Kaffir corn with the Elkhart header, or any other header, the work is only half done, as the stalks—those not broken down by being run over—are still standing, and in order to save them for feed

food. If we crop the soil in such a way that we interfere with these processes, or exhaust the available plant food, we rob it of its fertility. All animal life, therefore the life of man, depends on the soil. We should devise a system of tillage such as would build up its richness.

Mr. Westgate, in a brief discussion, showed the intimate relation which exists between plant life and insect life. Most flowering plants require the presence of insects to insure the fertility of the seeds, and many insects depend wholly upon the nectar of the flowers for their food.

The subject of farmers' institutes was reviewed by Mr. Otis. They have been of great value where rightly conducted. The college furnishes one or two speakers and the printed programs free of charge and the community must work up the rest. The institute brings the farmers together, where they interchange ideas, and many interesting and instructive facts are brought to light. A large number of institutes have been held during the past year, and, as an example of the good accomplished, the speaker told of a neighborhood where a dairy institute was held, and how, through the influence of the facts brought to light, there was a great impetus given to alfalfa-growing in that section.

#### About Hedge Fences.

Editor Kansas Farmer:—In the Farmer of January 19, Mr. Dan Kershner, of Scandia, takes exception to Mr. Shinn's paper in regard to hedges. In the first place, conditions are vastly different in Franklin and Republic counties, but, nevertheless, the time will come when the farmers of Republic County, as well as in the eastern portion of the State, will have a change of heart on the hedge question. Certainly, plant trees, and Osage orange, or "sodcock," too, but plant them in a body on one portion of the farm, where they will grow tall and straight, and in a few years you will have a large amount of the best post timber in the world.

Hedge fences are expensive if taken care of properly, and are very unsatisfactory for fencing against all kinds of stock. I believe I am safe in saying that not one farmer in fifty in Allen County depends on this kind of a fence to turn hogs, and we are beginning to think that a fence that will not turn hogs isn't half a fence. I have had a great deal of experience with hedges, as a user and in erecting fences for others who have been removing their hedges. Have erected 7 miles of 2-bar 58-inch Page for Eli Neff, of Middletown, Wilson County, and nearly all of it replaces hedges. After a third of a century's use this is his verdict, and is certainly entitled to consideration.

Near Humboldt, in Allen County, Mr. R. M. Work is doing the same as Mr. Neff, and has removed several miles of hedge. He cuts off side limbs and packs up close and then burns in August, which almost entirely destroys the hedge.

Farmers in this portion of Kansas are beginning to realize that to grow hogs cheaply and successfully they must have large range, and if the entire farm is properly fenced there is great advantage many times in allowing swine to run in fields where grains have been harvested. J. W. HAMM.  
Humboldt, Kans.

#### Shawnee Fire Insurance Company.

It seems strange that with the vast amount of fire insurance business in Kansas there is only one first-class company in the State, with a paid up capital amounting to \$100,000, and that company, the Shawnee, has paid losses up to the close of last year amounting to \$493,266.63.

In their annual statement to the insurance department for the year ending December 31, 1898, their total assets amounted to \$288,867.58, an increase in their assets over previous year of \$45,526.

Ex-Superintendent of Insurance, Geo. T. Anthony, said: "The Shawnee Fire Insurance Company is as good and reliable as any company doing business in Kansas or elsewhere. Its management includes as many strong capitalists and business men as could be found in the same number in all the State."

The present insurance commissioner, Hon. Webb McNall, says: "I can also say that upon an investigation of your assets at your home office that I found your securities gilt-edge and of the value placed upon them by your officers."

There is no company doing business in the State that does as much in Kansas as the Shawnee. Any of our readers that are interested in insurance are cordially invited to call upon any of the local agents of the company, or address the secretary, J. W. Going, Topeka, Kans.



ROCKY FORD MUSKMELON OR CANTALOUPE.

Kansas Experiment Station ever experimented any on this line?

What are the names of corn and wheat that the experiment station folks think would do best for southern Kansas? Some claim yellow corn will yield more, but I have been raising a white sort. I do not know the name, for it has been grown in this county for, lo, these many years, and it seems to yield about as much as any that I have seen grow here, although it does not average nearly as well as Mr. J. A. Baxter and others tell about in the Farmer. I bought wheat seed called the Red Fultz, but it does not seem to yield very largely.

Moline, Kans. JOHN GILMAN.

#### Answers from Experience.

Editor Kansas Farmer:—I herewith send you a few suggestions, practical, applicable, or otherwise. One person writes for any information regarding salt as a manure. In my experience, as much as 100 or 200 pounds sown broadcast per acre on any tough, rank or sour grass will induce stock to eat it off and render it as good pasturage as the other. It has also been customary to sow some on asparagus beds. On garden walks and carriage drives, a light application hinders the weeds for a while, but sometimes afterwards stimulates them. It is dangerous to sow too heavily, owing to the proximity of other plants, shrubs, etc.

Another writes concerning straw for cattle feed. Nice, bright, chaffy straw makes good feed for cattle to fill up on and spend their spare time picking over. What they waste makes good bedding. A little salt tossed over it once in a while will induce them to eat it closer. In my opinion the straw will make a more substantial and palatable feed for cattle than prairie hay, that is, for common roughage. It is valuable as wind-breaks. Oat straw is away better and richer than any other.

It is also interesting reading regarding

ers, whereas the Shorthorn steer makes good and early-maturing beef, and the cow is useful as a dairy animal as well as a breeder. ED A. LORD.  
Kingman, Kans.

#### Rocky Ford Muskmelon or Cantaloupe.

The Rocky Ford muskmelon is a new and most valuable introduction, and has attained in an incredibly short time a national reputation. It is of the Netted Gem type, oval in shape, averaging from four and one-half to five inches in length, of a delicious flavor, very fine and smooth grained flesh, of a light green color throughout when ripe, and is the most attractive and popular cantaloupe ever before placed on the market. This variety derives its name from the district in which it has been for the past two years so extensively grown, Rocky Ford, Colorado, and from which point these melons are shipped in their season by the car load to nearly every station in the United States, till the name Rocky Ford has become a synonym for excellence in cantaloupes. Few hotels remain whose tables are not supplied with this toothsome dainty, and for a breakfast delicacy this luscious little melon is without a rival. Its aroma is delightful, and no bill of fare is complete without it in the melon season. In productiveness it equals any of the older sorts, making up in quality and number of melons for whatever it may lack in size. Recent experiments have determined its perfect adaptability to many counties in Kansas, and the up-to-date grower of melons for the market has a field already opened to him by the enterprise of the Rocky Ford growers for this superior variety. The seed we offer is of our own growing at Rocky Ford, Colorado, and can be relied on for both purity and vitality. The accompanying cut, made from a photograph of melons grown by us, will show the true type of the genuine Rocky Ford

the ground must all be gone over again. Now, why not cut up your Kaffir corn with some kind of a corn harvester, or sled cutter, or binder, and, at the proper time, run it through a shredder? That would clear your ground, thresh your seed, save your roughness, and make it better and more of it, and hence feed much farther. Besides all this, you can put it just where you want it, where it will keep and where it won't have to be handled again before it is fed. It would also save the trouble and risk of taking care of the heads between the time of heading and time of threshing.

In eastern Kansas the risk and danger of leaving the heads in windrows or shocks in the fields would be very great. Heavy rains coming soon after heading would certainly ruin it.

I have had no experience with the shredder, but if it will thresh off the seed all right—and I think it can be set so it will—then, in my judgment, it would be just the thing. G. W. PRIEST.  
Meriden, Kans.

#### At the Kansas Agricultural College.

The Students' Farmers' Club, January 26, 1899, discussed topics of interest and importance to the students and farmers.

Mr. R. B. Mitchell told how the present and future interests of the farmers depended on the fertility of the soil. He said that the soil in the beginning was nothing more than the solid rock. This became broken down and pulverized, and in time plant life began to add to its richness through decayed vegetation. The soil we have to-day has been formed by ages of this process of decomposition of rocks and humus matter. The soil contains all the elements required by plants in their growth, but these must be in the right form or plants cannot use them. The soil is a great laboratory, where the action of air and water and of myriads of bacteria is constantly changing the elements into available plant

## The Stock Interest.

### THOROUGHbred STOCK SALES.

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

MARCH 3—Grant Hornady Live Stock Co., Fort Scott Kas., Herefords, at Kansas City, Mo.

### THE CARE OF PEDIGREES.

By Henry Comstock, of Cheney, Kans., read before the Kansas Improved Stock Breeders' Association.

In the rush for papers for this meeting your secretary had the kindness to assign to me the task of leading in the discussion of the subject, "The Care of Pedigrees." Every breeder who owns a good hog, whether boar or sow, that reproduces itself in full litters concedes the necessity of preserving its pedigree. If he lives in a wide-awake community the quality of the hog he produces by his skill in breeding builds up his reputation as a breeder, as well as the strain of hogs from which it was taken. The quality of the hog as a breeder establishes the skill of its owner in properly mating the two sexes in such a way as to bring the most satisfactory results, which he couldn't do if the ancestry of his stock were bred on the zig-zag line of good, bad, and indifferent.

The produce of the good hog gives evidence of his long line of ancestry, in the formation of which no serious mistakes by mismating or otherwise have occurred. While very many of the good results of proper mating have grown out of the persistency of the breeder of fine stock, there is yet an aptness that belongs to some more than others that brings them easier, quicker and better results, which, when pushed, is the acme of skillful breeding. Now, whether the fine hog is produced by one or other, or through both of these causes, it is very important to the old as well as the young breeder that these lines of fine breeding should not only be brought to the best ideals of perfection, but that a full record should be kept of them.

First, that breeders may learn the line of breeding which brings such satisfactory results.

Second, that the line be not broken by the death of those who established it, but rather perpetuated for all time.

Third, for the protection of such persons as will in the future wish to buy.

The careful breeder of a half-century's continued labor is better able to detect the errors in a long line of breeding than one but recently engaged in the business, for, among other reasons, he has seen many of the old hogs in their day, and can more readily point out certain resemblances in form in the produce and align them with the ancestry to which they more especially belong.

I had the misfortune to buy a male last February from one of Illinois' many noted breeders, paying him his price for what he said was as good a pig as he raised that season by Hadley's Model 35913 S.

Barring his want of size, he had two good ends, but his middle is indescribable. Some of the produce of each of the three matings with gilts that were especially good where he was most lacking (heart-girth and upper line) show his peculiar characteristics of form. Not being acquainted with his entire line of breeding, I am not able to say whether the blame belongs to his sire or dam, but am certain that hereafter I will not purchase any of the breeding of his ancestry unless I am personally acquainted with that particular branch. It is equally true that we have suckers in Kansas as well as in Illinois. Fortunately, we had three other sires on which to depend for breeding.

The point I wish to make is, the preservation of the pedigree is not only helpful in pointing out safe lines of breeding, but also other lines that should be avoided. Farmers, as well as the breeders who are engaged in breeding stock for breeding purposes, can, by preserving the pedigrees of sires and dams in their herds, the better guard against in-and-in, or what is sometimes termed close line-breeding, if that style is objectionable to them.

Very many of our customers are farmers who are making additions to and crosses in their herds to secure the best market on the block for the food consumed. While to record their pedigrees seems like a waste of money, yet it would be advisable for them to file them in a scrap-book for reference. Many of these farmers neither call for pedigrees of stock purchased nor would they preserve them if sent to them. Such men, as a rule, buy their males from some breeder in whom they have confidence and can fully rely on his selection for crosses. To fully serve them, it is necessary that the breeder should keep a record of all the sires and dams, date of farrow, and to whom sold, so that when another cross

is ordered he can better select one that will preserve his patron's style of breeding and insure greater success by not selecting one too close akin. After a farmer is compelled to sell a good hog because the she stuff in his herd is too closely related to him, and he falls into the hands of a breeder who appreciates him because he can obtain his pedigree by referring to the record, as above, of animals sold. The breeder, thus enabled to help an old patron sell his hog at an advanced price over that of pork, sells him another, and oftentimes makes a customer of the breeder who has bought the farmer's hog. The keeping of the record of fine stock sold begets confidence in breeders, which is mutually beneficial to them and their patrons, and cannot be so fully done without the preservation of pedigrees.

A close tab kept on the ancestry of all full-blooded stock is in line with the push of any up-to-date breeder at the close of the nineteenth century.

### DISCUSSION.

Mr. Hubbard: It is a good paper; it is all good; there is no mistake about that, not a bit of it.

Mr. Patterson: As stated in the paper, my experience points to the fact that there are scattered around in Kansas some men who, when we send to them for a pig of a certain kind, do not always send us the best they have. They humbug us by sending a pig that is not registered, and I want to know if there is any way of avoiding being taken in by that class of men. Have we got to go to one certain man and take just whatever he is a mind to send us, and continue ordering until we get what suits us? During my experience, I have had two or three worthless pigs shipped to me in the last ten years. If there is any way to avoid this except by our going to see the hog, I would like to know what it is.

Mr. Maguire: I had one bad pig shipped to me, that I would not receive, and I complained on the last hog I had, and I fired it back to the man who sent it to me, and I got back the best hog that was ever shipped to me.

Mr. Ferguson: I was very much interested in that gentleman's paper, very much indeed. Just recently I have spent a good deal of money in traveling around over the State in order to get good individuals. I have found a great many well-bred hogs, some of them the sire of which sold for as high as \$5,000, but the individuals that the people who own these hogs were trying to sell me were worthless scrubs. I have found this so with cattle too. I have been in the South, and you people here have probably heard about the people down there. There are a whole lot of cattle down there, and the reason they don't make good steers is because they won't make steers. I have also found young boars that they wanted \$50 for that really would not make good barrows. It strikes me that a man who has had several years' experience in raising hogs ought to know a good hog when he sees it, and a poor one, too, and he ought not under any consideration ship that hog any distance for any kind of a price. There is a market for all fat hogs, and I think that a young boar at the age of 3 months at least ought to show whether or not he will make a good individual. He will develop into good pork. And it seems to me that the breeders of Kansas—I have met a good many of them and I think they are honorable men—ought to pay more attention to the individuals.

Mr. Cheney: I would like to hear a little discussion on the subject matter of the paper, "The Care of Pedigrees." If there is any one who has any remarks to make upon the subject, I would be glad to hear from him.

Mr. Harrington: I have had some trouble that way, myself. I wish some old breeder would tell me what he does with the pedigree. Do you put them all in a bunch, and go and hunt through all these old pedigrees when you want one? Wouldn't it be advisable to get a book and have it numbered so you could turn to each one as you want it?

Mr. Hubbard: I get a book, of course, and register up all the pedigrees—record them.

Question: Do you copy it or paste it in?

Mr. Hubbard: O, no; copy it in the book in blank form, for which lines are drawn down for about three litters, two or three generations on each page, and then when you have exhausted that page with two or three litters, transfer it and at the bottom of the page state transferred to page so and so.

Question: Do you fix it yourself?

Answer: No, you can buy a record of almost any stationer.

Question: Bound books?

Answer: Yes, sir.

Question: Blank pedigrees?

Answer: You can get a book about 10 by 14 inches for about \$1 or \$2 that will answer every purpose.

Thank you. I will inquire for them.

### Why I Breed Shorthorns After Half a Century's Experience With Them.

By ex-Governor G. W. Gillick, of Atchison, Kans., read before the Kansas Improved Stock Breeders' Association.

After the depression of about ten years, the cattle industry seems to be again assuming greater importance, with corresponding increase of profit to the producer. This condition is encouraging to the breeder of live stock and is a stimulus to investigation, experimentation and improvement in the methods of breeding, and a growing desire to improve the quality of the cattle that are bred and raised by enterprising and progressive farmers.

The environments of the cattle breeder of Kansas are such as to aid him in accomplishing greater improvements and securing greater profits than are made in many other localities where cattle breeding and beef-making has been a pronounced success for many years. We have usually a mild, dry winter climate, with cold enough to produce the tonic effects that makes the central part of the north temperate zone an ideal cattle feeding country. The grains and forage crops are abundant and cheaply produced. Access to markets are equal to any of our rivals or neighbors and much better than many of the Western ranches enjoy, while fair and reasonable transportation rates will greatly stimulate this industry and will largely increase the income of the railroad companies.

The Kansas City market to-day is the equal of any in existence, and its nearness to the Kansas producer gives him a decided advantage in the amount of his profits in shipments. The great crops of corn—the hundreds of millions of bushels produced on Kansas farms makes it one of the greatest feeding and maturing sections of our country. With such surroundings if the Kansas stock breeder and feeder does not succeed it indicates a lack of skill or industry, or that he prefers to view profits as of no concern to him by raising and feeding the unprofitable scrub.

Stock raising, by the force of conditions, will, if farmers take care of the kinds of cattle they raise, become yearly more profitable. The sheepmen are crowding the cattle off the ranges. The territory of the ranches is annually becoming more limited and circumscribed in extent, and many of the great ranches that flourished and produced cattle a few years ago by the tens of thousands have been closed out. This enables the farmer to increase his holdings and to make up this deficiency. There was a shortage of beef cattle in 1898 of 200,000 head, and this shortage was mainly in range cattle. With this increasing annual shortage, with an increase of population, with a consequent increase of demand and price, the opportunity of the Kansas cattle breeder and feeder is at hand. Will he take advantage of the opportunity offered to him? What shall he do to get the advantages that conditions now offer to him? The answer of the thoughtful, enterprising breeder is plain. He answers you by saying, "Breed better cattle." Breed up the herds and give better feed and care. Dissolve partnership with the scrub as soon as you can. The scrub eats as much as the thoroughbred or high-grade steer and sells for much less, this difference being from \$5 to \$25 per head. This difference should be an incentive to raise cattle for the top of the market rather than the bottom.

There are in Kansas now, as we learn from the statistics of our agricultural department, 1,604,065 head of cattle. If we can improve them or their produce even to the extent of only \$5 per head, it would increase their value over eight millions of dollars. By the use of thoroughbred males of one of the beef breeds this value would easily increase \$10 to \$20 per head.

We are also told by the same authority that Kansas sold cattle for slaughter in the year 1898 of the value of \$49,123,517. This is a magnificent record for our stock breeders. By the improvement of the common cattle of the country by breeding up with Shorthorn bulls and feeding better cattle the sum could easily have been \$60,000,000, the increase being enough to settle the ordinary tax bills of the State and counties.

What is the best breed of beef cattle to breed? Men may differ, and honestly, too, as to the best breed of males to use to breed up the common cattle of the country, and I have no quarrel with the friends of any breed. Circumstances, conditions and education often have much influence in these preferences. But any of the thoroughbreds are far better than the scrub, and the breeder who uses thoroughbred males is far in advance of

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the one who uses scrubs. My own preference is for the Shorthorns. There are many reasons why I prefer the Shorthorn to other breeds. The Shorthorn improves and breeds up all other breeds of cattle on which it is crossed. It improves all classes of cattle to the highest point of bovine excellence. They take on flesh rapidly and mature very early and can be fattened off at any age and sell in the market for the block at top prices. The reason for this excellence is that the Shorthorn puts on flesh on those parts of the body where the high-priced, tender, juicy steaks and roasts are found. The scrub steer may make as much weight for the food consumed as the thoroughbred or high-grade Shorthorn, but no other class of beef animals produce such a wealth of high-priced steaks and roasts as are found in the upper third of the well-fatted Shorthorn steer. The Shorthorn always shows evidence of good breeding. It has a pleasant countenance, a mild and tractable disposition, a broad, level back, that carries a wealth of the best finely marbled steaks and roasts that bring the highest price in the markets, with thickly fleshed loins, long and well-finished quarters, while it has the well-sprung ribs that give it a style and finish, and which are covered with thick, juicy flesh, mellow to the touch, and, though firm, is well marbled and tender.

This great, broad back is one of his distinguishing qualities. This broad back furnishes all the high-priced meats. It gives assurance that in cutting up and selling out the carcass that the largest percentage of good and valuable meat will be found and the largest percentage of good beef to live weight will reward the purchaser. It is the high price of the rib, the porterhouse, the sirloin and the round steaks that gives the greatest value of the well-fed beef steer, and in the production of these valuable parts the Shorthorn steer has no equal when the whole carcass is considered in connection with its market value. While it is true, once in a while, that a small number of another family of beef cattle may sell as well or better on some particular day in the market, it only attests the skill of a good feeder and does not disprove the fact that the Shorthorn is the best beef steer, and as a beef producer has no rival and is by far the best seller every day, that goes to the market.

Shorthorns are the farmer's ideal animals. They are quiet and gentle in their dispositions, a characteristic absolutely necessary to produce rapid growth. The dams are good milkers and furnish plenty of milk to raise strong, healthy and lusty calves and plenty to spare, and when taking to the fair you do not have to take one or two extra milch cows of some other breed to nourish their calves. It was remarked by a visitor at the Omaha Exposition, when viewing the cattle, that he found quite a number of calves that had "twin mothers." The Shorthorn cow had no need of a traveling dairy to care for her calf. In England, at one of the great fairs in 1897, it was a Shorthorn cow that took first prize as a milk or dairy cow, and in 1898 (the next year) this same cow, at the same show, took the first prize as a beef animal. In Canada the dairymen are discarding males of the purely milk breeds and using Shorthorn males. They are getting, by this cross, as much or more milk and of as rich a quality as they get from the milk breeds, while the male produce make good feeding steers. And the cows, where age or other reasons unfit them for the dairy, are valuable as beef animals, while the male produce of milk breeds are practically worthless except for veal or to sell to some breeder, if the calf is of an extra milking strain. This same idea is rapidly taking shape with Kansas dairymen. The butcher's block is the ultimate end of the beef animal. There is where his value is estimated and fixed, and when this test has been applied the Shorthorn beef animal, in the large majority of cases, has been not only an easy winner but a triumphant winner. When put to the most exacting test, when prizes were offered for the best grade animal to be tested by



lea and Europe have more than 95 per cent of the total number in the world; the United States, Germany and Russia have nearly 70 per cent of them, and the United States alone has over 40 per cent of the whole, and seven Western States a large proportion of these. This distribution is readily accounted for. In the case of other animals grass is their principal foodstuff. In the case of hogs it is grain. The three countries named are the great grain producers, and of corn, the best hog feed of all, the United States has a monopoly of production. The estimated number of hogs in the United States in 1897 was 47,546,000, valued at \$196,257,000. It is estimated that the annual slaughter of hogs in this country is about 30,000,000, of which 25,000,000 are killed at the packing houses in a comparatively few cities. The greater part of the slaughter not done in the regular packing centers represents farm killing for domestic use. The economies where the business is conducted on a larger scale, and the facilities for the distribution of the fresh product through the medium of refrigerator cars, constantly tend to further concentration of killing at large centers. It has been estimated that our per capita consumption of swine flesh is about 55 pounds per annum, and of lard about 8 pounds, a rate of meat consumption not approached in any other country.

Facts are stubborn things, and, with all this array of figures staring us in the face, no thinking person should be short-sighted enough to imagine that the future of the swine-breeding industry should be looked into in any uncertain manner. The production of pure-bred swine for the improvement and maintenance of the high quality of the hogs that go to market is as necessary as the great packing plants, and no one thinks they are going out of business. There is a constant tendency of hogs to deteriorate, and fresh blood must be constantly infused to keep up the quality to a paying basis. All farmers have not yet learned this, but many of them have, and the number is constantly increasing, and the demand for the breeder's output is growing.

Mistakes have been made in the hog business, as well as along many other lines, and scheming, and oftentimes disreputable, men have engaged in fine-hog breeding and speculation, but they have been short-lived, and to-day there are but a very few in the ranks but that are men of good repute, and are doing a straight, legitimate business. The day of inflated values, and so-called royal breeding is happily past. A hog to pass muster now must have individuality and quality first, and then his breeding is most generally good enough. Hundreds, and in a few cases thousands, of dollars have been paid for hogs that were in no wise superior to thousands of their fellows. No hog has ever yet lived that towered above all other hogdom like Pike's Peak above the ant hills, but for a time a lot of men believed there was. The business is coming back to a legitimate basis, and the breeder who breeds quality and culls closely, and raises his hogs mainly on the products of his farm, and then prices them at a reasonable figure, will have a profitable business.

But few men live up to their opportunities, and if a man does not live up to his full privilege in the conduct of his business we should rejoice in the success of a more wise competitor, all of which means that you should let your light shine through the medium of the agricultural press.

#### Forthcoming Hereford Sales.

Among the public sales of registered Hereford cattle announced to take place here in the West is that of W. A. Colt, Clinton, Mo., and W. W. Gray, of Norris, both in Henry County, Missouri. The draft of 50 head consists of bulls and heifers whose breeding is as aristocratic as could be demanded by the up-to-date white-face breeder. The writer paid a late visit at both farms and was agreeably surprised to find so good cattle that had never been exhibited or advertised since the herds were founded. Mr. Colt's herd was founded in 1884 and now aggregates about 100 head. The foundation animals were selected out of the noted herds of Earl & Stewart and that of Van Natta, and since reinforced by the best obtainable. In his sale draft of 40 head are 20 2-year-old heifers sired by the premier herd bull, Shadeland 36692, a full brother to the noted Earl of Shadeland 22d 27147. Sixteen of the nice heifers are safe in expectancy by the younger herd bull, Daniels 71690, bred by Gudgell & Simpson, and sired by Imp. Chesterfield 56697. One finds an extra good lot of young bulls, well marked, finely coated and coming on in that way that insures sure future usefulness. The visitor at Mr. Gray's 500-acre farm, situated near

Maurine, on the Kansas City branch of the Frisco, finds a herd of 60 head, whose founding was laid in 1882 by individuals bred by Tom Clark, of Indiana, that were the immediate descendants of Success 2 and The Grove 3d. The prices for these animals ranged at \$300 to \$800, therefore the reader will understand that they were good ones. The herd bulls since used were Nobleman 6th 4515, Equity 2d 12547, and Shadeland 36692 now in service in Mr. Colt's herd. The premier herd bull now is Printer 66684, bred by Gudgell & Simpson, sired by the great breeding bull, Beau Brummell 51817. Individually Printer 66684 is a typical beef bull of the up-to-date Hereford type and is proving himself an extra good sire. The draft of 10 bulls that Mr. Gray puts in the sale were sired by Printer 66684, and, like those of Mr. Colt's, have been cared for in a common sense way, being hardy, and as such are a desirable lot of youngsters. It may with propriety be stated that none of the females have ever been sold from either farm, hence the commingling of blood now found in these herds is a most desirable one. For further information concerning the sale and offerings consult the sale announcement elsewhere in this issue and write for a free copy of the sale catalogue.

The strongest and most noted lot of registered Herefords so far announced to take place this year at public sale is the aggregation of 150 head from the well-known herds of T. F. B. Sotham, Chillicothe, Mo., F. M. Nave, Attica, Ind., and the Grant Hornaday Live Stock Co., of Fort Scott, Kans.

It may be stated, and truthfully, too, that the name Sotham has become indelibly fixed in American Hereford history. All through the years of the depression in the better class of beef cattle Tom Sotham never faltered in his faith in the white-face nor deserted the Hereford colors in the competitive show rings of the country. Year after year the meager profits were used to pay the incidental expenses that of necessity came from exhibiting representatives from the Weavergrace herd. A few lines quoted from his "Greeting," found in the sale catalogue, are, we think, pertinent enough at this writing. Among other things he says: "This catalogue of my seventeenth public sale of Hereford cattle is issued in the light of a wider and more intelligent appreciation of the real merits and purposes of pure-bred cattle than ever before existed in this country."

Mr. Nave, in founding his herd, that now consists of about 150 head, all ages, used every means at his command, and on several occasions females came to the farm at \$800 to \$1,000 each. His premier herd bull, Dale 66481, cost him in November, 1897, \$1,100. This great up-to-date typical beef animal last year was the champion bull. Several of the cows and heifers in the sale are safe in expectancy by him. Another feature of the Fairview herd since its beginning has been to avoid all bad-dispositioned individuals, hence the entire herd is very docile and easily handled. The offering will consist of individuals suited to the wants of prospective buyers—aged bulls and cows, young bulls, bred and unbred heifers.

The Hornaday sale cattle consist of 50 head—bulls, cows and heifers—whose foundation rests on the immediate descendants of the noted Anxiety 4th 9904, topped by one of the best sons of the noted Corrector 48976, whose sons and daughters have won the numerous victories for the Weavergrace herd of Sotham's. Among the offerings are four cows, Hebe 3d of Oak Grove 54471, a show cow with a calf at side by the \$840 bull Sir Comewell 68776; the other three, Petunia 12th 66669, Bonny Maid 66548 and Blight 4th 61518, are daughters of Druid 46833, a son of the World's Fair second prize winner, Don Carlos 33734. The visitor finds six extra nice young heifers by Sir Comewell 68776 and out of Gudgell & Simpson bred dams. These youngsters are strong recommendations of what their sire has done for the Hornaday herd. There are, too, six weanlings and 15 calves at side by Sir Comewell that attest his work as a getter of broad-backed, deep-bodied individuals. Among the older ones are two bulls about ready for service—one, Admiral Sampson, by Sir Comewell and out of Bellona 66528, she by Spartacus 51842; the other one, Sir Hesiod, by Sir Comewell and out of Candace 61346, she by Funkhouser's noted Hesiod 2d 40679. Both these young fellows are good enough to go anywhere. For complete details consult sale announcement and write for copy of the catalogue. W. P. BRUSH.

#### Shorthorns Next Week.

Editor Kansas Farmer:—All beef cattle breeders and growers recognize the fact that there is always a demand for the best of beef cattle and that it is the



**SUCCESSFUL SHOOTERS SHOOT WINCHESTER**

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better ones, no matter which of the improved breeds, that bring the top price at the great markets. Intelligent and practical buyers always assert that there is a lack of extra good ones, hence the breeders of improved cattle should endeavor to offer more of them. Individually and alone the professional breeder of any beef breed works against odds that experience teaches can best be overcome by organization and a more thorough dissemination of the better methods practiced by the older and more experienced persons engaged in the business.

Under this view of the question the Missouri and Kansas Shorthorn Breeders' Association was organized two years ago. An increasing interest has been manifested in both Missouri and Kansas since the initial meeting, and the next meeting promises to be the most successful one yet held. An excellent program has been prepared which covers about all the leading questions concerning the methods most essential in the breeding of better cattle, especially Shorthorns. The first day's session will begin Wednesday, February 15, at 2 o'clock p. m. The evening session Wednesday will be devoted entirely to social affairs and the members of the association with their families will be tendered a complimentary banquet.

Other questions than those announced in the preliminary program will come up for the consideration of the association. All persons interested in beef cattle are cordially invited to be present.

W. P. BRUSH, Secretary.  
Station "A," Kansas City, Mo.

#### Gossip About Stock.

Col. J. N. Harshberger, who made the Poland-China sale held at Holton, February 1, for M. C. Vansell, Muscotah, and J. E. Hoagland, of Holton, reports that, owing to the severity of the weather, the attendance was small. The prices realized were very good, running from \$18 to \$25. Under the circumstances, the sale was considered quite satisfactory to all concerned.

The St. Louis Globe-Democrat, issued in semi-weekly sections, is perhaps one of the best substitutes for a daily that is offered to our readers. No paper in America has a more comprehensive news service than the Globe-Democrat. The subscription price for this semi-weekly edition is \$1 per year, but for a limited time the Kansas Farmer will supply it in connection with the Kansas Farmer, both papers one year for \$1.50.

Do you love your wife? If so, you will make her tasks lighter and easier, especially in the work of making her ironing easy by sending 25 cents to one of Topeka's leading merchants, Mr. J. W. Hardt, whose advertisement appears on the "Home Circle" page of the Kansas Farmer. This advertiser owns one of the largest and best laundries in the State and his proposition to the ladies of Kansas is a really meritorious thing.

If you intend to plant trees or shrubs it will be to your interest to get a catalogue of the Jansen Nursery, of Jansen, Neb. Their stock has been inspected by the state entomologist and a clear certificate of health is sent with each shipment. Read their advertisement in another column and you will observe some of their great inducements in prices, besides the additional benefit of having freight paid on all orders of \$1 or more. Mention Kansas Farmer when you write. stock gos

Attention is directed to the new Poland-China advertisement of C. P. Shelton, Paola, Kans. His herd boar, Priceless 30169, was bred by Perry Willson, of Ohio, has been owned by Watkins & Broadna, of Ohio, and for four years

headed the famous herds of W. C. Welch and Samuel Willson. Mr. Welch says: "Priceless is the best breeding boar ever used," putting him ahead of Welch's Black U. S. 33521, the second best son of old Black U. S. 13471, so says Lambing. He has been pronounced by competent breeders as good an individual as Grand Price and a far better breeder. In the recent sale of bred sows and gilts of up-to-date and popular breeding, selected by Ed Klever, Hadley and Hendrick, two fine gilts in said sale were sired by Priceless, and 50 per cent of the entire offering are of Welch's Black U. S. and One Price blood. The gilts offered for sale are good, serviceable gilts and will make profitable brood sows. No richer bred One Price and Black U. S. stuff can be had. Prices will be reasonable.

After all, farmers have learned that success with hogs depends largely upon furnishing them something besides corn and water. The proper thing is clover and blue grass pastures in summer, and succulent food, such as artichokes, the balance of the year. It will be to every farmer's advantage to write to the Melville Seed Farms, box 5, Melville, Ill., for their free "Essay on the Artichoke" as a cheaply raised food for all farm stock and as a preventer of hog diseases.

#### Poland-China Breeders.

The Standard Poland-China Record Association, having a membership extending over 17 States and Territories, concluded its annual session at Maryville, Mo., last week.

The following officers were elected: President, George W. Falk, Richmond, Mo.; vice presidents, C. P. Allen, Vicksburg, Miss.; W. A. Paxton, Santa Ana, Cal.; S. W. Myers, Sugar Grove, Ill.; I. B. Bell, Toledo, O.; James I. Royer, Denver; James O'Connell, Malcolm, Neb.; J. F. Pyntor, Alton, Kas.; A. D. Outhier, Halstead, Okla.; Ed I. Brown, Rindland, Ind.; J. West Jones, Lenox, Iowa; F. M. Neal, Marshall, Mo.; Prof. H. H. Wing, Ithaca, N. Y.; David Craig, MacLee, Oreg.; James Johnson, Lehi, Ariz.; D. B. Garriott, Carrollton, Ky.; Marion Peterson, Vermillion, S. D.; board of directors, W. T. Garrett, Maryville, Mo.

The report of the secretary showed a very prosperous year's business, the balance in the treasury being \$2,274. Sam McKelvie, the retiring president, delivered an address, presenting many thoughts concerning the successful history of the association, and suggestions for its future welfare. Resolutions were passed memorializing the American Poland-China Record Association to take some action in determining whether the produce of the hog, Klever's Model, farrowed since April 1, 1897, are eligible to record or not.

It is often the case that judgment in planning and managing the work to be done will accomplish more than the amount of work itself.

IF THE  
**DAMP**  
AND  
**CHILL**



PENETRATE, LOOK OUT  
FOR AN ATTACK OF

**SCIATICA.**

BUT DEEP AS THE  
SCIATICO NERVE IS

**ST. JACOBS OIL**

WILL PENETRATE AND QUIET  
ITS RACKING PAIN.

### Corrector and Two Champion Sons.

In presenting our readers with a picture of the celebrated Hereford sire, Corrector 48976, with his two best sons, Sir Bredwell 63685 and Thickset 68785, we portray the crowning glory of the Weavergrace breeding establishment, Chillicothe, Mo., and of Mr. T. F. B. Sotham as a breeder of Hereford cattle. Since Cadillac, the first calf begotten by Corrector, won champion honors on the Western circuit of State fairs, 1893, not a year has passed without adding a long list of first and champion honors to the credit of Corrector's progeny. During this term of years the get of Corrector have won more important prizes for the get of one sire than the get of any other bull that can be named. Among the champions over all breeds, begotten by Corrector, was Cadillac, in 1893; Grace, 1894; Grace and Protection, 1895; Sir Comewell, 1896; Thickset and Excellent, 1897; Silence, Benison and Thickset, 1898. While the honor of being the

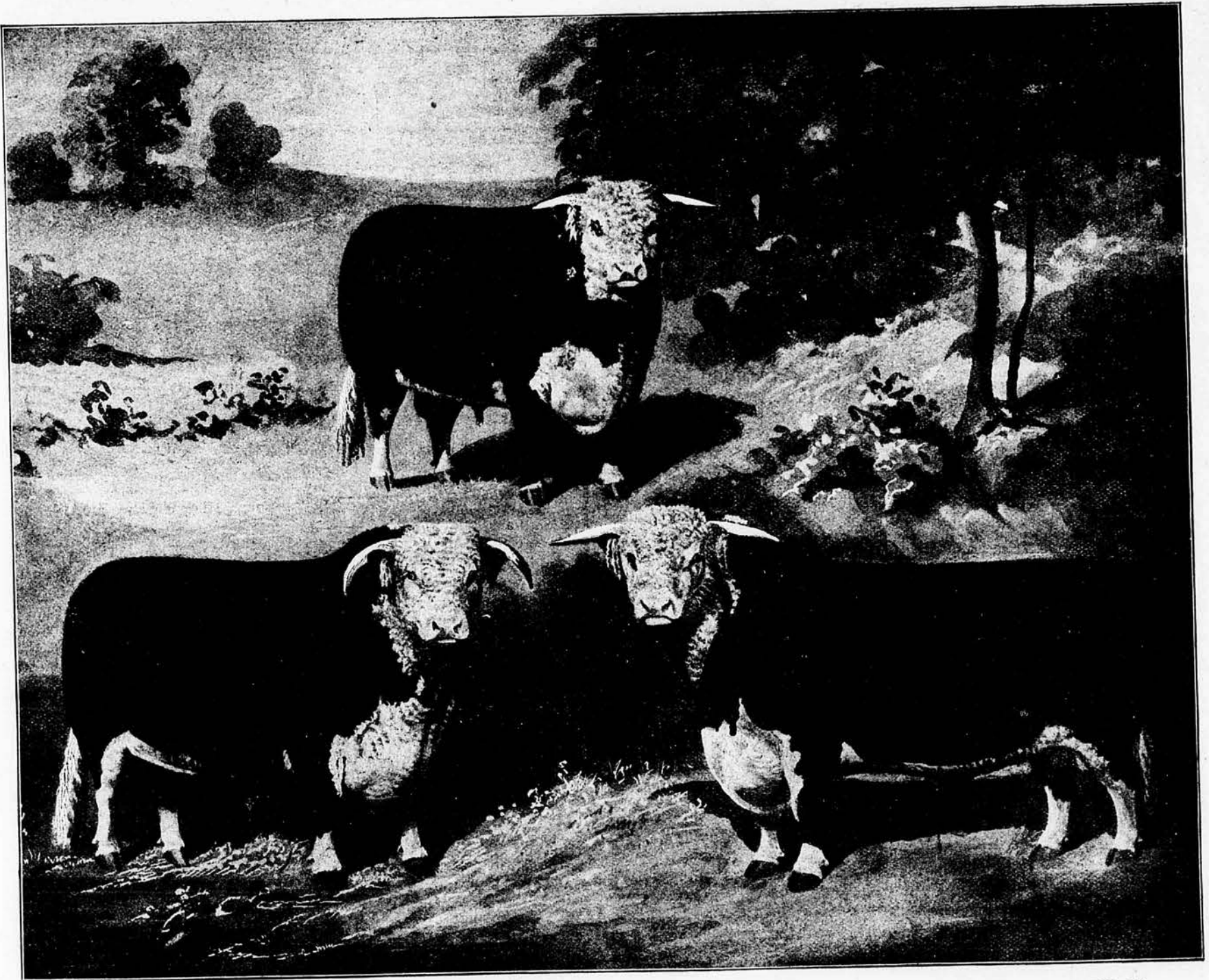
having the highest degree of quality, with good size and weight. At Weavergrace they will not use extensively a sire that will not at maturity, under favorable conditions, develop a weight of 2,400 pounds. A weight of 2,500 pounds in a matured sire, when in the pink of show condition, is the desideratum. Weights even higher than this, such as were attained in the earlier history of the Hereford breed, will be welcome at Weavergrace, if the quality can be retained therewith. It is this desire of Mr. Sotham's to enlarge the scale of Hereford cattle that led him to purchase at Mr. Armour's recent sale the 2,100-pound cow, Lady Laurel, that for smoothness and depth of flesh, has never been excelled and doubtless never will be. Coupled with such a bull as Thickset, whose marvelous thick flesh and smoothness envelops a carcass that will weigh 2,400 pounds at 36 months, it is hoped at Weavergrace to produce something that has been unrivalled in the Hereford breed or any other breed since the day of

minds of everyone. In addition to this, Sir Bredwell has won over 30 first prizes in class and groups. He has been used extensively at Weavergrace; has the sweetest of dispositions; is active, robust and a sure getter. Enough of his calves will be included in the sale to satisfy any breeder of his usefulness. Mr. Sotham and his manager, Mr. Edward J. Taylor, are endorsed by many competent judges in their belief that it only requires time to make Sir Bredwell, as a sire, the peer of any Hereford bull in the history of the breed. There is great regret at Weavergrace that Sir Bredwell is to be exposed at auction on March 1, and nothing could induce them to part with him had they not his sire, his full brother, his full sister and his dam (well along in calf to Corrector again). Sir Bredwell possesses in his individuality and make-up every requisite the most careful breeder could require in a bull. He has undoubtedly the most perfect head ever produced on an American Hereford; the most beautiful droop horns,

which the first prize could have been placed by any good judge without incurring serious criticism. Sir Bredwell and Thickset were very potent factors in drawing for Corrector the incomparable first prize for the "get of one sire," an honor gained by the get of Corrector at the Illinois State Fair and at the Minnesota State Fair, as well as at the wonderful show at Omaha.

Mr. Cecil Palmer, the artist who drew the subject for our engraving, regards the group as the finest subject he ever undertook. The trueness of the likeness, portraying, as it does, the individual character of each animal, makes the picture a delight to all lovers of good cattle. The work is a credit to any artist, and particularly to an American artist, for we do not believe Bonheur or Landseer or any other artist can excel this masterpiece of Mr. Palmer's in its excellence as a model of animal portraiture.

—Carl Freigau, secretary of the American Chester White Record Association, Dayton, Ohio.



WEAVERGRACE BREEDING BULLS, CORRECTOR AND TWO CHAMPION SONS, THICKSET AND SIR BREDWELL, OWNED BY T. F. B. SOTHAM, CHILLICOTHE, MO.

champion of the Hereford breed, which is felt to be as great an honor as can be achieved, has been won by a score of his get at different prominent fairs. But this is not the best of it. The get of Corrector, both sons and daughters, have proven themselves almost invaluable as breeders, in the hands of not only Mr. Sotham at Weavergrace, but of all his customers. There is not an instance on record where Corrector's sons and daughters have not afforded the most complete satisfaction. Perhaps much credit for this is due to the high standard of cows maintained at Weavergrace. Mr. Sotham is a stickler for animals that come from the greatest ancestry through the best individuals of the breed. Perhaps, again, the usefulness of Corrector has been accentuated by the judicious methods of feed and development at Weavergrace, under the management of Mr. Edward J. Taylor, who, like Mr. Sotham, contends for the necessity of rearing young cattle on bone- and muscle-forming foods, calculated to grow weight and scale in addition to quality. It is the prime aim at Weavergrace to produce a type of cattle

Maidstone, the 3,000-pound nephew of Corrector, that was champion at the Paris World's Fair, 1888.

It is needless to call attention to the five celebrated brothers of Corrector, that made his dam, Coral 13526, the grandest cow of the Hereford breed. It is well known that the sire of Corrector, Harold 21141, weighed 2,500 pounds, and his sire, Highland Laird, could have been made to weigh 200 pounds heavier. Harold's winnings in the show ring were numerous and praiseworthy. Prospective buyers at the Weavergrace sale, Kansas City, March 1, would do well to study up the prize record of Corrector. Mr. Sotham gives his patrons ample opportunity to do so from facts furnished in his unique catalogue, which is illustrated with over 150 engravings of Hereford cattle. This catalogue can be had by addressing Mr. T. F. B. Sotham, Chillicothe, Mo., as per advertisement on another page.

Of Sir Bredwell, it seems superfluous to say much. His record as the champion bull of any age at Omaha, in the grandest and strongest competition ever marshalled in the show ring, is fresh in the

and a general perfection of form. It is needless for us to describe him in detail, for the picture portrays him better than words possibly can.

Thickset is believed at Weavergrace to be the only rival in the Hereford breed that Sir Bredwell has. There are some breeders who rate him higher, but competent judges have always differed on the merits of these two animals. It is thought Thickset will excel Sir Bredwell in weight, while retaining essentially as much quality. Thickset was the champion 2-year-old bull over all breeds at the Minnesota State Fair, and won first prizes at the Illinois State Fair and second at Omaha Exposition, where his defeat was probably the only unpopular award made by the Omaha judge, in the estimation of the spectators. There were numerous cries of "Change the ribbons," when Thickset danced gaily with the second ribbon, about the show ring. Second prize in this ring, however, was a great honor, for it is unquestioned that it was the grandest ring of 2-year-old bulls ever seen in the show ring, and there were at least three animals on

ton, Ohio, writes in reference to the fifteenth annual meeting of the association: "After enjoying a very interesting and instructive swine breeders' institute, at Columbus, Ohio, on January 11, in which the treasury report showed a balance of \$638.96 on hand, the new officers were elected, as follows: President, L. H. Martin, Alexandria, Ohio; vice president, I. P. Cummins, Cedarville, Ohio; secretary-treasurer, Carl Freigau, Dayton, Ohio. One of the resolutions adopted, which is of interest to the West, reads as follows: "That breeders who are not now members of the American Chester White Record Association be presented with one volume of this Record upon the recording of two animals at \$1 each, and one volume for each additional two pedigrees at \$1 each, and when the pedigree fees thus received amount to the sum of \$20, a share of stock and full membership rights be issued to said breeder."

One of the best ways of building up a run-down soil is by growing clover.

Send for sample copy of the Farmer,

## The Home Circle.

### YEAST IN RHYME.

A handful small of fragrant hops. Deposit in a kettle;  
Then add a pint of Adam's ale and boil them till they settle;  
Then if you wish to brew good yeast, live; and sweet, you'd oughter  
Take four potatoes, medium sized, and wash them well with water;  
Divest them of their jackets next, in common parlance, skin 'em,  
And faithfully dig out the eyes, there's dirt imbedded in 'em;  
Then make assurance doubly sure and banish all pollution,  
By subsequently giving them another granulation.  
Then boil them—half an hour, perhaps; of course your judgment using,  
Or steam them, if you like it best, the method's of your choosing.  
But whether boiled or cooked by steam the process should be rapid;  
Potatoes moderately cooked are heavy, soggy, vapid.  
Then mash them thoroughly, each lump with vigor pulverizing,  
And put them in a vessel which leaves ample room for rising;  
A cup half filled with sugar add, 'twill sweeten it enough.  
It needs the same amount of salt, you'll find it quantum suffo. (Sufficient quantity.)  
The hop infusion strain in next, a pint, you mind, by measure.  
Then with two quarts of water warm dilute it at your pleasure;  
And to gently keep it moving from circumference to center,  
Never fail to bid your silver spoon its hidden depths to enter;  
Then add two brimming cups of yeast, and quickly take occasion  
The fragrant mixture to subject to brisk manipulation.  
And when the entire ingredients are mingled well together,  
Then give the opportunity to rise, according to the weather.  
In winter set it near the stove and oft renew the fire;  
In summer place it farther off, the temperature is higher;  
Then patiently the issue wait, while time his flight is winging,  
Its status scanning now and then; and when you hear it singing  
And see upon its surface, now here, now there, a bubble,  
You'll feel a thousand-fold repaid for all your toil and trouble.  
Give to the winds all idle fears, all doubts, all scruples banish;  
And when the bubbles thicken fast and the crowd and break and vanish  
The yeast is prime, your toil is o'er, success has crowned persistence,  
And loaves of tender, light, sweet bread are looming in the distance.  
—Philadelphia Press.

### THE HOME LAWN.

By W. H. Moore, Kansas State Agricultural College, read before the Students' Farmers' Club of the College.

The art of composition embraced in landscape gardening has certain principles which tend toward forming a unity of the whole, and from which no deviation can be made without marring the results. Tastes may be possessed in a greater or less degree, but without principles it will fail to create a design of harmonious proportions or associations.

It is not expected that every man can be a successful landscape gardener, any more than he can be a successful lawyer or physician, but he should have sufficient love for his home to induce him to study the principles of the art, so as to appreciate the reason for arrangements of designs by a landscape artist. A spirit of independence and a pride for the creation of one's own should imbue every citizen in the improvement of his home grounds by judicious planting.

One of the most common errors in ornamental gardening is that of mixing herbaceous flowers with shrubs and trees. In such a situation neither can thrive properly. Even if they do, the effect of one is injured by the effect of the other. In placing trees, shrubs, and herbaceous plants, give plenty of room to show their characteristics; a crowding of varieties inconspicuously together destroys unity and effect.

The style of the house as well as the surroundings has much to do with the kind of trees to be planted. If the house is of a square design with a flat roof, and standing on nearly level ground, then the prevailing character of trees should be round, but if the house is of pointed Gothic design, with many broken, inharmonious lines, and is located on some elevated position, then spiral and pointed trees should be largely introduced, especially those nearest the house.

Do not crowd too many trees and shrubs into your lot, especially if it is small. Adapt your planting to the size and character of the grounds as well as the buildings. If your grounds are small, place only a few trees on them, just enough for shade. If you live in a village and wish a few trees along the street, plant the same kind of trees as those of your neighbors. Trees of the same variety for the street give a very pleasing effect.

### PREPARATION OF SOIL.

The soil of the grounds to be treated should be thoroughly prepared to at least one foot in depth. The depth should

be uniform, without regard to rise and fall of grades. Make the under soil, or bed, perfectly level at first, then put on the other soil 10 or 12 inches deep. If the soil is deep in one place and shallow in another the grass will be green on the deep places and killed out on the shallow ones during a drought. Rake thoroughly and then pulverize, with a roller, all of the top surface till it is as fine as an ash heap.

### SEEDING.

When seeding is practiced, sow at the rate of 4 bushels of blue grass and 1 bushel of white clover to the acre. It is a very good plan to divide the seed into 3 parts; sow the first one-third, then rake the entire surface all one way; then sow the second one-third over the entire surface, as before, and rake crosswise of the first raking; sow the last one-third and again rake crosswise of last raking; then roll it all down firmly. Where sod is to be laid, the ground should be prepared the same as for seeding. It should be thoroughly wet down and allowed to settle, then leveled off, rolled and raked as the sod is laid on. The general practice now in sodding is to lay the sods about 2 inches apart, filling the spaces with soil, then to seed the entire surface with grass seed and roll all down together. This method gives very good results.

### WALKS AND DRIVES.

Walks and drives are necessary improvements on the home lawns. The geometrical plan is the one most commonly used. It gives more or less formal character and seems more evenly balanced when viewed as a whole. The symmetrical plan allows a much wider scope in shape. The surroundings should form the main guide in laying out walks. They should be as inconspicuous as possible to comfortably serve the purpose. If the walk is a curved one it should be easy and natural. Do not run the walk up through the only large patch of lawn in the grounds, but let it curve to one side among the trees and bushes. In making a drive for general hauling of loads do not lay it out through the front of the grounds, but go along the outer edge and curve it into the back door or place of approach, then give the drive a gentle curve to the barn or highway. If a turning place or sweep is needed in the drive leading to the house make it as small as possible for convenience. What should be put in this circle depends on the surroundings. If the turn lies opposite the door, and some unsightly scene should be shut from the view, plant shrubbery or low-growing trees. If the surrounding view is pleasing, then put in a tall-growing tree that can be trimmed high.

### TREES.

In planting trees and shrubs on a lawn, leave as much open grass space as is possible, according to the size of the grounds. If the lawn is small, plant so that in one or more places will be given the longest unbroken stretch of lawn possible, thus making the grounds look larger. Set trees, shrubs, and plants of the most formal and regular appearance nearest the buildings, and those that are the wildest and most picturesque farther away. When planting, always leave lines radiating from the principal views from the house toward picturesque scenes and screen unsightly scenes.

Plant shrubs and herbaceous plants so that the foundation of the house may be more or less screened and the house seem to rise out of the surroundings. The thought that should be made most emphatic, especially in the country, is to make the buildings harmonize with the surroundings. Carry the large trees and shrubs toward the back and side of the yard and let the smaller ones appear in front of them.

Plant so that the outlines formed by grouping the trees and shrubs shall be broken and uneven, advance here and recede there in a cove or nook. Plant so that the sky lines will be irregular and broken; also have a different color on background than in front. Use sparingly those trees and shrubs of strange and striking habits and appearances. Some trees and shrubs leaf out early in the spring and others late; they also drop their leaves some early and some late in the fall, and this should give a variety in grouping. When planting trees and shrubs we should also have them in keeping with the character of the land. A hillside may be made to appear either higher or lower by the choice of trees.

The choice should depend somewhat on the soil and location. In choosing, take those that you know grow successfully in your location. Of the deciduous trees, the elm is excellent for shade, ornament and wind-break. The maple and box elder are good for bottom lands, but the maple is short-lived. White and green ash do well in dry climates. There are many others, but these are common.

# GOLD DUST

## THE BEST WASHING POWDER

When choosing conifers for all purposes, the Scotch and Austrian pines are the best. They are grown with success farther west than many other such trees, and success with them depends on planting them quite young. The choice spruces are the white spruce, Colorado blue spruce, and Douglass spruce. They should be planted very early in the season, as soon as the ground will permit their removal.

### SHRUBS.

There are a great many good ornamental shrubs that are very appropriate for planting in the home grounds, but, as with the trees, only a few will be named here. In small grounds only small shrubs should be planted, while in large grounds the larger-growing shrubs can be more liberally used. Of the lilac, *Syringa vulgaris* and *S. Persicum* are the most common. *Philadelphus coronarius* (mock orange) has a very strong-scented, creamy flower. *Philadelphus tomentosus* is later. *Philadelphus Gordonianus* has a large stiff bush and flowers last of all. Among the honeysuckles are *Lonicera tartarica*, which has white and pink flowers and later in the summer forms yellow and red berries. *Lonicera fragrantissima* has very fragrant flowers; the leaves are stiff and leathery and are retained often nearly all winter. *Lonicera Halliana* is a slender vine; the flowers are creamy white and fragrant and the leaves are nearly evergreen. *Barberry*, or *Berberis vulgaris*, has flowers in racemes which are attractive in spring, while the scarlet fruit is attractive in the fall. *Spiraea* are excellent shrubs, good for screen as well as flowers. *Spiraea Thunbergii* is the earliest. *Spiraea Reevesiana* is white, produces an excellent bloom and is late. *Spiraea Van Houttii* is very popular, blooms about the first of June. *Deutzia gracilis* and *Deutzia crenata flora plena* are very compact shrubs with close spikes of very attractive flowers. The rose we are all acquainted with. It can be grown nearly everywhere. It should have a rich, heavy soil, such as a clayey loam. Its roots are strong and it likes a soil in which they can entrench themselves firmly. I will name only a few varieties. Among the old varieties are the Province and Damask—both good. The June bloomers are the Persian, yellow; George the Fourth, crimson; Madame Plantier, white. The popular class of roses are the hybrid perpetuals; yet none of them can be called perpetual bloomers, because there is but one profuse crop; but if, after the first crop is off, the shoots are cut back and the soil enriched and given plenty of water, a fresh and vigorous lot of branches will be sent out, and these will give a very good crop the entire season. This class of roses must be protected in winter. Examples of these are the Alfred Colcomb, red; Baron de Bousletten, dark crimson; General Jacqueminot, crimson. The moss rose is a very pretty rose when in the bud. Examples of these are, Blanche Moreau, white; Henri Martin, red; Princess Adelaide, pink. The most popular climbers are the Baltimore Belle, bluish white, and the Ramblers, crimson and yellow.

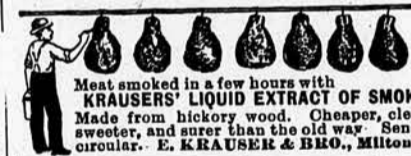
### FLOWER BEDS.

The flower beds should be considered next. Never put a flower bed in the sharp curve of a drive or walk, in the triangle formed by the union of walks, in a circle made in a drive for turning, in the middle of a large patch of lawn, nor in a group of high-growing trees. The bed should be outlined so as to be agreeable to the eye. This depends somewhat on location and surroundings. Carpet beds should be placed where large spots of livid color do not strike too loud a note in the general effect of the grounds. Place them inside of nooks. It is pleasing to happen into a nook of

blooming plants and bright foliage. Place a few beds near the house, where they can be seen from the windows and verandas; also where they will blend with clumps of shrubbery near the walks. The bed should be in proportion to the size of the plants to be used; the highest should be in the center of a bed that can be viewed from all sides, sloping toward the outside, where the lowest should be. Place the flower beds among the shrubbery near the buildings, but not on the open lawn patches, unless near straight or very gently curved walks. Where a large bed is placed near a building or clump of shrubbery the large plants are usually placed near the back, with smaller ones toward the front, although in some cases it is admissible to place the larger plants pretty well toward the front as well as back, making a valley of small plants between the clumps of larger ones. It might be well to name a few of each kind of plants used in bedding, such of the annuals as the Phlox Drummondii, petunias, nasturtiums, asters, candytuft, mignonette, lobelia, pansies and balsams. Among border plants are Aquilegias, Campanula or harebell, Delphinium or larkspur, and digitalis or foxglove. Bedding plants are the geraniums, heliotrope, lantana, verbenas, coleus, Acharanthus, Alternanthera, and Centaurea. For center and back plants, Richinus, caladiums, cannas, and Musa ensete or banana plant, are very good.

Hardy bulbs should have a place in every flower garden. They are grown in geometrical beds and figures, and also in the border. The soil for bulbs should be rich, light and well drained. They should be planted in October or November and mulched during the winter. There are the narcissus, which are divided into daffodils, poet's narcissus, and jonquils, each with numerous varieties; also hyacinths, crocus and tulips are among the best and most popular hardy bulbs.

Dr. Bull's Cough Syrup is sure to cure ineluctant consumption. This remarkable remedy will stop the wasting away of the patient, and in a short time effect a cure.



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







# KANSAS FARMER

ESTABLISHED IN 1863.

Published Every Thursday by the

## KANSAS FARMER COMPANY.

E. B. Cowgill, Pres. J. B. McAfee, Vice Pres.  
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E. B. COWGILL, Editor.  
H. A. HEATH, Advertising Manager.

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Display advertising, 15 cents per line, agate (fourteen lines to the inch).  
Special reading notices, 25 cents per line.  
Business cards or miscellaneous advertisements will be received from reliable advertisers at the rate of \$5.00 per line for one year.  
Annual cards in the *Breeders' Directory*, consisting of four lines or less, for \$15.00 per year, including a copy of *KANSAS FARMER* free.  
Electros must have metal base.  
Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.  
To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.  
All advertising intended for the current week should reach this office not later than Monday.  
Every advertiser will receive a copy of the paper free during the publication of the advertisement.  
Address all orders—  
**KANSAS FARMER CO., Topeka, Kans.**

A subscriber inquires: "Will it kill alfalfa to burn off crab-grass the second year?" Answers from those who have had experience will be appreciated.

A farmer in the central part of the State raises the following pertinent inquiry: "What is the matter with Kansas nurserymen, that they don't advertise? One setting trees wants Kansas trees, but, really, it is hard to find where they can be had."

W. E. Bolton, formerly of Kansas, now of Woodward, Okla., has, with characteristic largeness, sent out his invitation to everybody to attend the fifth annual convention of the Oklahoma Live Stock Association, to be held at Woodward, February 14 and 15. The program pre-figures a valuable meeting and a good time.

The author of the invaluable paper entitled "What I Know About Alfalfa," which appeared in the *Kansas Farmer* of January 26, is Mr. H. D. Watson, of Kearney, Neb. There are several Watsons in Kansas and Nebraska, and they are all successful with alfalfa. Unfortunately, in publishing Mr. H. D. Watson's paper we got his initials reversed, and now he is overwhelmed with letters addressed to D. H. Watson, who is also a good alfalfa grower, but lives in Kansas instead of Nebraska.

The proposition to have Kansas represented at the Paris Exposition, emphasizing her agricultural characteristics, and that in this she join with other States in educating the old world as to the food value of her products, and especially her corn, with a view to widening the markets for her surplus, is a good one. The further proposition to make Secretary Coburn the commissioner for Kansas is exceptionally fortunate. Mr. Coburn may not be good for everything, but he is the most efficient agricultural secretary in the United States. To place him in charge of Kansas' exhibits at Paris would insure the faithful and efficient execution of the purposes of his appointment.

The United States Senate, on last Monday, ratified the treaty with Spain. This extinguishes Spanish sovereignty in Cuba, in Porto Rico and in the Philippine archipelago. The further purposes of the United States as to Cuba and Porto Rico are well defined along the line of making Porto Rico a possession of the United States and assisting Cuba to establish a stable republican government. Much division of opinion exists as to what ought to be done with regard to the Philippines. There is a strong sentiment in favor of making them colonies of the United States, much after the plan of the British colonial possessions. Almost equally strong is the sentiment that this country ought to be guided by the fundamental principle of the Declaration of Independence, that governments derive their just powers from the consent of the governed. This sentiment would be fairly well satisfied with a course as to the Philippines similar to that determined upon for Cuba: The Filipinos themselves seem determined to erect for themselves a republic. The ratification of the treaty clears the way for consideration of the Philippine question. This question is becoming so prominent as to threaten a new alignment of parties.

### "THE AMERICAN SUGAR INDUSTRY."

The *Kansas Farmer* has received from Herbert Myrick, the author and publisher, an elegant volume on the "American Sugar Industry." The subject is taken up by divisions and is treated in a lively manner that is sure to interest the reader. Part I. is devoted to "Economics of domestic sugar production." Most authors, in treating of economic subjects, launch forth boldly into figures. Few have the rare ability possessed by Herbert Myrick to make figures interesting. In the second paragraph of this part of the book, he says: "The value of the sugar imported into the United States averages about \$100,000,000 each year. The quantity doubles every fifteen years." Thus in a succession of breezy sentences Mr. Myrick compares this great sum with the amounts realized from some of the larger agricultural exports from the United States.

Branching off into a consideration of what the sugar industry means to the United States, the author considers 1,720,000 long tons of sugar as a fair average importation, and finds that to produce this quantity would require 920 factories, each working 350 tons of beets during a campaign of one hundred days of twenty-four hours. The area of beets required is figured at 2,000,000 acres. The yield is estimated at 10 tons per acre, and this easily gives 20,000,000 tons as the quantity of beets the farmers are to be lucky enough to sell. He continues: "At only (?) \$4 per ton for beets delivered at the factory, the farmers would receive \$80,000,000 for this new crop." This is superb. One hundred million dollars worth of sugar, the finished product, and the farmers to get four-fifths of it for the raw materials! The magic of Herbert Myrick's figures is charming. But there are more to follow. The laboring man and the furnisher of materials aside from the beets, are to have a benefit. There is to be paid to these a snug sum of \$45,000,000 annually. Thus for the \$100,000,000 worth of sugar now imported the magic of the author's figures will give to the farmer, the laborer and the other fellow:

For beets.....	\$ 80,000,000
For labor, etc.....	45,000,000
Total.....	\$125,000,000

But this is not all. There are to be erected 920 factories, at a total cost of over \$300,000,000. Thus the capitalist is to be accommodated with an investment for his money. The author does not estimate the interest on this vast sum, nor the amortization account, nor the share of the promoters, nor the profits of the stockholders. If they are to be figured on the liberal scale used in estimating the farmers' and the laborers' shares of this \$100,000,000 of sugar money; and if it be remembered that the promoters, the bondholders, the stockholders, etc., are not likely to go into the sugar business solely on account of their health, and that Old Time is sure to take his pay out of the investment every year, it will be found that an allowance of 20 per cent for all these will really be less liberal than the portions set apart for the farmer and the laborer. The account will thus stand:

DR.	
Farmers for beets.....	\$ 80,000,000
Laborers and others.....	45,000,000
Capital, amortization, etc.....	60,000,000
Total.....	\$185,000,000

CR.	
Sugar.....	\$100,000,000
Deficit.....	\$ 85,000,000

No doubt the magical wand can dissipate these ugly millions by which the balance sheet tells the wrong story; but the writer hereof possesses no such wand. Until these figures can be made to vanish, and the "Economics of domestic sugar production" can be relieved of their stain the subsequent glowing descriptions of sugar factories, of beet farming, of progress in American sugar industry, will fail to interest the reader to the extent that their literary merit demands.

But the second chapter of the book is elegantly embellished with interesting figures, as shown in the following table, which looks well, near the middle of page 7:

	United States.	West Indies.	East Indies.	Hawaii.
Yield of sugar per acre, tons	1 1/4	2 1/2	2 1/2	4
Cost of sugar per ton.....	\$75	\$40	\$20	\$35

The author follows these figures with the following statement:

"This is a fair mean under average conditions, though the yield for the United States may be criticised as too high and the cost too low. On the other hand, experts will claim that the tropics can produce more sugar per acre and at less cost."

"Quite likely the latter is true, for only on this basis can an explanation be

found for the momentous increase in imports into the United States of sugar produced by the yellow races—from 250,000 tons in 1892 to 600,000 tons per year. And this while Cuba's industry was almost prostrated by war.

"The enormous profits in the Sandwich Islands are due in part to the marvelous productivity of Hawaiian plantations. The Ewa boasts of having produced an average of 8 1/2 tons of raw sugar per acre in 1896, or four times the largest yield ever reported from Louisiana cane or California beets. Reports of the Ewa, Hutchinson and other plantations give the cost of production at from 1 1/2 to 2 cents per pound, compared with 3 and 4 cents as the cost of making raw sugar from cane in Louisiana or beets in California or New York after the industry is well established. The enormous increase in the Hawaiian sugar industry, the immense plantations that are being developed and the preparations now on to double and triple the sugar output of those islands, are now matters of common notoriety, that have already attracted a saturnalia of speculation.

"Cuba has practically unlimited possibilities for sugar production. Porto Rico, though comparatively small in area, can, on a conservative estimate, produce almost as much as the total yearly production of the United States! The Philippines possess sugar potentialities of unknown extent."

In reciting the sentences here quoted, Herbert Myrick dropped the jubilant tone which characterized his recitation of the figures quoted in the earlier part of this notice. He seems to consider the facts stated in the latter quotations as doleful harbingers of evil, as if one should have discovered that from and after a certain event the people of the United States should no more eat sugar, neither candy, nor should they have molasses any more.

If the sugar-producing capabilities of the East Indies or the Philippines are so generous that they will furnish us a whole long ton of sugar for \$20 there is nothing doleful about it to the man who produces bread and meat and buys his sugar.

But Mr. Myrick's book is superbly illustrated with pictures of sugar factories, both exterior and interior views, pictures of plows and other implements used in the production of beets, pictures of beet fields and of individual beets, pictures of beets in silos, and of beets on railroad cars, pictures of laborers in beet fields and of Claus Spreckles and other promoters. It is an interesting book, and if one could only get beyond some of the figures in the first chapter, it would be a valuable as well as enthusiastic presentation.

While the United States Senate was yet undecided as to the ratification of the treaty by which Spanish sovereignty was extinguished in the Philippines, the native soldiery attacked the forces of the United States at Manila. A twenty-four hours' battle ensued in which the desperate bravery of the Filipinos made but slight amend for their lack of arms. With a few fire arms, supplemented with bows and arrows, their great numbers made them no match for the well-equipped soldiers of the United States. They did, indeed, kill a few of our soldiers and wounded some more, but the slaughter on their side is reported at thousands. Whether our handling of the Filipinos is to resemble that of the Indians of North America, it is perhaps too early to predict. The aggressiveness of the Anglo-Saxon race is, however, an element to be reckoned with. Possibly the inhabitants of the eastern archipelago will prove amenable to influences of civilization, and will live and intermarry with the immigrants who are sure to come to their shores. Possibly some upheaval in the world will stay the onward march of the Anglo-Saxon, and leave the Filipino to work out his own destiny. More likely, however, he is to be crowded out of his islands by the stronger race.

H. M. Cottrell, professor of agriculture, Manhattan, writes the *Farmer* as follows: "Replying to the query of your Oklahoma correspondent, I will say, that we regard ensilage as one of the very best feeds for the dairy cow. We have not been successful in feeding it to horses, although a few horse raisers report satisfactory tests with it. Our horses respectfully decline to eat it."

Red clover and orchard grass make a good mixture because they both ripen at the same time and may be cut for hay at the best stage of growth.

Knowing just what everything costs, its value and its price in market, can only be determined by the farmer keeping an account of all his transactions and by comparisons of the account each year.

### Free Rural Mail Delivery and Postal Savings Banks.

By Col. T. W. Harrison, read before the Berryton Farmers' Institute, February 2, 1899.

Nations are aggregations of people living under acknowledged or agreed forms of government. There are two kinds of government, one asserted by conquest, where the power is lodged in the ruler and comes from him down to the people, and the other formed by association, where the power rests with the people and goes from them up to officials whom they choose to exercise control. In the one case the right to govern rests with the ruler, in the other that right rests with the people. The former is a monarchy, the latter a republic.

Our government is a compact or agreement for mutual protection and association. The constitution and laws made thereunder form the contract which is the basis and strength of our government. The people simply organized and agreed upon this contract for the general good. The people pledged to this compact, called the government, allegiance, loyalty and support. And this unity of interest, called the government, embodied a pledge from all the people to each and every portion of them for protection, assistance and equal rights. Nations, like cities, grow and expand and increase in population and power. When they are young and weak they are nurtured and upheld by the people, and when they get large and populous and powerful the necessities of the people increase and they need more and more the equalizing protection and assistance guaranteed to them by their compact of government.

When a city is quite small, the people do not require city waterworks or city lights or telephones or street cars or paved streets, but as the city grows in population the necessities of the people demand all these things, and the city government must exercise its power to furnish or procure to be furnished all these conveniences for the use of the people.

When a nation is small in population, the needs of the people are not great and they require but little assistance from the government for equalizing and distributing the necessities and conveniences which contribute to their prosperity and happiness. But as the population increases, some of it in densely congested cities and some in thickly populated rural districts, the necessities of the people also increase and they require more and more the exercise of that power which they have lodged with the government to be used for the general good.

The people's compact with our government is to form a more perfect union, promote the general welfare and secure the blessings of liberty to ourselves and our posterity. By that mutual contract the people not only formed our government and gave it the power, but also placed upon it the direct and positive obligation to promote the general welfare and secure the blessings of liberty to all the people. This obligation excludes the idea of favored classes or specially favored localities. The true function of government is not only to protect and perpetuate itself, but also to promote the welfare, prosperity and happiness of all the people. In the exercise of this function the power of the government should obviously be most used where it is most needed.

The wealthy and powerful classes are best able to care for themselves. The government has given them the opportunity and protection that has enabled them to become wealthy and powerful. But the great masses of the common people, while enjoying and fully appreciating the protection of the government, have not equal facilities for supplying themselves with the conveniences and necessities of this progressive age. Hence the equalizing power expressly lodged with the general government should be freely used to better the condition and improve the happiness of the common people. The same facilities afforded to the wealthy and strong should, so far as applicable, be accorded to the masses of the common people.

Free mail delivery has been furnished in cities for many years. In cities, not only the people, but the wealth, is concentrated, and the people are better able to supply themselves with this convenience than are the people in the rural districts. In some respects the necessities for this service may be greater in the cities than in the country, but in many other respects they are not so great.

The successful farmers of to-day must necessarily be studious, thoughtful, reading men and women. They must not only use muscle, but brains, in their business. The idea that "any fool can farm" was born in the backwoods of obscurity and indolence; it died in its in-

fancy from poverty and starvation and was buried in the rubbish of cast-off ignorance and failure. It requires more skill, wisdom, and industry to successfully manage a farm and get the best results from it than it does to run a national bank. The competition of the bank is local, but the competition of the farmer is world-wide.

The banker has free mail delivery every hour in the day and instant service of telegraph and telephone at his command. The farmer must drive from 5 to 10 miles to town for his mail, which he cannot do oftener than once a week, for he loses the best part of a day in going and returning. The banker works six hours a day and has abundant time for reading and planning his work. The farmer has to work sixteen hours a day and must do his thinking and planning while working in the field or doing his chores. We are not complaining because the banker has too much paternal encouragement and protection, but because the farmer has too little. The banker has other people's money to work with, but the farmer must work with his own or none at all, and more often the latter. The banker has the public paid police to guard his place of business and his treasure, while the farmer must watch his own hen-roost and smoke-house or go without ham and eggs for breakfast. The banker fixes the prices at which he does his business, but the farmer is obliged to submit to prices fixed for him by others at both ends of the line—on what he has to sell as well as on what he has to buy. The farmer pays more than his just proportion of public taxes, for everything which he owns is in sight and nothing escapes the eye of the vigilant assessor, while bankers and business men have various and devious ways of eluding the assessor and escaping taxation. The farmers pay more than their proportion of public taxes and receive far less than their just proportion of the public service.

Free rural mail delivery would be one step towards a fairer distribution of the public service for the benefit of farmers. It would simply be giving to farming communities what the cities have had for many years. Public sentiment is now demanding this added service on the part of the government.

The way in which it should be done is a mere matter of detail, which can be easily solved and worked out by so fertile and resourceful a government as ours. In thickly populated localities it should be done with a light mail wagon drawn by two horses, something like a small traveling postoffice, with which mail could be distributed and gathered and money orders and stamps sold. In more sparsely settled localities it could be done on horseback, with suitable saddle bags and mail pouches.

Every farmer would stand ready to protect his mail service from robbers and mail robbing would be far less frequent in the rural districts than train robbing on the railroads, for every farmer would be a minute-man to protect his free mail delivery, and the impossibility of escape would impel the bandit to let the farmer's mail wagon alone. The principle once established, the genius of our government would readily devise ample ways and means for putting it into effective service, that would give to the rural districts their fair share of free and rapid mail delivery.

Postal savings banks form another subject that is now demanding public attention. They would be banks of deposit for the common people. The common people who accumulate a little surplus money want some place to deposit it that is easily accessible to them and where the responsibility and security would be as unquestionable as the government under which they live. Their little hard-earned savings are more important to them than thousands of dollars are to the millionaire, and they cannot afford to deposit them where there is any risk whatever. They would rather hide their money away at home and run the risk of thieves, burglars and fire than to deposit it in a bank that might possibly fail. And they know that banks do fail, hundreds of them every year, and the failure is not publicly advertised in advance, but comes like an earthquake and swallows up the deposits of the common people, who have no friendly tip of warning to enable them to withdraw their money. They would rather take a lower rate of interest from the government and know that their money is absolutely safe and always available when needed. Postal savings banks would not only be beneficial to the common people, but also to the government as well. Our government is paying interest ranging from 3 to 5 per cent per annum on more than a million dollars in bonds. The lowest rate of interest it pays is to our own people on the popular loan that was made during last year, and the fact that

seven times the amount of the loan offered was quickly subscribed and that these 3 per cent popular loan bonds have rapidly advanced to 7 per cent premium, shows how willing the people are to entrust their money to the government. Through the medium of postal savings banks the greater portion, and probably all, of this bonded debt could be carried by our own people at not to exceed 3 per cent interest per annum without any gold clause or commissions to wealthy syndicates. The interest would be paid to our own people and kept at home to add to the wealth of our own country instead of being sent abroad to enrich the wealthy nobles of foreign lands.

The method for doing this is also a mere matter of detail that the genius of our government would be amply able to solve.

The postoffice is accessible to the common people. They go there for their mail and are familiar with its methods and have absolute faith in its security. The postmaster is their neighbor and their servant, one of the common people himself, and they would gladly deposit their savings, large or small, in the postoffice where they send and receive their mail. The government would have no lack of funds, for the people would have no lack of confidence. This system would call into active use money that is now hidden away and is not earning anything and would not be deposited in the banks that now exist.

The strongest nation is that which has the strongest government at home, and that government is strongest at home which has the fullest confidence and support of the great masses of the common people. And that government has the greatest confidence and support of its common people which protects them best from oppression, military, monetary or political, and gives them the greatest opportunity for the pursuit and acquisition of that prosperity which brings contentment and happiness to man.

#### Publishers' Paragraphs.

We desire to call attention to the advertisement of John F. Dayton, Nurseryman, of Waukon, Iowa, contained in this issue. Mr. Dayton is one of the largest growers of plants and fruits in this country, and offers stock of the best quality in great variety at low prices.

In these days of overproduction, many people are looking about for an investment that will pay. One industry is certainly not overdone—raising poultry and eggs for market. Success with poultry is easy if you know how. Therefore the best investment a poultry raiser can make, is one dollar for a year's subscription to Farm-Poultry, which teaches how to keep poultry for profit. A sample copy of Farm-Poultry can be obtained free by any of our readers who apply to I. S. Johnson & Co., Boston, Mass.

The modern way of doing business—that is, direct dealing between the manufacturer of an article and the user of it, has been successfully applied to carriages, harness and horse accessories by the Columbus Carriage and Harness Company, of Columbus, Ohio. This company has built up a great business by making first-class articles and selling them direct, saving the purchaser the profits of jobbers, wholesalers and dealers. One profit instead of three or four is added to the cost of making a carriage or harness, and anyone can judge how decided a saving this causes by looking through the catalogue, which the company will send to anyone contemplating a purchase.

There is genuine pleasure in reading the 50-page catalogue of R. H. Shumway, of Rockford, Ill., on vegetables and flowers, which he calls his '99 Illustrated Garden Guide. Each page is full of illustrations of the most tempting sort, teaching the large and small grower for profit or pleasure, what to use for seed and how to order intelligently, valuable information that every gardener and householder needs to know. The postage on this year's issue of the Garden Guide is itself six thousand dollars, besides the thousands it costs to issue the book, yet it is sent free to all who write for it. We advise our readers to send their names for this handsome and worthy book, whether their garden wants are many or few. Their advertisement appears elsewhere in this issue.

Sticking closely to one thing at a time is one of the causes of the success of the Harrison's Nurseries, at Berlin, Md. They are very favorably located for growing peach trees, no trace of San Jose scale or yellows having ever been found in the county, and by skillful attention to this specialty they have grown and sold millions of trees which have delighted grow-

ers by their sturdy healthfulness and freedom from insect pests. The strawberry plant business is conducted on a separate farm, under the personal supervision of a member of the firm. They fill orders for strawberry plants from one million down to half dozen lots. Asparagus plants have received the same particular attention and have become quite a specialty with this nursery. Their new catalogue will be sent to anyone who writes for it.

Our readers will notice the advertisement of Montgomery Ward & Co., Chicago, in this issue. They are the originators of the catalogue business, and the largest concern of the kind in the world. They started in business twenty-seven years ago, at that time employing one man and a boy. Their business has grown so phenomenally that at the present time they have 1,500 employees, own and occupy buildings which give them 15 acres of floor space, carry a stock of goods representing \$1,500,000 in money, and sell everything direct to users that they eat, use or wear. They attribute their great growth to the fact that they always do as they promise—that they never sell shoddy, fire sale or second-hand goods, and that in making a sale they place themselves in the same position as if they were the buyers, and not the sellers.

The February number of the New England Magazine contains a third and final article on "Negro Melodies," by William E. Barton, D. D. The first, which appeared in the December number, contained the older plantation songs; the second, the songs which show the influence of the war and of the new freedom which it brought to the slave; and the third concerns itself principally with the newer songs which have grown up or been modified by new use since emancipation. The articles embody the words and music of nearly seventy of the best of these songs, most of them till now unpublished. Some of these newly published songs are equal to the very best hitherto in print, and all are of interest. It is the largest "find" of this character since the publication of the original collections of Fisk and Hampton, and one which students and compilers of these songs will certainly use in future books of this sort. The historical and descriptive notes are gossipy and instructive. Warren F. Kellogg, 5 Park Square, Boston, Mass.

In our advertising columns will be found the advertisement of Whinery's Swine Advocate, Salem, Ohio. This publication has advanced rapidly and is making a strong bid for popular favor. One new feature is the publishing of two editions, an Eastern and a Western. It is proposed to make the Western edition as desirable for Western breeders and feeders as it would be possible to have it if it was published and mailed west of the Mississippi. They announce premiums for February subscription contests amounting to \$610. They have been putting up quite a lot of fine pigs each month for the subscribers and friends to work for, and 51 pigs with two sows held as sweepstake prizes, to the largest clubs, is the quota for February. Among the list of awards already made this winter, 4 pigs and sweepstake sow went to Arkansas, 2 pigs to Texas, 2 to Kansas, 2 to Minnesota, 3 to Illinois, 1 to Iowa, 1 to Nebraska, 1 to British Columbia, balance of Eastern and Southern States. They give the December, January and February numbers free to all applicants. Read their advertisement and write for particulars.

In advance of the coming planting season the seedsmen and nurserymen are now sending out their spring catalogues. One of the best of these, and the coming of which is of great interest to gardeners all over the country, is "Burpee's Farm Annual," issued by W. Altee Burpee & Co., Seed Growers, Philadelphia, Pa. It is of convenient size, finely illustrated, neatly printed and full of interesting information. The present issue has been greatly enlarged, the added space being devoted to giving cultural directions and useful planting tables. A large number of new and improved varieties of both vegetables and flowers are offered, noticeably the first of a new race of bush sweet peas, having the freedom of bloom and large flowers of the tall sorts, but growing only fifteen inches high, and does not require support. This is beautifully illustrated in a colored plate. A new feature of the catalogue is the offering of special premiums, at every State and county fair, for the prize products grown from their seeds; that is, to still further introduce the merits of Burpee's seeds, the firm will duplicate the prizes of any State agricultural society if the premium is awarded to specimens grown from seeds purchased of them, together

## Good as Five Cows.



A Little Giant Separator will increase a dairy herd by 25 per cent. In a herd of twenty dairy cows it will give the farmer as much butter as five of his cows. Without the separator that butter would be wasted in the skim-milk. Think about this carefully and then send for special circulars.

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

with special cash prizes for the best displays of garden products from Burpee's seeds. A request on a postal card will bring you a copy by return mail.

Tools may come and tools may go, but there is one standard implement that hold its place on the farm. The Acme Harrow still remains the best implement for finishing up the average plowed field for seeding. It packs, crushes, levels, crumbles, drags and smashes, turns and twists the soil and leaves it just right for the seed-bed. We consider it a remarkable fact that no one has yet been able to devise a tool that will do this peculiar work better than the Acme. During the past year we have used it for following the Cutaway and plow, for covering small seeds and for covering potatoes and corn, and it has also taken the place of a roller. It is certainly a grand tool. It is manufactured by Duane H. Nash, Millington, N. J., who will send you circulars and full description. Look it up.—Rural New-Yorker.

"Important Announcement" is the head-line of an advertisement appearing in our columns of the old-established seedsmen and florists, Peter Henderson & Co., 35 and 37 Cortland street, New York. This announcement is to the effect that this firm no longer supply their seeds to dealers to sell again, so that to procure the famous Henderson seeds the same must be purchased from them direct. Their advertisement also offers their annual catalogue, entitled "Everything for the Garden," which is in reality a book of 190 pages, containing over 700 engravings and 6 superb colored plates. This catalogue will be sent to all who send 10 cents in stamps to cover the cost of postage and mailing. In addition to the catalogue, this firm, wishing to trace the result of their advertising in different papers, will send to all who state where they saw the advertisement a trial collection of 6 packages of choice vegetable and flower seeds, contained in a red envelope, which when emptied and returned with an order from catalogue will be accepted as 25 cents in part payment. We advise our readers to avail themselves of this unusually liberal offer, as we feel confident that its terms will be faithfully carried out.

The old maxim that "a dollar saved is a dollar earned" is no less true to-day than when it was first uttered. If this statement is true—and we believe that it is—it necessarily follows that the best way to make money is to save money. Take the matter of farm fencing for instance. Granting that the time is past when timber or lumber of any kind can be profitably employed in fences, and that the period of modern woven wire fencing is here to remain permanently, the only problem confronting the farmer is the selection of the fence he shall use. There are numerous good fences on the market, and in the main there is no material difference in the price. If, however, you can build an equally good or better fence than any of them, yourself, and save money in the operation, why not do so? There are reliable machines for building fence by hand at less than half the cost for the manufactured article. Why not use one of these and save that 50 per cent? This is where our original proposition applies. A very good machine of this class is the Duplex Automatic Fence Machine, manufactured by Kitzelman Bros., at Ridgeville, Ind. Write them for circulars, prices, etc., and look into this matter. It may be the means of saving you much money.

#### TO CURE A COULD IN ONE DAY

Take Laxative Bromo Quinine Tablets. All druggists refund the money if it fails to cure. 25c. The genuine has L. B. Q. on each tablet.

While it is an advantage to have everything in readiness so as to sow oats at the first opportunity, there is no advantage in attempting to sow when the soil is too wet to work readily into a good condition.

Horticulture.

MONEY IN ONIONS.

By H. W. Buckbee, Rockford, Ill. How to raise onions successfully is a question I am asked thousands of times every year...

CHARACTER OF SOIL.

A fine crop of onions can be grown on any soil which will produce a good crop of corn, unless it be a stiff clay, very light sand or gravel...

FERTILIZING.

There is no crop where a liberal use of manure is more essential than in this. Even on the deep, black muck lands of the great West, manure is essential to a good crop...

PREPARATION OF THE SOIL.

This is one of the main points: Remove all refuse of previous crops in time to complete the work before the ground freezes up, and spread the composted manure evenly...

SELECTION OF VARIETIES.

Of course, this is a question that always leads to much discussion, but my experience of over twenty years has brought me in touch with nearly all the known varieties of onions...

For fancy market varieties, or to grow for prize exhibitions, fairs, etc., I would advise planting "The Three Giants"—Buckbee's Red Giant, Genuine Prize-taker and Mammoth Silver King...

In most localities the white varieties find ready sale, and I would advise that a small portion of your field be set aside for Large White Globe, New Silver White Skin or White Portugal.

The preferable varieties for growing on sets are Round or Yellow Danvers

and Yellow Strasburg, the former variety being the most popular.

The best pickling varieties are found among the following sorts: Buckbee's Extra Early Combination, Extra Early New Queen, White Globe and White Portugal, the first named variety being in the greatest demand.

SOWING THE SEED.

This should be done as soon as the ground can be gotten ready, and can be done best by a hand seed drill (after trials of many seed drills, I find the Iron King the preferable).

CULTIVATION.

Give the onions the first hoeing—just skimming the ground between the rows—as soon as they can be seen the length of the row. (We find the McGee cultivator the best by all odds).

GATHERING.

As soon as the tops die and fall, the bulbs should be gathered in windrows. If the weather is fine they will need no attention while curing, but, if it is not, they will need to be stirred by simply moving them slightly along the row.

KEEPING ONIONS THROUGH WINTER.

One of the most popular methods of keeping onions is to spread straw to the depth of 13 inches upon the barn floor, scaffold or garret; upon this spread the onions 6 to 10 inches deep and cover with 2 feet of straw.

A cool, dry cellar of some outbuilding, barn or carriage house, will be found excellent for keeping onions, if it has windows for ventilation. The cellar of a dwelling house is usually too warm.

TO GROW ONIONS FOR PICKLES OR SETS.

Use good ground, prepared as above, and sow the seed very thick in broad drills, 40 to 60 pounds per acre.

Thorough preparation of the ground, careful sowing and the best of after culture will avail nothing unless seed of the best quality be sown. Given the same care and conditions, the product from two lots of seed of the same variety, but from different growers, may be so unequal in the quantity of merchantable onions that the good seed would have been the cheaper at ten times the cost of the inferior.

I shall be pleased to give the readers of this article any further information desired. There is always good money in growing good onions.

Horticultural Notes.

The Japanese wineberry has proved to be worthless as far as profit is concerned.

One of our largest and most productive early black-cap raspberries is the Eureka. It is now being planted in preference to the Tyler, Souhegan, Palmer, and Ohio.

My experience in the fruit-growing business is to go slow on high-priced novelties, unless you have plenty of money that you don't know what to do with; but if you do try them, grow a quarter or half dozen to test their merits.

Blackberries should be set at least 3 1/2 to 4 feet apart in the row and the rows not closer than 7 feet apart. The re-

sult will be larger berries and much more easily picked. For the latter reason some growers set the rows 8 to 9 feet apart and 4 feet in the row.

A proper selection of varieties, good ground, and good culture are necessary to the best success in growing small fruits. Yes, I might say, a good market too; but if a nice grade of fruit is raised the market problem is easy.

If the old canes have not already been cut out of the raspberry hills, no better time can be found to do it than on the first pleasant days. If left in the hills too long, my experience is that it is a detriment to the permanency of healthiness in future canes.

I prefer prairie or marsh hay for a mulch for strawberries, as there are no weed seeds in it to make it bothersome in picking time, when the women pickers have to get through the dewy weeds if they pick early in the morning, which generally has to be done in order to get the fresh berries off to the early market.

Editor Kansas Farmer:—A half-inch of mulch scattered evenly over the strawberry bed, even where the plants do not have, will be of advantage when fruiting time comes, in holding moisture, keeping the berries clean and causing them to have a more beautiful gloss, which is a great help in creating a demand for your fruit.

These long winter evenings furnish a good time in which to plan for a good garden the coming summer. A good resolution right here is, to say that you intend to have a better garden the coming season than at any time in the past if right planning and a good determination on your part will do the work. Yes, and when we come to think of it, plenty of vegetables and small fruits in their season help out on the "economy" line considerably. CHAS. C. NASH. Three Rivers, Mich.

When you are out of sorts, feel tired, languid and dull you need Hood's Sarsaparilla. It will brace you up and give you strength and energy, vigor and vitality.

Hood's pills are the best family cathartic and liver tonic. Gentle, reliable, sure.

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

HIGH GRADE FRUIT TREES. THEY COST NO more than the other kinds. They yield better and more fruit. My trees were examined by our State Entomologist and are free from disease.

TREES! Apple, Peach, Japan Plum, Cherry, and a full line of Fruit Trees, Grape Vines, Small Fruit Plants, Evergreens, Roses, at low prices. Address: J. F. CECIL, Nurseryman, North Topeka, Kans.

ARTICHOKEKES THEMSELVES prevent Cholera. No. 1 for all Stock. Before buying send your and neighbor's "address" for FREE ESSAY on kinds, culture, yield (often 1,000 bu. p. a.) with prices and fruit rates to all points. Single bu. \$1. Melville Seed Farms, Box 5, Melville, Ill.

700,000 BERRY PLANTS FOR SALE. 700,000 My stock of old and the cream of the new Strawberries for 1899 is first-class. Also Raspberries, Blackberries, Gooseberries and Pear Trees. Send for price list. B. F. SMITH, Box 6, Lawrence, Kans.

1000 Rus. Merry \$1. Black Locust, Ash and Osage Hedge ABOUT SAME PRICE. 100 Apple, 3 to 4 ft. \$6. Cherry, 3 to 4 ft. \$14. Freestone Peach, \$2. Concord Grapes, \$2. WE PAY THE FREIGHT. Complete Catalogue free. Jansen Nursery, Jansen Jeff Co., Neb

COLUMBIAN WHITE Shoots white, remaining so as long as it for use; robust and vigorous. Nick Obama's latest new Strawberry; 10 varieties; Miller's Red Raspberry, the finest. Consult our budded list of peach trees—over 1,200,000 for sale. Catalogue free. HARRISON'S NURSERIES, Berlin, Md.

PURE-BRED SEEDS Of all kinds at WHOLESALE PRICES ... to farmers ...

VEGETABLE SEEDS, Well-filled packets, at 4 cents each of very best Seeds. Low price of Seeds in bulk. Send 2-cent stamp for postage for free sample packet of any VEGETABLE SEED you may select, and our prices and catalogue.

CHOICE IOWA SEEDS LEAD THE WORLD. We can save you money in buying, and make you money by planting our Seeds. Send to-day for free catalogue. Address: A. A. BERRY SEED CO., CLARINDA, IOWA

REID'S FRUITS Every tree, plant or vine bought at Reid's is well-rooted, vigorous, and true to name. Every care is taken in growing to insure absolute certainty to the buyer. Save one-half on anything you need in the nursery line, by buying at Reid's. We'll help you to choose by sending complete catalog, estimates, or any information you may ask for, free. REID'S NURSERIES, BRIDGEPORT, OHIO.

BURPEE'S Seeds Grow and are always the BEST THAT GROW! As proved by thousands of trials at our famous FORDHOOK FARMS—the largest Trial Grounds in America. BURPEE'S Farm Annual for 1899—mailed FREE to all. A handsome new book of 176 pages,—tells the plain truth about Seeds, including rare Novelties which cannot be had elsewhere. Beautiful colored plates and hundreds of illustrations from nature. Gives practical information of real value to all who would raise the choicest Vegetables and most beautiful Flowers. Write a postal card TO-DAY! W. ATLEE BURPEE & CO., Philadelphia

PLANTS THAT GROW. If you want all the tested new varieties as well as the standard old sorts in strawberries, I can suit you. I have 90 acres in strawberry plants. Strong, vigorous plants with big bunches of fibrous roots, absolutely free from disease. Can sell you A DOZEN OR A MILLION right fresh from the ground. No cellar or cold storage plants here. 32-page catalogue FREE. W. F. ALLEN, JR., Box 21, Salisbury, Md.

SEEDS Good and Cheap BEST in the world from 1 cent per packet up. Celebrated for strong and rapid growth. Postage paid. Large lot of extra packages free in every order. Oldest reliable seedsmen in the west. Send yours and neighbors address for prettiest large catalog ever printed. R. H. SHUMWAY, ROCKFORD, ILL.

BEST SEEDS ON EARTH! DIRECT FROM GROWER TO PLANTER. From Saginaw Valley Seed Gardens. Michigan Northern Grown Seed Potatoes, Vegetable, Flower and Field Seeds. Everything in Seeds at lowest prices. To introduce my superior Northern Grown Seeds everywhere, I will give away Absolutely Free as Premiums 1,000,000 Packets of Vegetable and Flower Seeds. Send your name and address to-day for my SEED BOOK which tells how to get THE BEST SEEDS FREE. Seeds that will grow. HARRY N. HAMMOND, Seedman, Box 26, Fifeield, Mich. FORMERLY, DECATUR.

BUY NORTHERN GROWN SEEDS FARM SEEDS Salzer's Seeds are Warranted to Produce. Mahlon Luther, E. Troy, Pa. astonished the world by growing 250 bushels Big our Oats; J. Bradley, 18 bushels, Wm. 173 bus. Barley, and H. Lovejoy, Red Wing, Minn., b g 220 bush. Salzer's corn per acre. If you do ..to them. We wish to gain 300,000 new customers nence will send on trial 10 DOLLAR WORTH FOR 10c. 10 pkgs of rare farm ds, Salt Bush, Rape for Sheep, the \$5000 Corn, "Big our Oats," Beardless Barley, Bromus Inermis—ing 7 tons hay per acre on 20 ac. soil, etc., "40c. Wh t," including our mammoth Seed Catalogue, t ling all about our Farm seeds, etc., all mail d you upon receipt of but 10c. postage, positively worth \$10, to get a star, 100,000 bbls. Seed Potatoes at \$1.25 p a bbl. 35 pkgs e ecta- tic seed., \$1.00 Catalog alone, 5c. No. 74

Free Sample. Of Vegetable Seed and Catalogue of the A. A. BERRY SEED CO., Clarinda, Iowa. Send 2 one-cent Stamps to pay postage, you selecting the variety of Vegetable Seeds. Catalogue tells all about Farm and Garden Seeds, and where you can get the best at the most reasonable prices. Leading varieties Corn, Oats, Wheat, Barley, and all kinds of Farm, Garden and Flower Seeds. Send to-day. CATALOGUE IS FREE. We want to do some business with you this year. We only ask a trial, and know that we can satisfy you. Address: A. A. BERRY SEED CO., Clarinda, Iowa.



Winter Protection of Peach Buds.

Press Bulletin Kansas Experiment Station.

The fact that peach trees produce a full crop only on occasional years has caused such little planting of trees in Kansas that good peaches are always scarce, and some years not produced at all in the State.

By splitting a bud longitudinally and examining the pistil, the small flask-shaped organ in the center, it is easy to determine whether the bud has been killed or not.

To insure a crop the buds must be matured in the fall before cold weather and kept dormant through winter and early spring.

To test results obtained in Missouri, trees of different varieties have been kept sprayed with whitewash containing milk and salt to cause it to stick longer.

It may be that the most practical means of bud protection has not been discovered, but at present the most promising is that of laying the trees to the ground in late fall or early winter and covering the tops with old hay or like material.

For best results, the orchard should be planted with this treatment in view. Very large trees can not be treated to advantage. When the trees are planted the large roots should extend east and west and those on the north and south removed.

For fear of late frosts, the mulching should not all be removed till the trees are in bloom, when the work of bees will be needed to aid in pollination.

If the work is all carefully done the operation will have no harmful effects on the trees. Taking it for granted that the life of the tree is shortened, this introduces no serious difficulty.

The cost of putting down trees and staking them up in spring will average two hours' work, or about 25 cents per

tree, a small expense for years when peaches can not be raised without some such protection.

Shawnee Horticulturists.

The Shawnee County Horticultural Society met at the State Society's rooms, February 2, under the leadership of President B. F. Van Orsdal. The following papers were read: "Economics in Horticulture," A. B. Smith; "How Shall We Train Our Girls for Home-making?" Mrs. J. G. Otis; "Nineteenth Century Horticulture, and What Will the Twentieth Century Bring?" William H. Barnes

It was decided to hold the picnic, or summer meetings, at the following places: May, Oak Grange hall, Mission Township; June, Ezekiel Marple's, Soldier Township; July, F. O. Popence's, Highland Park; August, A. L. Ensminger's, Silver Lake; September, J. S. Jordan's, Wakarusa; October, Garfield Park.

The next meeting will be held March 2, in the rooms of the State Horticultural Society.

Dr. Bull's Cough Syrup can be relied on. If you suffer from coughs, colds, hoarseness, bronchitis or other throat and lung affections, this old reliable remedy will cure you.

3,000,000 STRAWBERRY PLANTS.

Eighty varieties, old and new. The best plants we have ever grown at Lowest Prices. Raspberry, Blackberry and other small fruit plants. Write for catalogue. F. W. DIXON, Holton, Jackson Co., Kans.

Strawberry Plants!

5,000 Standard Sorts for \$6. XX Raspberry, Currant, Grape and other plants. The lowest prices when quality of stock is considered. C. C. NASH, Three Rivers, Mich.

STRAWBERRIES

\$1.75 a 1000 for standard kinds. Only New Zeda, Best Plant you ever saw. Raspberries, \$5. a 1000 Other fruits at like rates. Lists SENT FREE. JOHN F. DAYTON, WAUKON, Allamakee Co., IOWA.

DROP EVERGREEN TREES

Me a postal card and I will drive around and leave a price list of..... for sale, thrice transplanted, from one to five feet in height, price 10 to 30 cents each. No fall-dug, root-dried stock. A. W. THEMANSON, Wathena, Douglas Co., Kans.

FAIRBURY NURSERIES.

25 Cents FREE. We have a complete stock of choice Fruit, Shade and Ornamental trees, vines, shrubs, etc. All stock healthy, well rooted and sent to our customers true to name. Send your name on a postal card. Address C. M. HURBURN, Mgr., Fairbury, Neb. WE PAY FREIGHT.

Strawberry Plants

In large or small lots, grown from new fields especially for the plants. I keep only the Best and True to Name.

FRUIT TREES.

Apple, Peach, Plum, Cherry and Apricot trees, Grape-vines, Gooseberry, Currant, Blackberry and Raspberry plants.

Evergreens, Ornamental Shrubbery, Roses and Shade trees. Price List Free.

LITSON NURSERY, - Nevada, Mo.

Wild Flowers in California

are only one of the innumerable charms of that summer-land, which thousands of winter tourists find more delightful than the Mediterranean. Only 23¢ from Chicago by The California Limited, Santa Fe Route.

Address T. L. KING, G. P. & T. A., The Atchison, Topeka & Santa Fe Railway TOPEKA.

BLOCKS OF THREE.—Two new subscriptions for one year for \$2, and, in addition, a renewal for one year free to any old subscriber who sends two new subscriptions and \$2 in one order. Kansas Farmer Co., Topeka, Kas.

SWEET POTATOES Sent out to be Sprouted on Shares

No experience required. Directions for sprouting free with order. Also Vineless Sweet Potatoes for sale and on shares.

T. J. SKINNER, Columbus, Kas.

Our NEW SEED CATALOGUE of Garden, Grass, Field, Flower and Tree Seeds is now ready. You can have it for the asking. Don't delay. Send for one now. We also buy Sorghum, Millet, Alfalfa, Kaffir Corn, Jerusalem Corn and all other kinds of grass seeds and seed grains. If any to offer, please correspond with us. KANSAS SEED HOUSE. F. BARTELDES & CO. LAWRENCE, KANSAS.

WESTERN SEED AND AGRICULTURAL HOUSE.

One of the Best Equipped Seed Houses in the West. RECLEANED FIELD AND GRASS SEEDS, TESTED GARDEN AND FLOWER SEEDS, POTATOES AND ONION SETS, GREENHOUSE PLANTS, SHRUBBERY, ETC. HAND GARDEN CULTIVATORS, HAND SEED DRILLS, SPRAYING PUMPS, GARDEN TOOLS, BONE MILLS, ETC. Our 1899 SEED CATALOGUE is now ready. Write for it. PLANT CATALOGUE will be issued March 1st. MANGELSDORF BROS. COMPANY, ATCHISON...KANSAS.

BUCKBEE'S SEEDS SUCCEED! SPECIAL OFFER: Made to build new business. A trial will make you our permanent customer. Radish, 17 varieties; Lettuce, 13 kinds; Tomatoes, 11 finest; Turnip, 7 splendid; Onion, 8 best varieties—55 varieties in all. Guaranteed to Please. Write to-day and Mention this Paper. SEND 10 CENTS To cover postage and packing and receive this valuable collection of seeds Postpaid; together with my new, instructive and beautiful Seed and Plant Book, tells all about the Best varieties of Seeds, Plants, etc. H. W. BUCKBEE, Box 526 ROCKFORD, ILL.

DROUTH BEATING CORN.

A recent writer in this paper asked: "Why don't Kansas farmers raise more early sorts of corn?" The early varieties made twenty-five to thirty bushels per acre in Kansas in 1898, along side native corn that made less than five bushels. This is so in Kansas, as a rule. One hundred-day well-bred corn from Illinois matures its ears fifteen to twenty-five days before drouth or hot winds catches and ruins Kansas native corn. I have many testimonials affirming this. One below. Mr. J. D. Cowan, Austin, Kans., writes: "Your C. W. Pearl Corn made forty-two bushels fine corn per acre three weeks before drouth caught my native corn, which made very light yield of poor quality." C. W. Pearl Corn has made big yields in Kansas for fifteen years. It is very white No. 1 milling corn. Matures in 100 days. Price: Three pounds, postpaid, 75 cents; by fast freight, one-half bushel, 75 cents; one bushel, \$1.40; two bushels, \$2.55; five bushels, \$6.00; ten bushels, \$11.50. Freight charges on lots of two bushels or over will be prepaid to any Kansas point for 25 cents per bushel extra. New bags 15 cents each. My special treatise on how to raise big crops from Illinois-grown seed corn in Kansas in drouthy years abundant proof and my new catalogue of corn and other field seeds sent free if you cut out and send this advertisement and three addresses of wide-awake land owners. I refer to editor of this paper. Or send money to First National Bank, Bement, Ill. to be paid over to me if they know me to be reliable.

ADDRESS..... J. C. SUFFERN, SEED GROWER, VOORHIES, ILLINOIS. QUICKLY

CHAMPION WHITE PEARL CORN ORIGINATED BY J. C. SUFFERN. NEW EVERBLOOMING CHRYSANTHEMUM. PURE WHITE, DOUBLE, AND BLOOMS PROFUSELY FROM JULY TO JANUARY. A great Novelty. Spring-set plants of this marvelous Chrysanthemum begin blooming by July and continue in great profusion until New Year's or later. Flowers of good size, Chinese type, double, and snow-white in color. Perfectly hardy in the open ground, and may be grown as a garden or pot plant with equal satisfaction. Plants bushy, 20 inches high. No variety can equal it in profusion. Mr. S. F. Duncan, Ohio, the originator, says that the plants in his garden have always begun blooming by July 4th and are perfectly hardy any winter without protection. In pots it seems to bloom at all times of year, furnishing an abundance of magnificent white flowers. Price of strong plants by mail, guaranteed to arrive in good order, 25c, each; 3 for 50c.; 7 for \$1.00. 12 GREAT NOVELTIES for 60 cts. 1 Everblooming Chrysan., 1 New Everbloom'g Calla, 1 Rudbeckia Golden Glow, 4 Giant Gladiolus Childs, 4 sorts named, 1 pkt. each Multiflorus Roses (bloom in 70 days), Mayflower Verbena (color and fragrance like Trailing Arbutus), Giant Rainbow Leaved Coleus (Grand), Japanese Chrysanthemum Aster, Perpetual Blooming Carnation and THE MAYFLOWER Monthly Magazine for a year; Illustrated—colored plate each month—devoted to Flowers and Gardening. Worth \$2.00 but for trial all the 12 Novelties, Magazine, and Catalogue, postpaid, for 50 cts. Order at once; this offer may not appear again. OUR GREAT CATALOGUE of Flower and Vegetable Seeds, Bulbs, Plants and Rare New Fruits profusely illustrated; Magnificent Large Colored Plates; 144 pages; FREE to any who expect to order. JOHN LEWIS CHILDS, Floral Park, N. Y.

A Sly Tomtit.

"One time," began Baptiste, "Wiesahke was walkin' near Great Slave Lake when he come to a muskeg (swamp).

"Wiesahke was looking at that muskeg, an' thinking he mus' go 'round, for it's too sof'; he see a buffalo dead in the mud, where he had sunk too deep to get out.

"While Wiesahke looking he hear ver' big noise on the other side that muskeg. He look across an' see one big grizzly bear. When the bear see Wiesahke he stan' up an' hol' up hes two paws, and say, loud: 'I kill any one what I see.'

"Then Wiesahke is much 'fraid, but he wan' play some treak that bear. He think if I don' fright that bear he will me.

"Then he raise up hes two arms high, an' say, loud: 'I kill anything I see.' He point the buffalo, an' say: 'You see, I kill him!'

"Then the bear he's 'fraid, an' start run.

"Wiesahke he run after that bear. Nothing can run so fast as Wiesahke, for he's a god, you see. Wiesahke is always running close up to the bear's tall an' saying, loud: 'I kill you!'

"The bear is ver' 'fraid, for before he can always run away from anybody. Sometime they come some little bush, an' Wiesahke run 'roun' the outside an' get there firs'. This makes the bear ver' 'fraid. He's fat, an' soon hes tongue steak out.

"One time Wiesahke is running 'roun' a stump. He catch it with hes hand, an' a piece of bark break off. It's long, an' got a poin' like a big knife. Wiesahke hol' this up in his han' an' say the bear: 'I kill you with this knife.'

"The bear he look up an' see the sun shine on the white side that bark, an' he think it bright knife.

"He so 'fraid, he drop dead.

"Then Wiesahke he sit down an' say, 'I kill you; now I skin you an' eat you.'

"When he skin the bear he not feel hungry for such a big dinner; so he say to a stone lym' there, 'Ho, brother! get up an' we'll have a foot race.' The stone not move.

"Wiesahke say again, 'Get up, brother! I beat you in foot race.' The stone not move.

"The third time Wiesahke say, 'come, brother, race with me.' Then the stone roll' over an' say, 'All right, Wiesahke, I race with you. Where we race?'

"Up the top that high hill,' said Wiesahke, 'an' back again.'

"Then they start up the hill. The stone he can' roll fas' up the hill, an' Wiesahke he get there firs'. When they run down again, at first Wiesahke he is ahead. He look back an' he see the stone roll ver' fas'. Then he run hard. The stone he roll fas'er an' fas'er.

"Wiesahke he get 'fraid an' say, 'Brother, look out; don' roll on me—don' hurt me.'

"Just when they get to the bear the stone catch Wiesahke, an' roll on top him.

"Let me up, brother,' say Wiesahke to the stone. 'I mus' eat my dinner.'

"Lie still, Wiesahke,' say the stone. 'I'm tired; I mus' res'.'

"Then Wiesahke saw a little tomtit on a bush near the bear.

"Don't make a noise, brother,' says Wiesahke; 'cause if you make noise the whisky-jack (Canada jay) will come. He will eat all he can my bear; then he will make noise an' the crow will come. The crow will eat, an' make noise, an' the hawk will come. The hawk will call the eagle, an' the eagle will scream, an' the coyote will come; the coyote will howl, an' the wolves will come; an' I will get no dinner.'

"Ha! Wiesahke,' say the tomtit, 'you always playing treak. Now I will play treak on you. Peep, peep, peep!' he say, loud he can, an' a whisky-jaw fly down an' commence eat the bear.

"Don' make a noise, brother, or the crows will come,' say Wiesahke to the jay.

"Tweech, tweech!' cried the whisky-jack, an' a lot of crows come flying to the bear.

"Poor Wiesahke, he don' know what do. 'Get up, brother,' he say the stone. 'Let me up, I'm hungry.' But the stone he 'sleep, he not hear Wiesahke.

"Don' make a noise, brother,' he say the crows.

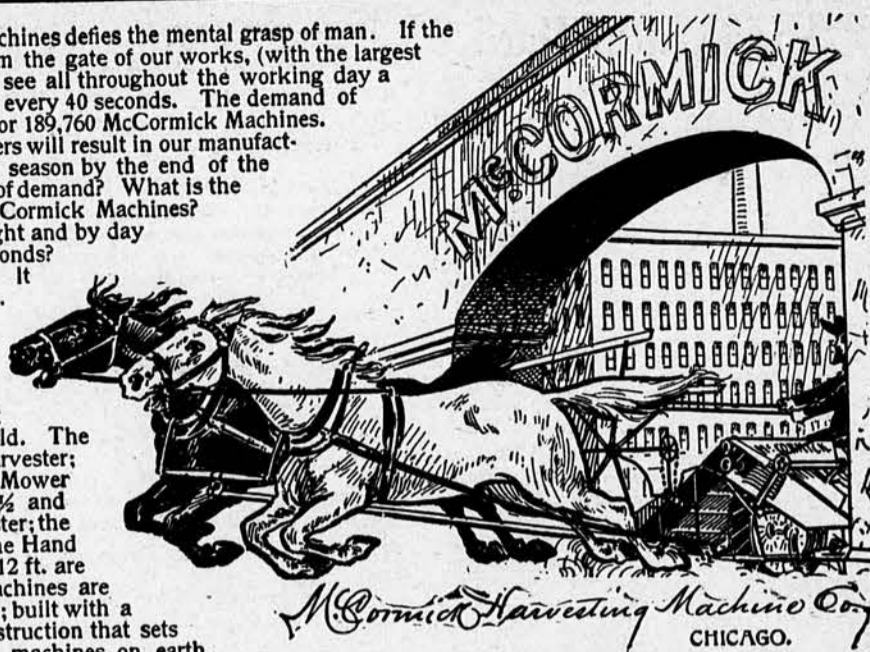
"Caw, caw, caw! Wiesahke,' they laugh, an' the hawks come.

"The hawks eat, an' call like they blow a sharp whistle, an' the eagles come. Then the coyotes come. They eat an' howl jus' like a small dog at night. The wolves come an' eat up all Wiesahke's bear, only some white bones lef'.

"Then the stone roll over an' Wiesahke get up.

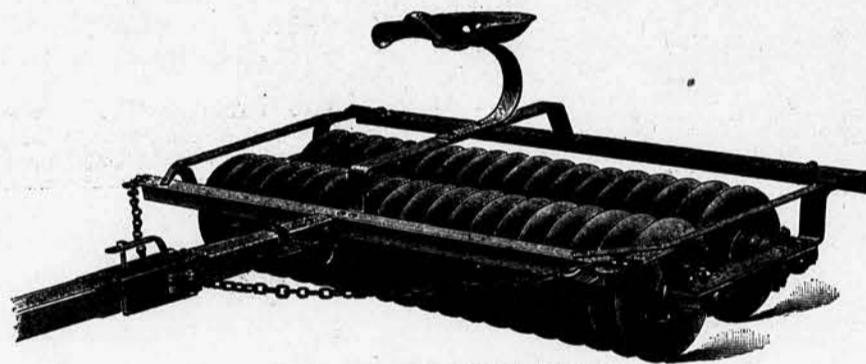
"He see the tomtit sitting there on a

The enormous output of McCormick Machines defies the mental grasp of man. If the machines we manufacture were to issue from the gate of our works, (with the largest output in the world) the spectator would see all throughout the working day a McCormick Machine emerging at full gallop every 40 seconds. The demand of the farmers in the past season of 1898 was for 189,760 McCormick Machines. This continuing tremendous call of the farmers will result in our manufacturing and selling still larger numbers in one season by the end of the century. What is the cause of this unheard of demand? What is the reason of the everlasting popularity of McCormick Machines? Why are we forced to run our Works by night and by day up to the output of a machine every 40 seconds? The cause is plain. The answer is simple. It is The Building of the Best in the World. Almost seventy seasons of success have elapsed since Cyrus H. McCormick invented the Reaper in 1831. In all that time the McCormick has been The Best Built Machine in the World. The McCormick Machines for 1899 are The Best in the World. The McCormick Right Hand Self-binding Harvester; the New 4 Mower 4 1/2 and 5 ft. cut; the Big 4 Mower 6 ft. and 7 ft. cut; the One Horse Mower, 3 1/2 and 4 ft. cut; the Folding Daisy; the Corn Harvester; the Corn Husker and Fodder Shredder and the Hand and Self-dump Hay Rakes 8 ft., 10 ft. and 12 ft. are The Best in the World. All these eight machines are McCormick End of the Century machines; built with a brilliance of invention and honor in construction that sets a noble standard to all other agricultural machines on earth.



bush an' he want play him some treak for steal his dinner. He say that tomtit: 'I'm los'. I run so far after that bear I lose my tepee. I'm hungry, too. Take pity an' show me that trail. Fly up high, little tomtit, an' see my tepee, then show me the trail.' 'I 'fraid you play me some treak, Wiesahke,' say the tomtit. 'Don' be 'fraid, little bird. I not hurt you,' say Wiesahke. 'So the tomtit he go for guide Wiesahke on the trail. He keep flying 'head Wiesahke so he can' catch him. 'By-an'-by Wiesahke say: 'Come, little bird; I'm tired—let's spell it,' that mean res' a little. So they set down for a res'. 'Don' be 'fraid, little bird,' say Wiesahke, for the tomtit he sit up on bush. 'Then they travel again. 'Now, we'll spell again,' says Wies-

verized and perfect seed-bed on the surface. It is a pulverizer and subsoil packer, roller and harrow all in one. The draft is not greater than that of a common harrow, while the results are incomparable. Three sizes are kept in stock—6, 7 and 8 feet wide. The manufacturers can build them larger on short notice. The weight is from 800 pounds up. They build a machine with one roller which does the work satisfactorily where it is only necessary to pack the subsoil and no lumps to pulverize. The double machine is preferred where the ground is liable to get lumpy, as it will do the work completely. Any farmer who desires a tool that will combine all the good qualities of a pulverizer, subsoil packer, clod-crusher, roller and leveler should at once correspond with the



THE IMPERIAL PULVERIZER.

sahke, pretty soon. 'Come, sit close to me, little bird, I am lonesome,' say Wiesahke. 'Don' be 'fraid—I won' hurt you.' 'So, by-an'-by, the tomtit he not 'fraid, an' sit close to Wiesahke on the groun'.' 'What that thing over there?' say Wiesahke, pointing to the bush. When the tomtit look that way, Wiesahke catch him in hes han'. 'Now, little bird, I got you,' he say. 'You play treak on Wiesahke, eh! What I do make you suffer? If I pluck you feathers all out that not 'nough.' 'Then he treat that tomtit so bad that ever since hes feathers are gray, he that frightened.'—W. A. Fraser, in Chicago Inter Ocean.

The Imperial Pulverizer.

This implement is manufactured by the Peterson Manufacturing Co., Kent, Ohio. We take pleasure in illustrating the above-named implement, because it is one that can be used with pleasure and profit on nearly every farm. The proprietors have so much confidence in it that they send it out on trial to be sold on the condition that it gives satisfaction. The device consists of a double set of rolls, so placed on a revolving axis that the rear set completely covers the trail of the front, thus leaving every particle of ground in a well-tilled condition. Among the many advantages claimed are the following: It crushes all the clods, without respect to size or solidity; it fines the soil below the surface as well as on top; it acts as a subsurface packer, and thus prepares the soil for the best preservation of moisture; it leaves a finely pul-

Peterson Mfg. Co., Kent, Ohio for circular and price list.

For the Successful.

Successful incubation is, in the minds of many of our leading poultry raisers, closely associated with the "Successful incubator." This thought seems to have had a controlling influence with the judges at the recent Exposition in Omaha, and also with those of the 1898 Poultry Show held in Chicago. In both places it carried off the highest honors. A neat little badge, "Pin Your Faith to the Successful Incubator," is first-class doctrine for the money-making poultryman. This machine is generally so well known that it needs no introduction. It is only necessary to say that it does just as good work as usual, is as well made as usual, and sells at as reasonable a price as usual. The 160-page catalogue issued by the Des Moines Incubator Company, of Des Moines, Iowa, manufacturers of the Successful incubator, is a most thoroughly useful book for the poultryman. Mailed to any address for 6 cents in stamps.



PIN YOUR FAITH TO THE SUCCESSFUL INCUBATOR

Good seed in well-prepared ground is the beginning of a successful harvest.

The prices of the farmer's products are largely determined by causes that he cannot control; but the cost of producing depends largely upon himself.

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B. & B. READ THEN WRITE US. All precedent in Dress Goods selling has been completely upset and outdone by the low prices we've made to finish clearing out all the odd and surplus 1898 lots of neat, useful novelty Dress Goods and plain mixtures. Kinds at 15, 25, 35, 50c—splendid for early spring dresses, and some for skirts. Get samples—you'll find these extraordinary money's worth that will appeal to your pocketbook's interest such as nothing of the kind ever did before. 6,000 yards of imported 70-cent silk and wool Plaids 35c yard—28 inches wide—assorted styles, medium and dark—goods so good and pretty and such value for shirt waists and children's dresses as will pay well to send for. Choice silks 50c, 65c, 75c—wonderful for the money. Ready to send samples of the beautiful new 1899 wash goods—10c to \$1.25. Also advance styles new spring suitings.

BOGGS & BUHL, Department G. G. Allegheny, Pa. LEADING NEW STRAWBERRIES. Sample, Excelsior, Nick O'Rourke, Jerry Fusk and Darlings are some of the new varieties I have to offer this season. MY STOCK IS LARGE AND VERY FINE. My illustrated and descriptive catalogue, containing 32 pages and describing 60 varieties of Strawberries will be sent FREE to all who ask for it. Your name and address on a postal is all that is required. Better send at once. W. F. ALLEN, JR., Box 31, Salisbury, Md. We can save you money, if you want most any paper or magazine, in connection with Kansas Farmer. Write for special club list.

BROWN'S BRONCHIAL TROCHES. Clear the voice, Relieve the throat, Cure coughs and colds. 1850—In boxes only—1899.

### The Poultry Yard

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

#### EGG PRODUCTION.

Can we produce hens that will lay 200 eggs per annum? Without a doubt. How? By scientific breeding, as for a good butter cow or a milker, as for a good trotting or high-jumping horse. Experiments have been made to increase the number of rows of corn on the cob with success. The same method is applicable to poultry breeding. We will start with a hen that lays 120 eggs. Some of her chicks will lay 150 per year. From these we will pick out layers, and so on until 200 or better are the result. At the same time, it is just as essential to breed out males from prolific layers as it is the females. In fact, it is more so. If we look after the breeding of the females only we will introduce on the male side blood which is lacking in proficiency and thus check every attempt in progress. It is just as essential that the male should be from a hen which laid 175 eggs and from a male that was bred from a hen that laid 150 eggs as it is that the hen was from one that laid 175 eggs and whose mother laid 150 eggs.—Poultry Herald.

The above is sound, sensible, practical logic, not a theoretical idea, but a fact. The breeding of poultry, in the eager scramble for dollars and cents, causes too many to ignore these true rules of evolutionary progress. The real stumbling block in poultry-raising on the farm is the failure to observe the practical method of improvement by selection. The oft-repeated suggestion or warning that new blood is necessary every year in the poultry yard needs qualifying. Such may be the case, and it may not. Where the usual farm methods are followed—that of disposing continually of the best specimens as soon as they attain a marketable size—new blood will be annually needed. If an exchange of male birds is made with another farmer, who is following the same undesirable methods, what is accomplished? Nothing. Such exchanges result in no improvement, for it is but a continuation of the inbreeding of weaklings, resulting in a further running down of poor stock.

An intelligent poultryman sells his "weaklings" and invariably retains the choice ones of each brood. If he has a cockerel that grows away from the others in a brood and possesses in a marked degree the distinctive characteristics of his breed, which is generally the case with the strong, thrifty growers of a brood, the bird is marked as a desirable one to be kept, probably for breeding. The same selection is observed with the pullets. It can be readily understood that such a method means the "survival of the fittest," and naturally a marked increase in early maturity, size and thrift of the flock. There is considerable difference in the time at which pullets of the same brood commence to lay. If there are one or more in a brood that will commence to lay a few weeks before the others it presents another opportunity to further observe intelligent selection, and with an idea of developing a better laying strain. If one has a lot of pullets of the same age and some will lay a dozen or less eggs and then become broody, while there are others that continue egg-laying right along for weeks, is it not wiser to endeavor to secure chicks from the best layers, to perpetuate this good trait? Is not this another lesson how to improve the value of a flock? No doubt one of the greatest factors in successful or paying poultry-raising results from intelligent selection of breeding fowls.

The old assertion that pure-bred fowls are not as healthy as scrubs has no foundation. The facts and object-lessons of the winter poultry shows afford all the evidence necessary to prove it. Could the magnificent specimens exhibited be reared from flocks of weaklings? Are they not pictures of the very ideal of vigor, strength and health? Can any farmer's flock produce cockerels or pullets from their mongrels that equal in weight, vigor or health any of the pure breeds seen at the poultry shows? The fancier must have thrifty, healthy, vigorous fowls to compete with the many specimens. That he is able to breed such and retain the distinctive plumage requirements in a most attractable degree of perfection is all the more to his credit. Such results show he has not only observed intelligence in selection and mating, but that he has observed other re-

### LIKE A MIRACLE.

#### HOW A LOCOMOTOR ATAXIA SUFFERER WAS CURED.

The Story of a Sturdy Engineer—His Death was Decried at a Consultation of Physicians but a Changed Medical Treatment Saved His Life

From the Evening News, Detroit, Mich.

James Crocket, a sturdy old Scotchman, living in Detroit, Mich., at 88 Montcalm Street, was asked about his wonderful cure. "First," he said, "I must tell you something of my life before my almost fatal sickness. I was born in Scotland in 1822, and came to this country in 1848. I am a marine engineer by trade, and have been up and down the big lakes hundreds of times.



There is no spot between Duluth and the Atlantic Ocean I do not know. In 1872 I was in the employ of the Detroit and Cleveland Navigation Co., and for fifteen years I was at my post as chief engineer on one of their big passenger steamers. My first boat was the R. N. Rice, which was burned at the docks. Then I was transferred to the Rubie, which was chartered to make the run between Detroit and Cleveland.

"I brought out the new steamer the 'City of the Straits,' and for years acted as her chief engineer. It is a great responsibility, the position of chief engineer on those big passenger palaces. Thousands of lives are held in the keeping of the engineer. Few realize the dangers that might befall them, and on the engineer depends the safety of the passengers. The anxiety causes a great nervous strain, and the strictest attention is necessary during the trip. Not for a moment must he lose his watchfulness, as the human freight above him is absolutely in his care.

"For fifteen years I carefully watched the big engines and boilers without a single accident, and only noticed that I was getting nervous. Suddenly without warning I was taken sick, and in less than a week I was prostrated. I had the best of physicians, and hoped to be at work again within a week. I grew gradually worse, and at the council of doctors, they said I had nervous prostration, and had destroyed my whole nervous system and would never be able to be up again. They said I had worn myself out by the long nervous strain caused by watching and worrying about the machinery. No man could stand such nervous strains over seven or eight years, while I had been fifteen years in destroying my nerve centres. For three long years I was unable to move from my bed without assistance. The doctor said I had locomotor ataxia, and would never be able to walk again.

"The pains and suffering I experienced during those years are almost indescribable. My wife used to put eight or ten hot water bags around me to stop the pain. Those that came to see me bid me good-bye when they left me and I was given up. The doctors said nothing more could be done for me. In fact I had given myself up, and thought there was no use trying to get well.

"We tried every known remedy, and my wife kept reading the articles about Dr.

quirements and necessary points, such as food, care and sanitary conditions. The improved size of the carcass, the uniformity of shape and the increased size of eggs have all been brought about by poultry fanciers, who have aimed to accomplish these very utility improvements—results that have been accomplished by no haphazard, chance proceedings. The farmer has greater facilities for advancing in these things than the average poultrymen, if he will only grasp the opportunity and natural resources at his command. No other product of the farm is an every month cash product like poultry. Taking a lot of pure-bred fowls and giving them the usual treatment afforded scrubs will yield only scrub results, yet, strange as the fact may seem, there are farmers who do not believe in pure-bred poultry because they do no better under the same circumstances than their mongrels.—Geo. O. Brown, in Baltimore Weekly Sun.

#### Black Langshans.

The Black Langshan enjoys the noteworthy distinction of being the most widely known and most popular of the black breeds, and of being the only real Langshan.

They were introduced into America in 1878 and admitted into the "Standard"

## Locomotor Ataxia and Paralysis Can be Cured

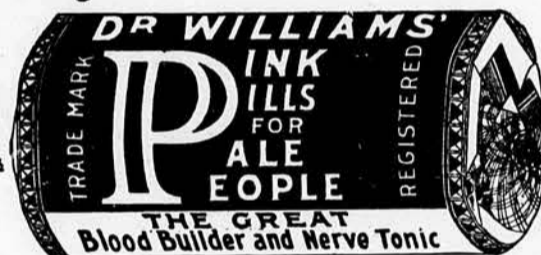
These extreme nervous disorders were treated with wonderful success by the discoverer of Dr. Williams' Pink Pills for Pale People previous to his discovery being offered to the public. This remedy is the only known specific in many diseases that, until recent years, were pronounced incurable. Recognizing their merit in such cases, many physicians now prescribe

### Dr. Williams' Pink Pills for Pale People

These pills expel impurities from the blood and supply the necessary material for building up wasted nerve tissue, thereby reaching the root of many serious diseases.

The great success of this remedy has led to many attempts at imitation and substitution. Some dealers tell customers that they have "a pill made from the same formula," or "the same except in name." Of course it isn't true. But they don't fool many buyers. People are too intelligent.

The Genuine are sold in Packages Like This.



50 cents per box at all druggists or sent direct by mail.

Address the DR. WILLIAMS MEDICINE COMPANY, Schenectady, N.Y.

Williams' Pink Pills for Pale People to me. Finally she said they only cost 50 cents, and she wanted to know if I would try them. To please her I consented, and the first box gave me relief. I continued to use them for about two years before I could get strength enough to walk. It came slow but sure, but what I am to-day is due wholly to Dr. Williams' Pink Pills for Pale People. "Nearly everybody in Detroit knows how long I was confined to the bed, and of my wonderful cure. It is almost a miracle to some people that saw me when the doctors had given me up, but Dr. Williams' Pink

Pills for Pale People cured me surely enough.

"Dr. Williams' Pink Pills for Pale People made me what I am to-day. I only wish I could persuade others to do as I did, and take them before it is too late."

(Signed) "JAMES CROCKET." Before me, a Notary Public, personally appeared James Crocket, who signed and swore to the above statement as being true in every particular.

ROBERT E. HULL, JR., Notary Public. Wayne County, Mich.

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**MAKE MONEY OUT OF POULTRY.** It's easy if you only know how. Our Catalogue and Poultry Guide tells how. Gives the experience, plans, etc., of the best and largest poultrymen of the country. Tells also about THE FAMOUS CYPHERS INCUBATOR which is delivered, freight paid to every purchaser. It needs no moisture. Controls this point completely. Possesses the good points of all machines and the faults of none. Buy the book and be informed. Price 10c. THE CYPHERS INCUBATOR CO. Box 84, Wayland, N.Y.

**A Little Gold Dollar and Our Big Poultry Book** represent about equal value. This book contains every thing that it is necessary to know to succeed in the poultry business. All about Incubators and Brooders, the best kind and the best way to handle them; thoroughbred poultry, with illustrations of each breed and a complete line of poultry supplies. We send it to all inquirers on receipt of 10 cents in stamps. **RELIABLE INCUBATOR AND BROODER COMPANY, BOX B 62, QUINCY, ILLINOIS.**



in 1883. On account of their beauty and many excellent qualities they were only a short time in taking a front rank among our domestic poultry.

In large cities and factory districts where there is much smoke and soot continually falling, they have become general favorites with breeders, since their plumage does not soil readily. They are a large, stylish breed, very hardy, and less liable to disease than any of the Cochon or Brahma class.

When first hatched they are black, marked with a canary color on head and breast, which disappears when feathered. They often retain a few white feathers in the wings and on the feet, but these also disappear if the strain is a good one, after the sixth month.

The plumage of the grown fowl is a dense black throughout, with a rich beetle-green gloss on the back, shoulder, saddle and sickle feathers that is beautiful to behold when standing in the sun's rays. The tail is large, well spread and carried well up. Hackle full, flowing and very glossy. Head small for the size of the bird. Comb single, straight and evenly serrated. Wattles and earlobes are a deep, rich red. Legs are a dark slate color, and feathered to the end of the outer toe. Bottom of feet and web between toes, pink. Flesh is of light color, tender and of good flavor.

The standard weight of cocks is 10 pounds, cockerels 8 pounds, hens 7, pullets 6. To sum up, they are a grand, beautiful and useful fowl; and to all who like or are compelled to have a dark-plumaged fowl, they will prove very satisfactory.

We, the "Sure Hatch" Incubator Company, of Clay Center, Nebr., desire to announce that we placed 150 of our machines in our home county prior to June 1, 1899, and are having a daily sale of from one to four machines to our home trade. The people come and buy our Incubators the same as they do plows, or other farm machinery, and without questioning whether or not the machine hatches as represented, as this fact is well established, and needs no investigation.

We, the undersigned, business men of Clay Center, Nebr., have known the members of the Sure Hatch Incubator Company for a number of years, and upon our acquaintance with them, and their business, can say the above statements are true, as we verily believe. And the establishment is a credit to our village.

J. M. McFadden, Merchant. Wm. W. Allen, Implement Dealer. Geo. F. Dickson, Abstractor. H. E. McDowell, Pres. of Commercial State Bank.

W. L. Palmer, Editor of Sun. L. W. Robinson, Druggist. W. E. Carney, Hardware Merchant. J. L. Campbell, Cashier Commercial State Bank.

Mitchell & Heasley, Merchants. J. H. Eller, Merchant. D. C. Hager, Jeweler. S. Mandelson, Merchant. John M. Jones, Postmaster. O. C. Williams, Insurance agent.

W. A. Ward, News Stand. L. F. Fryar, Abstractor. Jessup Bros., Editors of Patriot. We, the undersigned, members of the Clay County Poultry Association, concur in the statements made above.

J. C. Kasper, President. C. W. Jester, Secretary. W. H. Powers. B. H. Dunn. J. E. Athey.

W. F. Nevins. A. B. Shrever. W. F. Holcomb. Fred Townsend. John A. Ling. Ambrose C. Epperson.

I, the undersigned, Judge of the Clay County Poultry Show, of 1899, held January 24 to 27 inclusively, have carefully noted the "Sure Hatch" Incubator, and the operations of their shops, and believe the statements made above are true.

L. P. HARRIS, Poultry Judge and Fancier.

The Reliable Poultry Journal, consisting of 72 to 124 pages, issued monthly and finely illustrated, is said to be the biggest and best poultry paper published. Its pages are filled with helpful and interesting matter from the best authorities in the country and the illustrations are of the highest order, including half-tone reproductions, drawings from life,

ACME PULVERIZING HARROW, GLOD CRUSHER AND LEVELER. For all soils, all work—crushes, cuts, lifts, pulverizes, turns and levels. Cast steel and wrought iron—therefore indestructible. Cheapest riding harrow and best pulverizer on earth. Sizes 3 to 13 1/2 feet. Catalogue free. SENT ON TRIAL to be returned at my expense if not Entirely Satisfactory. I deliver free on board at New York, Chicago, Columbus, O., Louisville, Ky., Minneapolis, San Francisco and other points. Address DUANE H. NASH, Sole Mfr., MILLINGTON, N. J., or CHICAGO, ILL. PLEASE MENTION THIS PAPER.

etc. Drop a card for a sample copy. No matter what branch of poultry culture you are engaged in, you will find help in the Reliable Poultry Journal, Quincy, Ill.

POULTRY SUPPLIE. The Peerless brand of Crushed Oyster Shells, Bone Mills, Tarred Roofing, poultry foods and remedies, Poultry Netting, etc., etc. Write for price list to T. Lee Adams, 417 Walnut street, Kansas City, Mo.

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WE SELL DIRECT TO THE FARMER. Hardened Steel Landside Double Board Plow, hard as glass, 16-in. \$9. Sulky Plows, \$25. Riding Gang Plows, \$35. 3-in. Wagon, \$39. 1000 other articles. Big catalogue free. Write now and get ready for spring work. HAPGOOD PLOW CO., Box 455, Alton, Ill. Only Plow factory in the United States selling direct to farmer.

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

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FRENCH BUHR STONE MILLS. For grinding crushed ear corn, shelled corn, oats, any kind of grain mixed or separate for stock feed; table corn meal, buckwheat, rye and graham flour for family use. THE BEST MILL FOR ALL FARM USES. The most durable. Largest capacity. Less power. Finest grinding. No expense. Easiest handled and kept in order. Make no mistake, get a Buhr Mill, it will pay best. Our new book on Mills of over 85 sizes and styles now ready. Send for it. NORDYKE & HARNON CO., Flour Mill Builders, 285 Day St, Indianapolis, Ind.

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Low Farms for sale: \$2 per acre cash, balance crop until paid. J. Mulhall, Sioux City, Ia. BED-WETTING CURED. Sample FREE. Dr. F. E. May, Bloomington, Ill.

MARKET REPORTS.

Kansas City Live Stock. Kansas City, Feb. 6—Cattle—Receipts since Saturday, 3,284; calves, 24; shipped Saturday, 978 cattle; 154 calves. The market was slow, but about steady. The following are representative sales:

Table with columns: No., Ave. Price, No., Ave. Price. Rows include DRESSED BEEF AND SHIPPING STEERS, WESTERN STEERS, NATIVE HEIFERS, NATIVE COWS, NATIVE FEEDERS, NATIVE STOCKERS.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include NATIVE HEIFERS, NATIVE COWS, NATIVE FEEDERS, NATIVE STOCKERS.

Hogs—Receipts since Saturday, 5,899; shipped Saturday, 540. The market was steady to 5c lower. The following are representative sales:

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

Chicago Live Stock. Chicago, Feb. 6—Cattle—Receipts, 14,500; good grades steady, others weak; beefs, \$4.00 @ \$5.90; cows and heifers, \$2.00 @ \$4.75; Texas steers, \$3.50 @ \$4.80; stockers and feeders, \$3.20 @ \$4.60.

St. Louis Live Stock. St. Louis, Feb. 6—Cattle—Receipts, 3,300; market steady; native shipping steers, \$4.50 @ \$6.00; light and dressed beef and butcher steers, \$3.20 @ \$5.35; stockers and feeders, \$3.00 @ \$4.55; cows and heifers, \$2.00 @ \$4.25; Texas and Indian steers, \$3.75 @ \$5.00; cows and heifers, \$2.30 @ \$3.75.

Table with columns: Feb. 6, Opened, High'st, Low'st, Closing. Rows include Wheat, Corn, Oats, Pork, Lard, Ribs.

Kansas City Grain. Kansas City, Feb. 6—Wheat—Receipts here to-day were 178 cars; a week ago, 278 cars; a year ago, 212 cars. Sales by sample on track: Hard, No. 2, 64 @ \$5.50; No. 3 hard, 61 1/2 @ \$5.50; No. 4 hard, 58 @ \$5.20; rejected hard, 55 @ \$5.70. Soft, No. 2 red, 69 @ \$3.70; No. 3 red, 70c; No. 4 red, nominally 65 @ \$3.80; rejected red, 58 1/2 @ \$3.90. Spring, No. 2, 64c; No. 3 spring, 61 @ \$3.80; rejected, spring, 61c.

Kansas City Produce. Kansas City, Feb. 6—Eggs—Strictly fresh, 15c per doz. Butter—Extra fancy separator, 18c; firsts, 16c; seconds, 15c; dairy fancy, 15c; country roll, 11 @ 13c; store packed, 10c; packing stock, 9c. Poultry—Hens, 7c; springs, 8 1/2c; old roosters, 15c each; young roosters, 20c; ducks, 7 1/2c.

geese, 5 @ 6c; turkeys, hens, 8 1/2c; young toms, 8c; old toms, 7c; pigeons, 5c per doz. Vegetables—Navy beans, 1.35 per bu. Lima beans, 4 1/2c per lb. Onions, red globe, 60 @ 65c per bu.; white globe, \$1.00 per bu. Beets, home grown, 80c per bu. Turnips, home grown, 15 @ 25c per bu. Spinach, home grown, \$1.25 @ 1.50 per bu. Potatoes—Mixed varieties, 40 @ 50c.

TOO LATE TO CLASSIFY.

50,000 Apple, Peach, Plum, Cherry, Pear and other fruit trees, vines, etc. First-class for less money than elsewhere. Catalogue and special wholesale prices for a short time only. S. J. Baldwin, Seneca, Kans.

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WANTED—To buy or contract 1,000 to 1,500 cattle to pasture at \$2.30 per head for season. Convenient to shipping points in Riley and Geary counties. Located near Manhattan, Kans. Also pastures and farm lands to lease and sell. Address "Pasture," care Kansas Farmer, Topeka, Kans.

FOR SALE OR RENT—A farm of 150 acres, well improved, 18 miles from Topeka. For particulars call on or address W. C. Thomas, Fountain, Osage Co., Kans.

WHITE WYANDOTTE HAS NO EQUAL AS AN all-purpose fowl. I have first prize, high-scored birds, pure-bred stock, and eggs from best pens for sale. Prices reasonable. Address Jeff. Payne, Hutchinson, Kans.

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CANFIELD'S WHITE PLYMOUTH ROCKS WON first pen, first cock, first cockerel and first hen at the Kansas State Poultry Show, 1899, besides the grand sweepstakes for best ten birds in the American class. Eggs, \$2 for 15, \$5 for 45. M. L. Canfield, Belleville, Kans.

VINELESS AND COMMON SWEET POTATOES—Furnished to sprout on shares. No experience required. Directions for sprouting with order. T. J. Skinner, Columbus, Kans.

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M. B. TURKEYS AND B. P. ROCKS.—At Topeka state show, I won first and second tom; first and second pullet; second hen; first pen; first trio, and sweepstakes for best display. On B. Rocks, third pen, third pullet, in competition with 87 Rocks and 10 pens. At Kansas City, won first and second pullet, first tom. Stock for sale. Fine cockerels, \$1.50, \$2 and \$2.50 each. Booking egg orders now. Rocks, \$2 per 15; \$1 per 15 for utility. Per 100, \$10 and \$6. Turkey \$3 per 9; \$5 per 18. Mrs. F. A. Hargrave, Richmond, Franklin Co., Kans.

ORCHARD PARK POULTRY YARDS—Barré Plymouth Rocks from prize-winning birds. Cockerels and pullets \$1 to \$2 each. Eggs 13 for \$1. Mrs. J. R. Whitney, 1411 Massachusetts street, Lawrence, Kans.

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

MAMMOTH BRONZE TURKEYS A SPECIALTY.

All of my breeding stock this year consists of high-scoring birds. One lot of hens, weighing from 18 to 23 pounds, mated with prize-winning cockerel at Topeka show, weight 27 1/2 pounds, score 96 1/2. One lot of pullets to be mated with high-scoring 40-pound tom, each lot to have run of separate farms. Eggs in season, \$3 per dozen. C. H. CLARK, Delphos, Kans.

THE STRAY LIST.

FOR WEEK ENDING JANUARY 26, 1899. Chase County—M. C. Newton, Clerk. COW—Taken up by John Man, in Elk, Diamond Creek tp., January 7, 1899, one red cow, figure 2 brand, both ears cropped; valued at \$15. Lyon County—H. E. Peach, Clerk. STEER—Taken up by W. H. Phillips, in Reading tp. (P. O. Emporia), one red steer, 2 years old, notch in left ear; valued at \$25. FOR WEEK ENDING FEBRUARY 2, 1899. Greenwood County—Perry Clemans, Clerk. STEER—Taken up by M. R. Bollinger in Fall River tp. (P. O. Eureka), December 26, 1898, one steer, branded W. H. on right side, crop out of both ears, dehorned; valued at \$20. FOR WEEK ENDING FEBRUARY 9, 1899. Barber County—J. E. Holmes, Clerk. MULE—Taken up by F. J. Saunders, in Sun City tp., January 17, 1899, one blue horse mule, four feet six inches high, branded Con left shoulder; valued at \$15. Nemaha County—A. G. Sanborn, Clerk. STEER—Taken up by Emory Conwell, in Gilman tp. (P. O. Oneida), January 10, 1899, one red yearling steer, crop off right ear, swallow fork in left ear; valued at \$18. Harvey County—S. M. Spangler, Clerk. MULE—Taken up by Thomas H. Russell, on sec. 28, Darlington tp., January 18, 1899, one bay mare mule, about 12 years old, slit in each ear, about 15 hands high; valued at \$20. Lyon County—H. E. Peach, Clerk. MARE—Taken up by Fred Sedwith, in Emporia tp., January 10, 1899, one 2-year-old dark brown mare.

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No stale yeast. No sour bread. You pay no money, not even a stamp, until you have learned. We trust you. When well pleased with our art, then you pay 50 cents. Drop a postal. T. J. JACKSON, Hoxie, Kans. We can save you money, if you want most any paper or magazine, in connection with Kansas Farmer. Write for special club list.

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Here in Kansas, the One Price breeding prince that for five years gave prestige to the famed Herds of Welch, Willson, Hadley & Hendrick. Fifteen yearling gilts (out of dams of Welch's Black U. S. and One Price blood), safe in pig to Priceless for March and April. Twenty spring of 1898 gilts (out of dams of above breeding, and Nettie U. S., Young Edith), safe in pig to the \$110 pig, Chief Fortune, by Kiever's Chief Agate. Up-to-date breeders, progressive farmers, see that you get some of these One Price and Black U. S. queens. Prices reasonable. Address..... C. P. SHELTON, Paola, Kans.

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Table with columns: Official Receipts for 1898, Sold in Kansas City 1898. Rows include Cattle and Calves, Hogs, Sheep.

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TOWERS' SURFACE CULTIVATORS. Both Riding and Walking—a Complete Success. J. D. Tower & Bro.—"We have given your Surface Cultivator a thorough trial the past season, and we have been highly pleased with the result, not only as regards the superior condition in which it left the soil for conservation of moisture, but as to the way in which it handled the weeds. The stiff stemmed weeds, such as milk weeds, iron weeds, that dodge the ordinary shovel, had to go. The destruction of the small weeds, such as foxtail, was also much more complete than with the shovel or plow.—J. J. Edgerton, Farm Foreman, Iowa Agricultural College, 1898." Send for Treatise on Corn Culture, and discount to introduce where we have no agent. J. D. TOWER & BRO., 14th Street, MENDOTA, ILL.

POPULAR GOODS POPULAR PRICES. Mathews New Universal Seeders and Cultivators. They save practically all hand labor; that's expensive you know. They open the drill, drop the seed, cover the seed and roll and firm the earth all at one operation. In cultivating they cultivate deep or shallow, cultivate between the rows or straddle the row and cultivate on each side of it. Destroy all grass and weeds and leave a mulch of fine earth on top, which effectively preserves the natural soil moisture. They are fast and effective, strong and durable. Our Horse Hoe with I beam frame and spring steel standards is unequalled. Our book describing and illustrating, score or more of different styles sent free to anyone. Ames Plow Co., Boston and New York.

WE BUILD FARM TRUCKS ONLY. This is our No. 9. TEN STYLES. It has 6 in. tires, short-turn and the patented front gear and 6th wheel is very strong and especially built to hold a load steady on a short turn. Stakes pull out and 7 x 16 ft. flat platform, only 32 in. from the ground, rests on the bolsters. Our patented wedge made wheels, or steel wheels if desired. The best Farm Truck made. Send for free descriptive circulars. FARMER'S HANDY WAGON CO., SAGINAW, MICH.

CALIFORNIA GREAT ROCK ISLAND ROUTE. All of my breeding stock this year consists of high-scoring birds. One lot of hens, weighing from 18 to 23 pounds, mated with prize-winning cockerel at Topeka show, weight 27 1/2 pounds, score 96 1/2. One lot of pullets to be mated with high-scoring 40-pound tom, each lot to have run of separate farms. Eggs in season, \$3 per dozen. C. H. CLARK, Delphos, Kans.

PAGE GREAT GUNS! Third solid train load west since Thanksgiving, February 14th Nebraska gets 40 cars—525 miles—of Page fence. Ten days' weaving. PAGE WOVEN WIRE FENCE CO., ADRIAN, MICH.

HALL'S STEEL WIRE FARM FENCE. The strongest, most durable and best fence on the market, being constructed of the best heavy galvanized steel wire, with a heavy cable at top and a barbed wire at the bottom. The only fence on the market that a hog cannot root under. Manufactured by J. W. D. HALL, St. Joseph, Mo.

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Boars and gilts for sale.  
S. W. HILL, Hutchinson, Kas.



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



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**Standard Herd of Poland-Chinas**

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

**H. W. CHENEY, North Topeka, Ks. POLAND-CHINAS**

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



**T. A. HUBBARD**, Rome, Kansas, Breeder of POLAND-CHINAS and LARGE ENGLISH BERKSHIRES. Two hundred head. All ages. 25 boars and 45 sows ready for buyers.

**Wamego Herd Imp. Chester Whites and Poland-Chinas.**

Mated for best results. Also Banded Plymouth Rock chickens and eggs for sale. Correspondence or inspection invited. Mention FARMER. C. J. HUGGINS, Proprietor, Wamego, Kas.

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Breeders of—  
**Short-horn Cattle and Poland-China Swine**  
Of the Best Strains.

Stock for sale. Correspondence and inspection invited.

**VERDIGRIS VALLEY HERD—Large-Boned Poland-Chinas.**

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

**Mains' Herd of Poland-Chinas.**

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

**Nation's Poland-Chinas.**

Fifty boars and gilts for this season's trade. My herd boars consist of Darkness Quality 14361, Princeton Chief 14543, Col. Hildebrecht 37247 and Standard Wilkes. My sows are splendid individuals and of the right breeding. Personal inspection and correspondence invited. LAWRENCE NATION, Hutchinson, Kas.

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Young boars old enough for service, also sows and gilts bred and unbred for sale. Sired by 2d Seven Oaks, Col. Mills 45718, Prince Majestic 45600 and others. Write for prices, or come and inspect stock. MANWARING BROS., Lawrence, Kas.

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Herd Boars are Grand Sons of J. H. SANDERS and SHORT STOP, the World's Fair Prize Winners. Bred to 20 large mature sows of Corwin Black U. S. and Black Bess blood. We aim to produce the money-makers, not sacrificing size and feeding qualities to fancy points. Choice young stock for sale at reasonable prices. M. L. SOMERS, Altoona, Kas.

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ANYTHING YOU WANT.

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

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Leading Scotch and Scotch-topped American families compose the herd, headed by the Cruickshank bulls, Glendon 119370, by Ambassador, dam Galan thus, and Scotland's Charm 127264, by Imp. Lavender Lad, dam by Imp. Baron Cruickshank. Young bulls for sale. C. F. WOLF & SON, Proprietors.

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The Harris bred bull, GALLANT KNIGHT 124466, a son of Gallahad, out of 8th Linwood Golden Drop, heads herd. Females by the Cruickshank bulls, Imp. Thistle Top 83876, Earl of Gloster 74523, etc. Size, color, constitution and feeding qualities the standard. A few good cows for sale now bred to Gallant Knight. Address T. K. TOMSON & SONS, DOVER, KANSAS.



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I have combined with my herd the Chambers Short-horns and have the very best blood lines of the Bates and Cruickshank families. Herd headed by Baron Flower 114352 and Kirklevington Duke of Shannon Hill 126104. The Cruickshank Ambassador 110811 lately in service. Best of shipping facilities on the A. T. & S. F. and two branches of Mo. Pac. Rys. Parties met by appointment. B. W. GOWDY, Garnett, Kas.

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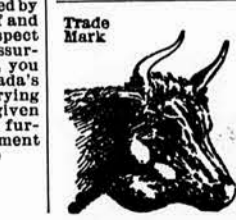
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